EXCELSIOR UNIVERSITY

CATALOG

JANUARY 2025

EXCELSIOR.EDU

Limitations

Information in this catalog is current as of January 2025 and is subject to change without advance notice.

Changes In University Policies, Procedures, and Requirements

Excelsior University reserves the right to modify or revise the admission requirements of any program; degree and graduation requirements; examinations, courses, tuition, and fees; and other academic policies, procedures, and requirements. Generally, program modifications and revisions will not apply to currently matriculated students so long as they actively pursue their degree requirements. However, in the event that it is necessary to make program changes for matriculated students, every effort will be made to give notice. It is also the responsibility of students to keep themselves informed of the content of all notices concerning such changes.

Excelsior University maintains a drug-free workplace and is a drug-free school, as provided by the Federal Drug-Free Schools and Communities Act Amendments of 1989 and the Drug-Free Workplace Act of 1988.

Campus Crime Statistics can be found at the following website: https://ope.ed.gov/campussafety/.

About Excelsior University

Excelsior University is an accredited, not-for-profit distance learning institution founded in 1971 focused on providing educational opportunity to adult learners. Excelsior contributes to the development of a diverse, educated society by valuing lifelong learning with an emphasis on serving individuals who are historically underrepresented by higher education. Excelsior meets students where they are—academically and geographically—removing obstacles to the educational goals of adult learners through affordable access to quality instruction and the assessment of learning. Our pillars include innovation, flexibility, academic excellence, and integrity.

Excelsior University is committed to providing a learning and working environment that is free from illegal discrimination based upon an individual's race, color, creed, religion, sex/gender (including pregnancy), sexual orientation, gender identity or transgender status, national origin, age, physical or mental disability (including medical conditions related to pregnancy and childbirth), genetic information, predisposition to diseases or carrier status, marital or familial status, criminal arrests and conviction status, military or veteran status, domestic violence victim status, known relationship or association with anyone in a protected class, or any other category protected by applicable federal, state, or local law. Illegal discrimination in any form will not be tolerated at the University.

Excelsior University is a Title IV-eligible institution offering federal student aid to students who qualify.

Our Mission

Excelsior University provides educational opportunity to adult learners with an emphasis on those historically underrepresented in higher education. Excelsior meets students where they are—academically and geographically, offering quality instruction and the assessment of learning.

Vision

Excelsior University provides access to quality higher education through innovative online learning, exceptional student experience, and innovation to be a model for addressing societal and workforce needs.

Accreditation

Excelsior University is an accredited institution and a member of the Middle States Commission on Higher Education (MSCHE or the Commission) www.msche.org. Excelsior University's accreditation status is accreditation reaffirmed. The Commission's most recent action on the institution's accreditation status on June 23, 2022 was to reaffirm accreditation. MSCHE is recognized by the U.S. Secretary of Education to conduct accreditation and pre-accreditation (candidate status) activities for institutions of higher education including distance, correspondence education, and direct assessment programs offered at those institutions. The Commission's geographic area of accrediting activities is throughout the United States.

New York State Board of Regents—Recognized Programmatic Accreditation: Excelsior University's associate-level nursing programs are programmatically accredited by the New York State (NYS) Board of Regents, State Education Department Office of the Professions (the Regents). The U.S. Department of Education has recognized the Regents as a state agency for the approval of nursing education programs since 1969. More information about the NYS Board of Regents' Recognized Programmatic Accreditation may be helpful for students or graduates to present to a school they are attending or to an employer seeking more information about their Excelsior University nursing degree: https://www.excelsior.edu/wp-content/uploads/2023/11/Excelsior-University-NYSED-BOR-Recognized-Programmatic-Accreditation.pdf.

The Bachelor of Science in Nursing, Master of Science in Nursing Leadership and Administration of Health Care Systems, Master of Science in Nursing Education, Master of Science in Nursing Informatics, RN to Master of Science in Nursing Leadership and Administration of Health Care Systems, RN to Master of Science in Nursing Education, and RN to Master of Science in Nursing Informatics programs at Excelsior University located in Albany, NY are accredited by the:

Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 Atlanta, GA 30326
(404) 975-5000

The most recent accreditation decision made by the ACEN Board of Commissioners for the baccalaureate and master's nursing programs is continuing accreditation.

View the public information disclosed by the ACEN regarding this program on the ACEN website.

The ACEN is a specialized accrediting agency for nursing recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation (CHEA).

The Bachelor of Science in Electrical Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs. The Bachelor of Science in Nuclear Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org, under the commission's General Criteria and Program Criteria for Nuclear Engineering Technology and Similarly Named Programs. The Bachelor of Science in Information Technology is accredited by the Computing Accreditation Commission of ABET, https://www.abet.org, under the General Criteria and the Information Technology Program Criteria.

The School of Business, College of Liberal Arts and Sciences at Excelsior University received specialized accreditation for its business programs through the International Accreditation Council for Business Education (IACBE), located at 11960 Quivira Road in Overland Park, Kansas, USA. For a list of accredited programs, please view our IACBE member status page.

All Excelsior University academic programs are registered (i.e., approved) by the New York State Education Department.

Recognition

The National Security Agency and the Department of Homeland Security designated Excelsior University as a National Center of Academic Excellence in Cyber Defense Education, through the academic year 2029.

Excelsior University has achieved institutional-level recognition for implementing Quality Matters™ standards for the design of online courses. Excelsior develops and evaluates its online courses based, in part, on the rigorous, research-based Quality Matters standards to ensure learner engagement and provide tools and information for successful learning.

Social Justice, Equity, Diversity, Inclusion at Excelsior University

Excelsior University values students, instructors, employees, and all members of its global community. Excelsior strives to integrate the dynamic concepts of social justice, diversity, equity, and inclusion into all aspects of the University, including through the recruitment and retention of students, faculty, and staff who reflect the diversity of society in which we live; curriculum development and academic advising; the delivery of services; the encouragement of volunteerism among our faculty, staff, and alumni; and participation in educational programs, training, cultural events, celebrations, and other awareness activities. We facilitate an inclusive, equitable, and just experience for all types of learners in their development as the next generation of leaders.

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Message from the President

David Schejbal, PhD

Dear Student,

Welcome to Excelsior University.

Congratulations on taking the next step of your learning journey with Excelsior. You join a global community of 13,000 current students and nearly 200,000 alumni. Since 1971, our accredited, not-for-profit institution has remained dedicated to its mission to provide education to adult learners like you, with an emphasis on those historically underrepresented in higher education.

As the largest online university based in the state of New York, Excelsior meets students where they are, academically and geographically. Our commitment to educational excellence is reflected in our rankings among the best distance learning institutions in the United States by Intelligent.com, Military Times, Online Master's Colleges, and Money.com.

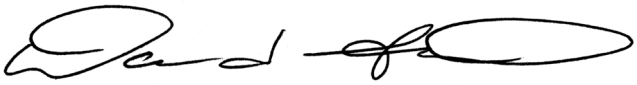
This catalog presents detailed information on more than 45 degree and certificate programs across six fields of study, all designed to help you succeed. In a recent survey, 86% of Excelsior alumni reported career advancement within a year of graduating. You will find a true community and a holistic learning experience that will continue to support you well beyond Commencement day.

When you are ready to pursue the next degree or credential, you can count on Excelsior to be your lifelong learning home. We are continually developing programs to meet your academic needs.

The Excelsior community is diverse and strong. Excelsior students and alumni come from all 50 states and more than 20 countries, and through the Center for Social Justice, we are committed to celebrating the diversity of all of us.

Thank you for choosing Excelsior University. Our expert faculty and staff are ready to help you achieve your goals. We move forward together, ever upward.

Sincerely,



David Schejbal, PhD
President

Academic Calendar

Spring Trimester 2025

SPRING 15-WEEK TERM: STARTS **JANUARY 6, 2025**

October 21	Registration opens
January 3	Registration closes
January 4	Late registration opens
January 6	**Term begins**
January 8	Late registration closes at 11:59 p.m. ET
January 12	Last day for non-military and veteran students to cancel without financial penalty.
January 20	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
January 20	Last day for all students to cancel with no record on transcript.
January 27	Students will start being withdrawn for lack of participation.
April 13	Last day to withdraw or request extension.
April 20	**Term ends**
April 25	Instructors submit grades
April 28	Grades posted to MyExcelsior

SPRING I 8-WEEK TERM: STARTS **JANUARY 6, 2025**

October 21	Registration opens
January 3	Registration closes
January 4	Late registration opens
January 6	**Term begins**
January 8	Late registration closes at 11:59 p.m. ET
January 12	Last day for non-military and veteran students to cancel without financial penalty.

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January 20	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
January 20	Last day for all students to cancel with no record on transcript.
January 27	Students will start being withdrawn for lack of participation.
February 23	Last day to withdraw or request extension.
March 2	**Term ends**
March 7	Instructors submit grades
March 10	Grades posted to MyExcelsior

SPRING II 8-WEEK TERM: STARTS **MARCH 3, 2025**

October 21	Registration opens
February 28	Registration closes
March 1	Late registration opens
March 3	**Term begins**
March 5	Late registration closes at 11:59 p.m. ET
March 9	Last day for non-military and veteran students to cancel without financial penalty.
March 17	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
March 17	Last day for all students to cancel with no record on transcript.
March 24	Students will start being withdrawn for lack of participation.
April 20	Last day to withdraw or request extension.
April 27	**Term ends**
May 2	Instructors submit grades
May 5	Grades posted to MyExcelsior

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Summer 2025 Trimester

SUMMER 15-WEEK TERM: STARTS **MAY 5, 2025**

February 17	Registration opens
May 2	Registration closes
May 3	Late registration opens
May 5	**Term begins**
May 7	Late registration closes at 11:59 p.m. ET
May 11	Last day for non-military and veteran students to cancel without financial penalty.
May 19	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
May 19	Last day for all students to cancel with no record on transcript.
May 26	Students will start being withdrawn for lack of participation.
August 10	Last day to withdraw or request extension.
August 17	**Term ends**
August 22	Instructors submit grades
August 25	Grades posted to MyExcelsior

SUMMER I 8-WEEK TERM: STARTS **MAY 5, 2025**

February 17	Registration opens
May 2	Registration closes
May 3	Late registration opens
May 5	**Term begins**
May 7	Late registration closes at 11:59 p.m. ET
May 11	Last day for non-military and veteran students to cancel without financial penalty.
May 19	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
May 19	Last day for all students to cancel with no record on transcript.
May 26	Students will start being withdrawn for lack of participation.

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June 22	Last day to withdraw or request extension.
June 29	**Term ends**
July 4	Instructors submit grades
July 7	Grades Posted to MyExcelsior

SUMMER II 8-WEEK TERM: STARTS **JUNE 30, 2025**

February 17	Registration opens
June 27	Registration closes
June 28	Late registration opens
June 30	**Term begins**
July 2	Late registration closes at 11:59 p.m. ET
July 6	Last day for non-military and veteran students to cancel without financial penalty.
July 14	Last day for military students (active duty, in the Reserves, National Guard, or active-duty military family members) to cancel without financial penalty.
July 14	Last day for all students to cancel with no record on transcript.
July 21	Students will start being withdrawn for lack of participation.
August 17	Last day to withdraw or request extension.
August 24	**Term ends**
August 29	Instructors submit grades
September 1	Grades posted to MyExcelsior

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FALL 15-WEEK TERM: STARTS **SEPTEMBER 1, 2025**

June 16	Registration opens
August 29	Registration closes
August 30	Late registration opens
September 1	**Term begins**
September 3	Late registration closes at 11:59 p.m. ET
September 7	Last day for non-military and veteran students to cancel without financial penalty.
September 15	Last day for military students (active duty, in the Reserves or National Guard, or active-duty military family members) to cancel without financial penalty.
September 15	Last day for all students to cancel with no record on transcript.
September 22	Students will start being withdrawn for lack of participation.
December 7	Last day to withdraw or request extension.
December 14	**Term Ends**
December 19	Instructors submit grades
December 22	Grades posted to MyExcelsior

FALL I 8-WEEK TERM: STARTS **SEPTEMBER 1, 2025**

June 16	Registration opens
August 29	Registration closes
August 30	Late Registration opens
September 1	**Term begins**
September 3	Late registration closes at 11:59 p.m. ET
September 7	Last day for non-military and veteran students to cancel without penalty.
September 15	Last day for military students (active duty, in the Reserves or National Guard, or active-duty military family members)¬† to cancel without penalty.
September 15	Last day for all students to cancel with no record on transcript.
September 22	Students will start being withdrawn for lack of participation.
October 19	Last day to withdraw or request extension.
October 26	**Term ends**
October 31	Instructors submit grades
November 3	Grades posted to MyExcelsior

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FALL II 8-WEEK TERM: STARTS **OCTOBER 27, 2025**

June 16	Registration opens
October 24	Registration closes
October 25	Late registration opens
October 27	**Term begins**
October 29	Late registration closes at 11:59 p.m. ET
November 2	Last day to cancel without penalty.
November 10	Last day for military students (active duty, in the Reserves or National Guard, or active-duty military family members) to cancel without penalty.
November 10	Last day for all students to cancel with no record on transcript.
November 17	Students will start being withdrawn for lack of participation.
December 14	Last day to withdraw or request extension.
December 21	**Term ends**
December 26	Instructors submit grades
December 29	Grades posted to MyExcelsior

Admissions Requirements

Excelsior University accepts and reviews applications for admission into degree programs year round. The eligibility requirements for admission to all degree programs are listed below. Please be sure to contact our Admissions Office to assist with any questions and need for assistance. The application for admission identifies the required supporting documentation as well as details on all admission criteria. For further information, refer to the Admission and Enrollment and Students Without High School Diploma policies.

Non-Nursing Degree Programs

Undergraduate: Associate and Bachelor's Degree Programs

- No special admission requirements

Graduate Degree Programs and Graduate Certificate Programs

- The GRE is not required.
- Submission of an official transcript confirming the completion of a bachelor's degree at a regionally accredited college or university, or the foreign equivalent, is required. Bachelor's degrees from non-regionally accredited institutions will be accepted if the school was accredited by an accrediting body listed in the U.S. Department of Education's Database of Accredited Postsecondary Institutions and Programs at the time of attendance.

Executive Master of Business Administration

In addition to the above graduate degree program requirements, applicants to the Executive Master of Business Administration program must demonstrate 5 or more years of professional experience and management of people and projects by submitting the following criterion:

- Curriculum vitae/resume detailing professional experience that includes job titles, responsibilities, and achievements.
- Two letters of recommendations, one of which must be from a supervisor or board member who can speak to your professional accomplishments, leadership skills, and managerial experience. The second letter must be from another professional reference that highlights your qualifications and suitability for the Executive Master of Business Administration program. For self-employed applicants, applications will be reviewed on a case-by-case basis. A letter of recommendation from a colleague or client who can attest to your professional interactions and managerial capabilities must be provided.
- One letter of intent that details your credentials and professional background; specific examples of your experience in overseeing people and managing projects; and how your professional experiences align with the objectives of the Executive Master of Business Administration program.

The Executive Master of Business Administration program has predetermined start dates. Check with Admissions for details.

Nursing Degree Programs

Associate in Applied Science in Nursing Program

Excelsior University accepts applications for admission into the Associate in Applied Science in Nursing program from a limited number of states. Refer to the Excelsior University—Associate in Applied Science in Nursing Application Requirements section of the website or contact the Admissions Office for the most current information.

Students are responsible for reading and understanding the RN licensure requirements in the state they intend to practice in following graduation or if considering relocation. Students may consult with the College of Nursing and Health Sciences State Board representative and the State Authorization and Disclosures webpage for current information regarding eligibility for RN licensure in each state and U.S. jurisdiction.

Applicants to the Associate in Applied Science in Nursing program must meet the following eligibility qualifications:

- Hold and maintain an active and unencumbered LPN/LVN license in the U.S., hold current and active paramedic certification, or are in a certain classification of active-duty military, National Guard, or Reserves within a specific military occupation that is equivalent within scope of practice to LPN/LVN or paramedic (learn more here).
- Be employed in a setting that requires direct patient care, under the supervision of someone with a health care credential who evaluates the student's clinical practice. This includes the submission of a Verification of Health Care Experience form, documenting the completion of 200 or more hours of employment within one year prior to the date of submission.
- Completed the Test of Essential Academic Skills (TEAS) and have achieved the minimum TEAS scores required. The TEAS score report from ATI must be completed within one year prior to the date of application. Review the TEAS requirement details.
- Submitted all required health care admission eligibility documentation through CastleBranch. Castlebranch is a third-party system that manages all clinical compliance. The clinical requirements that must be completed for clearance are the following:
  - Background Check
  - Drug Test—10 Panel Screening
  - Documentation Manager (i.e. Immunizations MMR, FLU, Varicella, TB, Quanti-Feron, etc.)

Undergraduate: RN to Bachelor of Science in Nursing and RN to Master of Science in Nursing Degree Programs

Applicants to the Bachelor of Science in Nursing and RN-Master of Science in Nursing programs must meet the following eligibility qualifications:

- Hold and maintain an active and unencumbered U.S. Registered Nurse (RN) license or the equivalent.
- An official transcript showing the completion of an associate degree in nursing or an RN diploma education. The associate degree in nursing or RN diploma education must be earned from a program with specialty accreditation, a regionally accredited institution, or a New York State (NYSED)-approved program.

Associate in Applied Science in Nursing graduates looking to pursue the BS in Nursing while preparing for the NCLEX can get a jumpstart with the Provisional Bachelor of Science Degree in Nursing option which is open to:

- Graduates of an RN diploma program of nursing.
- Graduates of an accredited college or university in the United States with an associate degree in nursing.

Graduate: Master of Science in Nursing Degree Programs

Applicants to the Master of Science in Nursing degree programs must meet the following eligibility qualifications:

- An official transcript showing completion of a bachelor's degree in nursing.
- An official transcript showing completion of a course in statistics at the undergraduate level.
- Hold and maintain an active and unencumbered U.S. Registered Nurse (RN) license or the equivalent.

All Nursing Programs: Residents of California and Washington State

Excelsior University is not accepting applicants to the associate, bachelor's, RN to MS, or MS in Nursing degree programs who reside in California or the state of Washington.

International Applicants

English Language Proficiency

An international student must submit one of the following to show proof of English proficiency:

- TOEFL score of 79 and greater with a minimum of 15 on each section.
- IELTS score of 6.5 and greater with a minimum of 5.5 on each section.
- PTE score of 58 or greater.
- Duolingo score of 105 or higher.

Test scores are to be sent directly to Excelsior University, Office of the Registrar. Students must provide Excelsior University's name and full address at the time of taking the test. Scores submitted to Excelsior have a validity period of two years. Scores that are older than two years at the time of application will not be accepted. Reference the English Language Proficiency policy for further details and exceptions.

International Credit and Credentials

Excelsior maintains a list of international schools for which transcripts may be submitted directly to the university, bypassing the required foreign credit evaluation agency. Students who wish to submit transcripts from post-secondary institutions outside the United States should check the Transcripts Accepted Directly from Institutions Outside the U.S. and in U.S. Territories list on the University's website. Transcripts from institutions on this list may be submitted directly following guidelines in the Submission of Incoming Official Credit-Bearing Documentation policy.

If a prospective student does not find their institution(s) listed, they must use an approved evaluation agency when submitting transcripts or credentials. Students must forward their official documents to an evaluation agency recommended by Excelsior for evaluating and interpreting international credentials. Courses taken at postsecondary institutions without this status will not be considered for credit unless the credits fall under another acceptable credit source category.

Non-Nursing Undergraduate Programs

Students who are seeking admission to an undergraduate program and have completed a degree or some college credits from international institutions should submit a Subject Analysis Transcript from Educational Credential Evaluators (ECE).

Non-Nursing Graduate Programs

Students who are seeking admission to a graduate program and have completed a degree from an international institution should submit a Course-by-Course from World Education Services (WES) for consideration into Excelsior graduate programs.

Nursing Programs

International students considering the nursing bachelor's and master's programs are welcome to apply. Admission to the associate degree in nursing program is not open to international students.

Nursing students with credentials from international nursing programs must submit their credentials to the Commission on Graduates of Foreign Nursing Schools (CGFNS) for evaluation to determine Registered Nurse or Licensed Practical Nurse equivalency.

International Student Nursing Admissions Details

- Students need an equivalent U.S. Registered Nurse (RN) license.
- Students must be a graduate from an approved school of nursing in their home country of education and hold an active and unencumbered nursing license.
- If students are licensed in multiple jurisdictions and/or countries, all licenses must be active and unencumbered.
- All nursing school transcripts and licenses will be verified by contact with the primary source of the information. Students also need to apply to the:
  - Commission on Graduate of Foreign Nursing Schools (CGFNS)
  - New York Credential Verification Service (NYCVS)
  - New York State Education Department (NYSED). The NYSED only issues an official eligibility document to applicants directly and will not send the document to Excelsior University. Students must forward the unopened official eligibility document to Excelsior University by taking the official NYSED document in its sealed envelope and inserting the unopened envelope into an outer envelope and forward it to Excelsior University. Students must write their full name, permanent address, and date of birth on the inner envelope. All official documents must be in sealed envelopes from the original source. If Excelsior receives an opened document, it will be considered unofficial and will not be considered for eligibility or evaluation, and the opened document will be returned to the student. In this case, it becomes the student's responsibility to contact NYSED and request another unopened official copy to supplied to Excelsior.

University Learning Outcomes

To best prepare students to excel in their careers and life, Excelsior University adopted the Degree Qualification Profile's (DQP) five themes as the common University Learning Outcomes (ULOs) for our institution. The ULOs are aligned with general education courses, undergraduate degree major courses, and graduate degree major courses. This outcome alignment from the course level to the university level helps ensure consistency and embedded educational values from a competency and learning outcome perspective throughout all degree levels. In addition to the ULOs aligning and reflecting Excelsior University's mission and values, the ULOs reflect transferable skills essential for long-term success in a changing world as a common foundation throughout our curricula. Students will encounter the ULOs by meeting the requirements for general education and their program of study.

Excelsior's ULOs consist of:

1. Specialized/Industry Knowledge
2. Broad and Integrative Knowledge
3. Intellectual Skills
4. Applied and Collaborative Learning
5. Civic/Democratic and Global Learning

Each ULO has a brief, summary description and rich, differentiated detail of how students may demonstrate the ULO at multiple degree levels. For more information and to see the detailed content per ULO, visit https://www.excelsior.edu/about/university-learning-outcomes.

Program Learning Outcomes

Aligned to the University Learning Outcomes, each program has specific learning outcomes that detail the knowledge, skills, and abilities students are expected to achieve upon completion of their degree programs. Depending on details or regulations associated with the program, these outcomes are referred to with different names throughout the catalog (e.g., **Program Learning Outcomes**, **Program (Student) Learning Outcomes, End-of-Program Student Learning Outcomes**).

Despite the different terminology, these outcomes are designed to provide a clear understanding of what students will learn and achieve in each program. Additionally, some programs may have Concentration Learning Outcomes for the concentrations in their programs and/or Program Educational Objectives, outlining what graduates are expected to attain within a few years after graduation.

Important Information for All Students

Students are subject to the degree requirements in effect at the time of their admission or degree transfer. The faculty reserves the right to make changes in curricular requirements as necessary to reflect the current professional practice. Changes may affect admitted, enrolled, and prospective students. It is the student's responsibility to keep informed of such changes. The University will make every effort to inform students of changes as they occur. Current information about degree requirements is posted on the website.

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple flexible pathways, including Excelsior courses, credit for prior learning, and credit aggregation options to achieve degree completion. In this way, the program is customizable and tailored to each student's needs and learning style.

Excelsior student policies are important to each student's academic success. They include important federal policies, including your right to privacy, to grading policies and policies and procedures concerning refunds, withdrawals, and other administrative issues.

When reviewing your desired program, it's the student's responsibility to review all the student policies to determine whether the program has any exceptions, limitations, or restrictions. This applies to all currently admitted and enrolled students, non-matriculated students taking courses, students in the application process, individuals using the OneTranscript® service, students currently in a withdrawn status, and graduates. All student policies are located at https://www.excelsior.edu/policies/.

Time Limit for Academic Program Completion

Students must make continuous progress toward their academic goals. Students will be academically dismissed if they do not complete their program within the published program time limits of the Time Limit for Academic Program Completion Policy and Procedure. A student attending full time could complete:

- An associate degree in two years;
- A bachelor's degree in four years; or
- A master's degree in two years

The time limit to degree program completion is cumulative for all Excelsior degree and certificate programs. With the exception of the programs listed below, all associate and bachelor's degree programs must be completed in seven years and all master's degree programs must be completed in five years. All undergraduate and graduate certificates must be completed in two years.

Degree Program	School	Time Limit for Completion
Associate in Applied Science	Nursing	4.5 years
Bachelor of Science	Nursing	6 years
RN to MS	Nursing	10 years
Master of Science	Nursing	6 years

In nursing degree programs, the time limit for program completion is cumulative between all undergraduate programs and between all graduate programs.

Time Limitations on Applicability of Transfer and Excelsior Credit

Generally, there is no time limit on the use of credit from approved sources of credit to satisfy the requirements of an Excelsior University degree program. The only exception is the Information Literacy requirement, which must have been successfully taken within 10 years of the date the student becomes admitted to Excelsior. There are time restrictions on the acceptability of courses or examinations used to satisfy specific requirements of Excelsior's degree programs. The following degree programs have established a time-related restriction on the application of certain subject areas meeting degree requirements.

Degree Program	Subject Area	Time Limit Restriction
Bachelor of Science in Computer Science	Major Core courses, Concentration courses	5 years
Bachelor of Science in Cybersecurity	Cybersecurity Component	5 years

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Degree Program	Subject Area	Time Limit Restriction
Bachelor of Science in Electrical Engineering Technology	Computer, Electrical (not AC/DC), Electronics	10 years
Bachelor of Science in Information Technology	Information Technology Component	5 years
Bachelor of Science in Nuclear Engineering Technology	Calculus I, Calculus II, Natural Science, Computers, Nuclear Engineering Technology, Electrical (not AC/DC), Electronics	10 years
Bachelor of Science in Liberal Arts with a concentration in Logistics Operations Management	Concentration courses	15 years
Associate in Applied Science in Nursing	Human Anatomy and Physiology Microbiology	5 years
	All Nursing/Major Core requirements	**Eligible Credit:** Excelsior courses completed since 2020 and no more than 5 years prior to the academic policy date, C graded or higher are eligible. **Ineligible Credit:** Previously completed Excelsior College Exams, Nursing Theory Conference Exams (NTCX), awarded waivers and pre-2020 Excelsior courses, and courses completed more than 5 years prior to the academic policy date are not eligible.

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Degree Program	Subject Area	Time Limit Restriction
Bachelor of Science in Nursing	All Nursing/Major Core requirements	5 years
Master of Science in Nursing Education	All Nursing/Major Core requirements	5 years
Master of Science in Nursing Leadership and Administration of Health Care Systems	All Nursing requirements	5 years
Master of Science in Nursing Informatics	Major Core requirements	5 years
All dual degree programs in nursing	All Nursing Major Core requirements	5 years
Bachelor of Science in Business	Business component courses	15 years
Bachelor of Science in Health Care Management	Professional Business core	20 years
All non-nursing graduate-level degrees	All credits applied toward the degree	5 years

Graduation Requirements

Excelsior University offers six types of degrees that require the minimum criteria outlined below. Individual programs may require additional hours to be completed in specific areas.

The chart below is specific to the Associate in Applied Science in Administrative/Management Studies, Associate in Applied Science in Computer Technologies, Associate in Science in Criminal Justice, Associate in Applied Science in Nursing, Associate in Applied Science in Technical Studies, Associate in Science in Health Sciences, Bachelor of Professional Studies Business and Management, Bachelor of Science in Computer Science, Bachelor of Science in Cybersecurity, Bachelor of Science in Health Care Management, Bachelor of Science in Mechanical Engineering Technology, Bachelor of Science in Nursing, Bachelor of Science in Psychology, Bachelor of Science in Public Health, Executive Master of Business Administration, Master of Business Administration, Master of Science in Criminal Justice, Master of Science in Cybersecurity, Master of Science in Human Resource Management with an Emphasis in Diversity and Technology, Master of Science in Management, Master of Science in Nursing Education, Master of Science in Nursing Informatics, Master of Science in Nursing Leadership and Administration of Health Care Systems, Master of Science in Organizational Leadership with an Emphasis in Technology and Data Analytics, Master of Public Administration, RN to Master of Science in Nursing Education, RN to Master of Science in Nursing Leadership and Administration of Health Care Systems, RN to Master of Science in Nursing Informatics degrees.

Degree Program	Minimum Total Program Credits	Minimum Liberal Arts and Sciences Credits	Minimum University Credits	Minimum General Education Credits	Minimum Upper-Level Credits	Minimum Concentration Credits	Minimum Elective Credits	Minimum Prerequisite Credits
Associate in Science (AS)	60	30	4	21	-	0 or 9	Variable	Variable
Associate in Applied Science (AAS)	60	20	4	21	-	0 or 9	Variable	Variable
Bachelor of Science (BS)	120	60	4	33	30	0 or 15	Variable	Variable
Bachelor of Science in Nursing (BS in Nursing)	120	60	4	33	30	0	Variable	Variable
Bachelor of Professional Studies (BPS)	120	30	4	33	30	0 or 15	Variable	Variable
Master of Science (MS)	30	-	-	-	-	0 or 9	Variable	Variable

Total Program Credits

A minimum total of 60 credits is required for associate degrees. A minimum total of 120 credits is required for bachelor's degrees. A minimum total of 30 credit is required for a master's degree. Individual degree programs may require additional credit hours to be completed in specific areas.

Overall GPA Requirements

Excelsior requires an overall 2.0 GPA for completion of an undergraduate degree and an overall 3.0 GPA for completion of a graduate degree and a graduate certificate. Individual degree programs may require a minimum GPA in the major to graduate. Individual degree programs may require a minimum major GPA throughout their degree program, and some degree programs may have individual grade requirements for specific degree requirements. Please refer to the Grade Scale, GPA, and Credit Application policy and procedure for additional information and specific catalog pages for individual degree information.

General Education Requirements

The general education curriculum at Excelsior University provides undergraduate students with essential foundational skills and knowledge that will support them in their degree programs, careers, and lives. Essential skills include written and oral communication, critical and ethical thinking, and quantitative reasoning. In addition, students in general education courses broaden their perspectives on the world by exploring topics and methods from multiple science, social science, and humanities disciplines.

	Associate	Bachelor's
Written English	3	6
Humanities	3	6
Ethics	3	3
Social Sciences / History	6	9
Natural Sciences	3	3
Mathematics	3	3
Natural Sciences/Mathematics	0	3
TOTAL	**21**	**33**

Individual degree programs may require specific courses in each of these areas. A minimum grade of C is required for courses intended to meet a general education requirement. Refer to the General Education Policy and Procedures for additional information.

Written English Requirement

Writing classes help students to hone their communication abilities, preparing them for both future academic study and communication in the workplace. The first part of Excelsior University's Written English Requirement focuses on expository writing: writing to describe, explain, or make an argument. For the second part of the Written English Requirement, students may choose to continue to study expository writing at a more advanced level or study the forms of writing used in a specific professional area such as business, technology, or health sciences.

Associate

3 semester hours in expository writing within first 13 semester hours.

Bachelor's

6 semester hours to include 3 semester hours in expository writing within first 13 semester hours and 3 semester hours in applied writing or writing within the discipline.

A maximum of two semester courses or three-quarter courses of credit in English composition/ freshman English courses will apply toward degree requirements.

Humanities

The humanities focus on the reflection and interpretation of the human experience. Through aesthetic appreciation and the development of knowledge and skills in critical thinking and problem solving, these courses examine the human environment with particular attention to diverse heritage, traditions, and cultures. Relevant discipline areas include art, music, literature, foreign language, philosophy, religion, speech, or a subject area other than writing.

Ethics

Ethics are the principles that guide human behavior and are a cornerstone of every field and profession. Employers need workers who can find innovative, ethical, and practical solutions to a wide variety of problems. In ethics courses and examinations students learn to reflect and analyze positions and issues from a variety of ethical perspectives. This ability equips students to make ethically informed choices in their personal and professional lives. Subject areas that meet the ethics requirement include, but are not limited to: classical or contemporary ethical theory and philosophy; ethical and moral reasoning; applied ethics relevant to particular disciplines and careers.

Social Sciences and History

The social sciences and history involve the study of individuals and societies and the processes individuals use to order and understand their world. The social sciences focus on theories that explain verifiable phenomena of individual and group human behavior using the scientific method. History is the systematic study of people and events in the past. Relevant discipline areas include anthropology, criminal justice (theory-based, not applied criminal justice), economics, geography, government, history, political science, psychology, and sociology.

Mathematics and Natural Sciences

The natural sciences and mathematics are those branches of science that examine the natural world through scientific methods using quantitative data. Relevant discipline areas for natural sciences include astronomy, biology, chemistry, earth science, and physics. Courses in applied science will not apply toward the natural sciences requirement. For mathematics, relevant disciplines include algebra, geometry, analysis (which includes calculus), and applied mathematics (which includes probability and statistics). Mathematics courses must include computation or quantitative reasoning. There are some restrictions on courses that can be used to meet the mathematics requirement, such as:

- Arithmetic courses and courses that have been designated as developmental or remedial cannot be used to meet the mathematics requirement.
- No more than three courses of mathematics credit below the level of calculus may be applied to any degree. Representative titles of courses below the level of calculus include College Math, College Algebra, Elementary Functions, Modern Math, Fundamentals of Algebra, Trigonometry, and Precalculus.
- No more than one course or examination may be applied that is:
  - Terminal in nature with no prerequisites beyond the level of arithmetic;
  - Intended for students outside of science and mathematics; or
  - A mathematics appreciation course.

Liberal Arts and Sciences

In addition to Excelsior's general education curriculum, all Excelsior undergraduate degrees include a breadth and depth of study in the liberal arts and sciences. The liberal arts and sciences are those areas of study classified as humanities, social sciences, history, natural sciences, and mathematics. The Associate in Applied Science (AAS) degree is required to have a minimum of 20 credits in the liberal arts and sciences. Associate in Science (AS) and Bachelor of Professional Studies (BPS) degrees are required to have a minimum of 30 credits, and Bachelor of Science (BS) degrees are required to have a minimum of 60 credits.

Upper-Level Requirements

All bachelor's degree programs require a minimum of 30 hours to be completed at the upper level. Excelsior courses that are designated at the 300–400 level are considered to be upper level. Typically, external courses must be from 4-year colleges and universities offered in the junior or senior level to be considered upper-level. The acceptance of coursework toward the upper-level requirement is subject to official evaluation review. The minimum 30 hours is specific to the Bachelor of Professional Studies Business and Management, Bachelor of Science in Computer Science, Bachelor of Science in Cybersecurity, Bachelor of Science in Health Care Management, Bachelor of Science in Mechanical Engineering Technology, Bachelor of Science in Nursing, Bachelor of Science in Psychology, Bachelor of Science in Public Health, RN to Master of Science in Nursing Education, RN to Master of Science in Nursing Leadership and Administration of Health Care Systems, and RN to Master of Science in Nursing Informatics.

University Requirements

All associate and bachelor's degree programs require at least 4 hours to be completed at Excelsior University to meet the Information Literacy and Cornerstone requirements. A minimum grade of C or higher is required. Refer to the General Education Policy and Procedures for additional information in regard to the Information Literacy and Cornerstone requirements.

Cornerstone

The purpose of the Cornerstone course is to provide students with the foundational skills and resources for academic and career success and assure a "smart start" to the Excelsior University academic experience. All undergraduate students must complete the Cornerstone course in their first term of credit-bearing activity at Excelsior University. The Cornerstone course cannot be completed in the same term as the Capstone course.

Information Literacy

Information literacy is the ability to find, evaluate, interpret, and use information legally, ethically, and effectively. This course introduces students to important knowledge and academic skills in the areas of technological and cyber literacy, the academic knowledge-creation process, library and internet research, source evaluation, reading and processing information, and writing with sources. All undergraduate students must meet the information literacy requirement within the first 13 Excelsior University credits attempted.

Major Core Requirements

All Excelsior University degrees require a specific area of academic focus within a particular field or discipline to meet the major core requirements. It includes a structured program of coursework that includes specific courses or subject areas.

Concentration Requirements

Some Excelsior University degree programs include the choice of a concentration that provides a focused area of study within the academic major. It includes specialized coursework and provides in-depth knowledge and skills of a particular subject as related to the major. The minimum concentration hours can vary from 9–15 hours depending on the degree program.

Elective Requirements

Individual degree programs may require additional elective requirements. Elective courses apply toward degree requirements as choices that are beyond the specified required sequence of courses. Some of these elective courses must be in specific areas such as arts and sciences courses.

Prerequisites to the Major Core Requirements

Individual degree programs may require certain requirements to be completed prior to the major core requirements. Reference the individual degree program section for further details.

Required Excelsior University Courses

Individual degree programs may require additional requirements to be completed at Excelsior University. Reference the individual degree program section for further details.

Capstone Requirement

The Capstone course is designed to bring together the student's cumulative knowledge and skills to demonstrate mastery of the learning outcomes for the degree program. Through a mixture of discussion, presentations, and written analysis, students will apply their previous learning in new ways, both analyzing and synthesizing fresh perspectives on their learning. A minimum grade of C is required for all associate and bachelor's degrees. Reference the individual master's degree programs for minimum grade requirements.

Credit Requirements for Bachelor of Science Degrees

EXCEPTIONS: This information is *not* specific to the **Bachelor of Professional Studies Business and Management Bachelor of Science in Computer Science, Bachelor of Science in Cybersecurity, Bachelor of Science in Health Care Management, Bachelor of Science in Mechanical Engineering Technology,** and **Bachelor of Science in Psychology.** Credit requirements for these programs can be found starting on their corresponding degree program pages, as well as the graduation requirement section on **page 25.**

60 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS	Credit Hours
IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.	3
Written English Requirement	6
Humanities Includes Ethics	9
Social Sciences/History	9
Natural Sciences	2
Mathematics	2
Natural Sciences or Mathematics	5
Additional Arts and Sciences	27
INL 102 Information Literacy	1
Capstone The Capstone course must be taken at Excelsior University and cannot be transferred in.	3
Additional collegiate-level study Requirements vary by degree. Specific details can be found under each degree listing in this catalog.	53–57
TOTAL DEGREE CREDITS REQUIRED	120–124

College of Liberal Arts and Sciences

Message from the Executive Dean

Scott V. Dolan, PhD

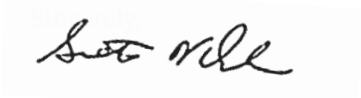
Dear Student,

It is with great joy and enthusiasm that I offer you a warm welcome to the College of Liberal Arts and Sciences. We are truly honored that you chose to pursue your degree at Excelsior University. Whether you are returning to school after some time away or continuing immediately after the completion of an undergraduate degree, the choice to pursue a university education is an important step in your lives and a significant investment of your time and effort, and one that can pay incredible dividends personally and professionally. Please know that as a school, we care deeply about your success, and we are committed to supporting your personal development, as well as your academic and career goals.

Your choice of Excelsior University comes with a promise from us: to provide you with a high-quality, rigorous academic experience that prepares you for the careers of the future and to be leaders in your communities. Our market-oriented programs will enable you to explore your field of study—whether it be in business, technology, or the liberal arts. But even more importantly, we want to challenge you to think more deeply about the intersection among these disciplines, and how you can work collaboratively and innovatively to seek solutions to the most significant issues of the day. As learners in our courses, you will engage with our expert, collaborative, and caring faculty, who bring their industry expertise and use our technology-enabled platforms to prepare you to be future ready. No matter what, during your time with us, know that our biggest joy is seeing the success of our students.

By choosing Excelsior University, you have placed great trust in us, and it is our honor to support you meeting your goals. Please know that along every step of your journey, the faculty and staff within the College of Liberal Arts and Sciences are here to support you. Please don't hesitate to reach out to us for guidance, support, or just to say hello.

Once again, thank you so much for entrusting us with your education, and best of luck on your success.



Scott V. Dolan, PhD
Executive Dean, College of Liberal Arts and Sciences

Excelsior University

College of Liberal Arts and Sciences

Mission Statement

The College of Liberal Arts and Sciences prepares all learners for the careers of the future through high-quality, innovative, inclusive, and relevant learning experiences enabled by expert and caring faculty, technology, and industry and academic partnerships. We empower our student community to thrive intellectually, emotionally, and socially, equipping them to make meaningful contributions to an ever-changing world.

Vision Statement

We will be a future-focused college that provides innovative academic experiences across multiple modalities, enabled by the capabilities of technology, and delivered by dynamic and expert faculty in ways that promote Excelsior as a lifelong, student-centered learning home.

College of Liberal Arts and Sciences Honor Societies

Alpha Nu Sigma Honor Society

Membership in Alpha Nu Sigma, an affiliate honor society of the American Nuclear Society, recognizes the high scholarship, integrity, and potential achievement in the applied nuclear science and nuclear engineering of those students.

Who is eligible:

Members of Alpha Nu Sigma are selected from juniors and seniors in the top 25% and 33%, respectively, of their class in Excelsior University's Bachelor of Science in Nuclear Engineering Technology program and Bachelor of Professional Students in Technology Management, Nuclear Technology concentration, program.

ANS National Honor Society Charter

Learn more about the American Nuclear Society

Alpha Sigma Lambda National Honor Society

The Alpha Sigma Lambda National Honor Society's purpose is to recognize academically outstanding students in higher education. Alpha Sigma Lambda is recognized as the official honor society for adult learners by the Association of College Honor Societies. Every year, undergraduate students in the College of Liberal Arts and Sciences are inducted into Excelsior's Sigma Zeta chapter of Alpha Sigma Lambda.

Who is eligible:

Members of Alpha Sigma Lambda are selected from the top 20% of students with a GPA greater than 3.5 who have earned a minimum number of credits at Excelsior, including credits in the arts and sciences.

Learn more about Alpha Sigma Lambda

Sigma Beta Delta

Sigma Beta Delta was established to honor students who have attained superior records in business programs in schools and colleges with regional accreditation. It has been an American collegiate tradition for more than 200 years.

Who is eligible:

To be eligible for Sigma Beta Delta, a business student must rank in the upper 20% of the junior, senior, or master's class and be invited to become a member by the faculty officers.

Learn more about Sigma Beta Delta

Upsilon Pi Epsilon Honor Society

The mission of Upsilon Pi Epsilon is to recognize academic excellence at both the undergraduate and graduate levels in the computing and information disciplines and to encourage these students' contribution to the enhancement of knowledge.

Who is eligible:

To be invited to apply, undergraduate and graduate students must rank in the upper 35% of the class. Candidates will have completed 45 (undergraduate) semester hours of college work or at least one half of the number of semester hours of graduate work.

Learn more about Upsilon Pi Epsilon

College of Liberal Arts and Sciences

DEPARTMENT OF LIBERAL ARTS

Degree and Certificate Programs

College of Liberal Arts and Sciences

DEPARTMENT OF LIBERAL ARTS

Mission Statement

The Department of Liberal Arts fosters intellectual growth, critical and creative thinking skills, and civic responsibility in students by offering diverse, inclusive, and interdisciplinary learning experiences in flexible liberal arts degree programs and enriching general education experiences for all students. We equip students with 21st-century knowledge, skills, and abilities that enable them to analyze complex problems, communicate effectively, and engage empathetically with diverse perspectives. We inspire students to contribute to society meaningfully, as informed citizens and innovative thinkers, rising as leaders in their respective fields.

Vision Statement

Our vision is to be a dynamic department for liberal arts education, where students explore within and across disciplines to develop a deep understanding of the human experience. We prepare graduates who are intellectually agile, ethically grounded, and ready to address the challenges of a rapidly changing world. We aspire to cultivate a community that celebrates curiosity, fosters resilience, and champions social justice and democracy, empowering lifelong learners to make transformative contributions to society.

Credit Requirements Specific to the Associate in Science in Liberal Arts Degree

60 CREDITS

This information is specific to the **Associate in Science in Liberal Arts.** Additional credit requirements for this program can be found starting on **page 40**, as well as the graduation requirement section on **page 25.**

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS	Credit Hours
IND 101 Cornerstone A: Foundations The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.	3
Written English Requirement	3
Ethics	3
Humanities	3
Social Sciences/History	6
Natural Sciences	2
Mathematics	2
Arts and Sciences Electives	9
INL 102 Information Literacy The course must be taken at Excelsior University and cannot be transferred in.	1
Capstone The Capstone course must be taken at Excelsior University and cannot be transferred in.	3
Additional collegiate-level study Requirements vary by degree. Specific details can be found under each degree listing in this catalog.	25
TOTAL DEGREE CREDITS REQUIRED	60

Associate in Science in Liberal Arts

60 CREDITS

General Education and Additional Requirements

Refer to chart on page 39 for an overview of general education and distribution requirements for all associate degree programs.

IND 101 Cornerstone A: Foundations
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Ethics

Degree-specific requirements

LA 298 Associate Degree Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 39. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Associate in Science in Liberal Arts is an entry-level liberal arts program in which up to half of the credits can be applied professional. For students, whose interests and goals include the traditional arts and sciences realms of humanities, social sciences, history, natural sciences, and/or mathematics, or who seek to complete an associate degree for job qualification or promotion and intend eventually to go on to the baccalaureate level, the Associate in Science in Liberal Arts degree may be more appropriate than a structured pre-professional degree in a specific discipline. The requirements for the General Education component of any Excelsior University degree fits the plan of the Associate in Science in Liberal Arts, and all credits are transferable to the Bachelor of Science in Liberal Arts.

Program Learning Outcomes

Upon completion of the Excelsior University Associate in Science in Liberal Arts program, students will be able to:

1. **Communication**
   Effectively communicate in writing and orally to a targeted audience.
2. **Diversity**
   Identify issues of cultural diversity and how they impact different global communities.
3. **Problem Solving**
   Integrate information from diverse sources to solve problems and achieve goals.
4. **Ethics**
   Research an ethical dilemma and articulate findings from multiple perspectives.
5. **Professional Development**
   Identify strategies for continuing education within a chosen professional career.

Degree Requirements

The Associate in Science requires a total of **60 credits,** distributed as follows:

- 30 credits minimum in the arts and sciences
- 30 credits minimum in applied professional and/or additional arts and sciences credit

Refer to the chart on page 40 for a graphic representation of the minimum credits necessary along with the credit distribution requirements for this degree program.

ARTS AND SCIENCES COMPONENT (30 CREDITS)

Arts and sciences are those areas of study classified as humanities, social sciences/history, and natural sciences/mathematics. The Associate in Science requires a minimum of 30 credits in the arts and sciences distributed as follows:

1. **Written English Requirement: 3 credits**
   (minimum grade of C required)

2. **General Education Requirement**
   18-credit minimum of which 6 credits are required in each of the three distribution areas: humanities, social sciences/history, and natural sciences/mathematics. Within the natural sciences/math distribution, at least 2 credits must be earned in college-level mathematics and 2 credits in the natural sciences. The humanities distribution must include at least 2 credits in ethics with a minimum grade of C, and at least one 3-credit course in a humanities discipline.
3. **Arts and Sciences Electives: 6 credits**
4. **Associate Degree Capstone: 3 credits**
   (minimum grade of C required)

OTHER REQUIREMENTS (30 CREDITS)

- **INL 102 Information Literacy**: 1 credit
- **IND 101 Cornerstone A: Foundations (cornerstone course):** 3 credits
  The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.
- **Applied Professional and/or Additional Arts and Sciences Credits:** 26 credits

Information Literacy

All student must meet the college's information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the college's Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the college's Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Bachelor of Science in Liberal Arts

120 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on **page 31** for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Ethics

DISTRIBUTION REQUIREMENT

- 33 credit minimum of which 12 credits are required in any two different arts and sciences distribution areas and 9 in the remaining distribution area: humanities, social sciences/history, and natural science/mathematics.

DEGREE-SPECIFIC REQUIREMENTS

OPTIONAL CONCENTRATION REQUIREMENTS

- Logistics Operations Management (18 credits, with 9 upper level)
  BUS 381 Transportation, Warehousing and Distribution, BUS 440 Supply Chain Management, BUS 443 Lean Logistics. Additional Credits in: Procurement, Purchasing, Inventory Management, Operations Management (including BUS 425 Operations Management), Project Management (including IT 390 Project Management), Quality Control, and other related courses (including BUS 435 International Business) as approved.

LA 498 Liberal Arts Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on **page 31**. Once you are admitted, the **My Academic Planner** tool will specify how credits (transfer and remaining) apply.

Program Description

Students in the bachelor's in liberal arts degree explore the full breadth of the arts and sciences while demonstrating competency in critical 21st century skills most desired by employers. The degree program stresses intellectual development and multidisciplinary exploration of the critical issues and values inherent in the human experience, equipping students for career advancement or graduate school options. Students who choose to pursue the general liberal arts degree does not specialize; rather, they select from a vast menu of courses that prompt students to ask questions about themselves, their history, their culture, their values, and their future and to consider whether a liberal education can, perhaps, release us from preconceived notions and unexamined attitudes. The general Liberal Arts degree is popular with our students because they offer the most flexible approach to degree completion using many different credit sources. It is an excellent choice for students who would like to investigate multiple opportunities while developing the skills and background necessary for a personally, socially, and professionally fulfilling life.

Of a total of 120 degree credits, Bachelor of Science students must complete 60 credits in the arts and sciences. The remaining credits may be a combination of applied professional and additional arts and sciences. At least 30 of the degree credits must be at the upper level, 21 of which must be in the Arts and Sciences.

Nine upper level credits are required for the **Logistics Operations Management concentration.**

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in Liberal Arts program, students will be able to:

1. Articulate complex concepts to a targeted audience in written and oral form.
2. Analyze the influence of cultural diversity when addressing global issues.
3. Collaborate within a team to solve interdisciplinary problems or achieve a common goal.
4. Evaluate perspectives of an ethical dilemma and present evidence-based solutions.
5. Develop a plan that integrates academic and professional experiences for achieving career goals.

Degree Requirements

ARTS AND SCIENCES (60 CREDITS)

Required credits are distributed as follows:

A. **Written English Requirement: 6 credits**
(minimum grade of C required)

B. **Distribution requirement**
33 credit minimum of which 12 credits are required in any two different arts and sciences distribution areas and 9 in the remaining distribution area: humanities, social sciences/history,

and natural science/mathematics.

Within the 33 total credits, the humanities distribution must include at least 2 credits in ethics with a minimum grade of C, and at least one 3-credit course in a humanities discipline. At least 2 credits must be in college-level mathematics and 2 credits must be in the natural sciences.

C. Capstone Requirement: 3 credits
This requirement may be satisfied by completion of **LA 498 Liberal Arts Capstone**. This requirement must be satisfied at Excelsior University and cannot be transferred in. A grade of C or better is required to pass the capstone requirement.

D. Additional Arts and Science Electives
18 credits in arts and sciences courses of your choosing.

OTHER REQUIREMENTS (60 CREDITS)

Required credits are distributed as follows:

- **INL 102 Information Literacy:** 1 credit
- **IND 101/301 Cornerstone:** 3 credits
- **Applied Professional and/or Additional Arts and Sciences Credits:** 56 credits

Concentration (Optional)

Logistics Operations Management

The Logistics Operations Management concentration is designed for students who want to enhance their skills for career advancement and who want to add a credential to their BS degree. The concentration requires 18 credits of coursework.

Concentration Learning Outcomes

Upon completion of the Logistics Operations Management concentration, students will be able to:

1. Solve inventory control, facilities planning, warehousing, and distribution problems
2. Analyze logistics, supply chain, and project management operations
3. Prioritize cost reduction, risk, and maximized profits for logistics operations
4. Integrate multidimensional methods to solve logistics problems
5. Evaluate the design and implementation of supply chain systems

A minimum of 18 credits, with nine at the upper level, and a 2.0 GPA are required. All professional Logistics courses must be taken within 15 years of admission.

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Bachelor of Science in Psychology

Overview

Psychology, often referred to as "the helping profession," appeals to students who have a passion for serving others and are interested in unlocking the mysteries of the human mind. Psychology majors develop a deeper understanding of themselves, others, and the world around them as they explore what motivates behavior and causes emotion. Studying what makes people tick, personality, and cognition enables psychology majors to develop strong communication, critical thinking, and analytical skills. Psychology is a rapidly growing field with a multitude of career opportunities, including counseling, social work, sales, communication, business, and research. Many psychology majors continue their education and obtain graduate degrees in counseling psychology, forensic psychology, sports psychology, school psychology, and industrial psychology to name a few.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements start on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements start on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics	3
COMM 125 Public Speaking	3
HUM 253 Mythology	3
HIS 101 United States History I	3
SOC 101 Introduction to Sociology	3
HIS 102 United States History II	3
NS 110 Science in Today's World	3
BIO 110 Biology (Non-Lab)	3
MAT 101 Mathematics for Everyday Life	3

A minimum grade of C or higher is required for all General Education requirements.

Major Core Requirements: 45 credits	
COURSE NAME	Credits
PSY 101 Introduction to Psychology I	3
PSY 235 Lifespan Developmental Psychology	3
MAT 201 Statistics	3
PSY 305 Research Methods This requirement must be completed at Excelsior University.	3
PSY 380 Biopsychology	3
PSY 280 Abnormal Psychology	3
PSY 220 Psychology of Personality	3
PSY 330 Educational Psychology	3
PSY 360 Social Psychology	3
PSY 362 Psychology of Human Sexuality	3
PSY 340 Psychology of Learning	3

Major Core Requirements: 45 credits	
COURSE NAME	Credits
PSY 420 Human Motivation	3
PSY 365 Psychology of Diversity This requirement must be completed at Excelsior University.	3
PSY 440 History and Systems This requirement must be completed at Excelsior University.	3
LA498 PSY Psychology Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C or higher is required for all Major Core requirements.

Elective Requirements: 38 credits
Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Psychology program, students will be able to:

1. Describe key concepts, principles, and overarching themes in psychology.
2. Use scientific reasoning to interpret psychological phenomena.
3. Apply ethical standards to evaluate psychological science and practice.
4. Exhibit effective presentation skills in a variety of media for different purposes.
5. Apply psychological content and skills to career goals.

College of Liberal Arts and Sciences

SCHOOL OF BUSINESS

Degree and Certificate Programs

College of Liberal Arts and Sciences

SCHOOL OF BUSINESS

Mission Statement

The School of Business fosters ethical, evidence-based learning that equips students for impactful careers in business and public service. Through flexible, partnership-driven programs, we empower graduates with the skills and knowledge to lead effectively, drive innovation, and create meaningful change in their organizations and communities.

Vision Statement

To advance business and public service by preparing students to achieve their goals and lead change through ethical leadership, research-driven education, and flexible, partnership-supported learning—delivered online, on location, and across diverse modalities.

Associate in Applied Science in Administrative/Management Studies

Overview

The Associate in Applied Science in Administrative/Management Studies is designed for those seeking careers in business management. The scope of careers is broad as this is a general management degree program that offers degree candidates the opportunity to explore different careers in management, ranging from business development to retail.

Degree Summary

TOTAL PROGRAM HOURS: 60

Arts and Sciences Requirements: 20 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree. Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
PSY 101 Introduction to Psychology I	3

continued on next page

General Education Requirements: 21 credits

COURSE NAME	Credits
SOC 101 Introduction to Sociology	3
NS 110 Science in Today's World	3
MAT 101 Mathematics for Everyday Life	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 18 credits

COURSE NAME	Credits
ACC 211 Financial Accounting	3
ACC 212 Managerial Accounting	3
BUS 222 Business Communication This requirement must be completed at Excelsior University.	3
BUS 230 Business Law This requirement must be completed at Excelsior University.	3
BUS 231 Business Data Literacy	3
BUS 299 Business and Management Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

Business Electives Requirements: 6 credits

Additional credits needed to fulfill the program requirements in business.
The following Excelsior courses are recommended to meet the Business Electives.

COURSE NAME	Credits
BUS 323 Business Ethics	3
BUS 435 International Business	3

A minimum grade of C is required for all Business Electives requirements.

Elective Requirements: 11 credits

Additional credits needed to fulfill the program requirements in any academic area. The following Excelsior courses are recommended to meet the Elective requirements.

COURSE NAME	Credits
BUS 311 Organizational Behavior	3
COMM 423 Leadership and Team Building	3
ECO 262 Introduction to Macroeconomics	3
Electives	2

A minimum grade of C is required for all Elective requirements.

Program Learning Outcomes

Upon successful completion of the Excelsior University Associate in Applied Science in Administrative/Management Studies program, students will be able to:

1. Apply key management and business theories and concepts to selected business problems.
2. Apply good judgment and business ethical reasoning to problems and scenarios that commonly arise in business organizations.
3. Communicate clearly, appropriately, and persuasively to a business audience.
4. Utilize business computer applications and information technologies to organize and interpret business data and information.
5. Apply scientific reasoning and college-level mathematics to real-world business problems.

Associate in Science in Criminal Justice

Overview

The Associate in Science in Criminal Justice prepares students for leadership positions and advancement in their careers. They will gain relevant skills studying the criminal justice and legal processes involved in arrest, adjudication, sentencing, probation, incarceration, parole, and inmate release. By the end of the program, they will be introduced to law enforcement, the courts, corrections, and juvenile justice systems in the United States, as well as the best practices in police-community relations and use of technology in the field.

Degree Summary

TOTAL PROGRAM HOURS: 60

Arts and Sciences Requirements: 30 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree. Refer to Graduation Requirements start on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
PSY 101 Introduction to Psychology I	3

continued on next page

General Education Requirements: 21 credits

COURSE NAME	Credits
SOC 101 Introduction to Sociology	3
NS 110 Science in Today's World	3
MAT 101 Mathematics for Everyday Life	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 18 credits

COURSE NAME	Credits
CJ 101 Introduction to Criminal Justice	3
CJ 110 Introduction to Law Enforcement	3
CJ 120 Introduction to Corrections	3
CJ 228 Multicultural Issues in Criminal Justice This requirement must be completed at Excelsior University.	3
CJ 265 Criminal Procedure and Evidence	3
CJ 298 Criminal Justice Capstone (Associate's Degree) This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

Arts and Science Electives Requirements: 3 credits

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

Elective Requirements: 14 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon completion of the Excelsior University Associate in Science in Criminal Justice, students will be able to:

1. Describe the various components of the criminal justice system: legislation, law enforcement, judicial, and correctional.
2. Describe how decision-making influences policy and procedure.
3. Explain how ethics is used in the decision-making process of the criminal justice system.
4. Analyze the various forms of diversity throughout the criminal justice system.
5. Describe the various criminal justice career opportunities.

Bachelor of Professional Studies in Business and Management

Overview

The Bachelor of Professional Studies in Business and Management program's strength is primarily based on the curriculum, ease of reentry into higher education, and the ability to obtain a degree that offers the necessary skills to be successful in the workforce. This program affords students the opportunity to strengthen their business acumen as well as apply theory to best practices in the workplace thorough course assignments and projects. In the program, students can apply knowledge attained from their careers and previous course work they've completed while adding to their skills and abilities, culminating with a Process Improvement Plan in the Capstone course.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 30 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
HUM 253 Mythology	3
PSY 101 Introduction to Psychology I	3
HIS 102 United States History II	3
SOC 101 Introduction to Sociology	3
MAT 101 Mathematics for Everyday Life	3
MAT 108 Elementary Algebra	3
NS 110 Science in Today's World	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 45 credits	
COURSE NAME	Credits
ACC 211 Financial Accounting	3
ACC 212 Managerial Accounting	3
BUS 231 Business Data Literacy	3
BUS 311 Organizational Behavior This requirement must be completed at Excelsior University.	3
BUS 312 Managing Human Resources	3
BUS 323 Business Ethics	3
BUS 341 Management Concepts and Applications This requirement must be completed at Excelsior University.	3
BUS 350 Principles of Finance	3

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Major Core Requirements: 45 credits

COURSE NAME	Credits
BUS 351 Marketing Concepts and Applications This requirement must be completed at Excelsior University.	3
BUS 435 International Business This requirement must be completed at Excelsior University.	3
BUS 452 Business Leadership This requirement must be completed at Excelsior University.	3
IT 221 Introduction to Computers	3
IT 390 Project Management	3
ECO 260 Introduction to Microeconomics	3
BUS 490 Integrated Business and Management Assessment BPB This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

Business Elective Requirements: 3 credits

College-level course work from the following subject areas will meet the business elective requirements: business, management, and Excelsior-evaluated business and professional certifications as outlined on the Start with More Credit webpage. The following Excelsior course is recommended to meet the Business Elective requirement.

COURSE NAME	Credits
BUS 230 Business Law	3

A minimum grade of C is required for all Business Electives requirements.

Elective Requirements: 35 credits

Additional credits needed to fulfill the program requirements in any academic area. The following Excelsior courses are recommended to meet the Elective requirements

COURSE NAME	Credits
BUS 222 Business Communication	3
BUS 325 Women in Business	3
ART 102 History of Western Art Since the 15th Century	3
ECO 262 Introduction to Macroeconomics	3
HIS 120 World History I	3
HUM 306 Creative Problem Solving	3
HUM 307 Critical Thinking	3
BUS 225 Consumer Behaviors	3
BUS 300 Introduction to Entrepreneurship	3
BUS 425 Operations Management	3
BUS 431 Business Data Analysis	3
Electives	2

A minimum grade of C is required for all Electives requirements.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Professional Studies in Business and Management program, students will be able to:

1. Apply basic accounting concepts and principles to the analysis and interpretation of corporate financial statements.
2. Explain how modern marketing concepts and theories support and influence business strategies.
3. Utilize financial management concepts and tools in order to make informed business decisions.
4. Apply the major concepts and theories of management to develop business strategies in a real-world context.
5. Analyze the opportunities and risks associated with doing business in global environment.
6. Employ organizational theories and concepts to explain the impact of the organizational environment on management practices and employee relations.

7. Analyze various leadership approaches and their application to different organizational contexts.
8. Apply project management tools and techniques in a business environment.
9. Effectively communicate strategic management concepts orally and in writing to multiple audiences.
10. Apply various information technologies to support business strategies.
11. Justify decisions by evaluating the social, ethical, and legal implications for business organizations.
12. Apply knowledge of business concepts and functions in an integrated manner.

Bachelor of Science in Business

120 CREDITS

General Education and Additional Requirements

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Degree-specific requirements (At least 21 upper level business credits)

BUS 323 Business Ethics	BUS 230 Business Law
ECO 260 Introduction to Microeconomics	IT 221 Introduction to Computers
ECO 262 Introduction to Macroeconomics	BUS 222 Business Communication
College Algebra or above	BUS 341 Management Concepts and Applications
BUS 231 Business Data Literacy	BUS 351 Marketing Concepts and Applications
BUS 311 Organizational Behavior	BUS 350 Principles of Finance
BUS 431 Business Data Analysis	BUS 435 International Business
ACC 211 Financial Accounting	Business Electives
ACC 212 Managerial Accounting	

CONCENTRATION OPTIONS
Finance, General Accounting, General Business, Logistics Management, Management of Human Resources, or Marketing (at least 9 upper level credits)

BUS 499 Strategic Management Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in Business is a competency-based degree program focused on preparing students to become business managers and leaders. The program puts special emphasis on developing the knowledge, professional skills, attitudes, and values required for a business person to meet the demands of a 21st-century workforce. To do this, the program emphasizes 15 competency areas that provide students with a broad professional foundation in the functional components of business, as well as with a strong liberal arts base to ensure students have academic breadth and the commitment to lifelong learning needed to adapt to and succeed in an ever-changing world. The integration of all 15 competency areas allows students to apply what they have learned within the degree program to the real-world contexts of the business world.

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple flexible pathways—online courses, credit for prior learning, and credit aggregation. These avenues can be used in the combination best suited to the preferences of the student. Each of these pathways allow students to customize and tailor the program to their own needs and learning styles.

Of the total 120 credits for the Bachelor of Science in Business, 21 upper level credits must be earned in Business.

Specialized Accreditation/Recognition: *The Bachelor of Science in Business is accredited by the International Accreditation Council for Business Education (IACBE), 11960 Quivira Rd., Overland Park KS, 66213.*

Program Educational Objectives

As an Excelsior University bachelor's-level business graduate, within a few years of graduation, you are expected to:

1. Apply discipline-specific concepts and methodologies to identify, analyze, and solve business problems.
2. Demonstrate a desire and commitment to remain current with and adaptive to changing business conditions through continuous learning and self-improvement.
3. Demonstrate independent and critical thinking, function effectively in team-oriented settings, and maintain a high level of performance in a professional business environment.
4. Communicate effectively, orally and in writing, in a professional business environment.
5. Behave ethically and professionally in business and society.
6. Demonstrate and utilize leadership principles in one's chosen career field.

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in Business program, students will be able to:

1. **Economics**: Apply micro and macroeconomic concepts and theories to explain the relationship between legal, social, and economic interests of individuals and society.
2. **Accounting**: Apply basic accounting concepts and principles to the analysis and interpretation of corporate financial statements.
3. **Marketing:** Explain how modern marketing concepts and theories support and influence business strategies.
4. **Finance:** Utilize financial management concepts and tools to make informed business decisions.
5. **Management:** Apply the major concepts and theories of management and leadership in order to develop business strategies in a real-world context.
6. **Quantitative Analysis:** Utilize quantitative research, statistics, and data analysis to analyze business data, support business decisions, and solve problems.
7. **Global:** Analyze the opportunities and risks associated with doing business in a global environment.
8. **Ethics:** Justify decisions by evaluating the social, ethical, and legal implications for business organizations.
9. **Communication**: Effectively communicate business concepts orally and in writing to multiple audiences.
10. **Computer Skills:** Utilize business computer applications and information technologies to organize and interpret business data and information.
11. **Teamwork/Cultural Diversity:** Work effectively and collaboratively on diverse teams to complete projects based on real-world scenarios.
12. **Critical Thinking:** Employ critical thinking skills to interpret and analyze competing arguments and perspectives in a business environment.
13. **Leadership:** Organize tasks and understand how to delegate responsibility in order to complete collaborative projects in a timely manner.
14. **Lifelong Learning:** Evaluate their individual strengths and weaknesses with the desire to update skills and continually improve.
15. **Business Strategy:** Apply knowledge of business concepts and functions in an integrated manner to make strategic decisions in a real-world context.

Degree Requirements

The Bachelor of Science in Business (with concentration) requires a minimum of 120 credits, distributed as follows:

- 60 credits minimum in the arts and sciences
- 51 credits minimum in the business component
- 9 credits in the elective credit component

ARTS AND SCIENCES COMPONENT (60 CREDITS)

Arts and sciences are those areas of study classified as humanities, social sciences/history, and natural sciences and mathematics. Excelsior University business degrees require a minimum number of credits in humanities and social sciences/history as part of the arts and sciences component:

- 6-credit written English requirement, completed with a minimum grade of C [**ENG 101 English Composition, ENG 202 Business Writing**].
- 9 credits in humanities (must include Ethics). Ethics must be completed with a grade of C or better.
- 15 credits in social sciences/history (must include microeconomics and macroeconomics)
- 9 credits in natural sciences and mathematics to include a math course at the level of College Algebra or above, statistics, and a course in natural sciences
- up to 21 credits in any arts and sciences area (must include **Organizational Behavior and Quantitative Analysis**)

Excess credits in arts and science or in the business component may be applied toward electives.

Humanities

You must successfully complete at least 9 credits in the humanities.

A. A minimum of 3 credits must be earned in Business Ethics with a minimum grade of C [**BUS 323 Business Ethics**].

B. A minimum of 6 credits must be earned in other humanities subjects such as art, literature, philosophy, religion, theatre, speech, and foreign languages.

Humanities subjects include, but are not limited to, art, music, literature, foreign language, philosophy, religion, speech, and creative/advanced writing.

Examinations or courses used to satisfy the written English requirement may not be applied toward the humanities requirement.

Social Sciences/History

You must successfully complete a minimum of 15 credits in the social sciences/history and must include microeconomics and macroeconomics.

Social sciences/history subjects include, but are not limited to, anthropology, sociology, government, political science, psychology, geography, history, and economics.

Natural Sciences and Mathematics

You must successfully complete a minimum of 9 credits in natural sciences and mathematics comprising a 3-credit course in College Algebra (or higher math), a 3-credit course in statistics [**BUS 231 Business Data Literacy**], and a 3-credit course in a natural science.

Natural sciences and mathematics subjects include, but are not limited to, anatomy and physiology, microbiology, chemistry, biology, genetics, zoology, physics, precalculus, calculus, astronomy, geology, and oceanography.

Only three college-level math courses below the level of calculus may be applied to degree requirements.

Arts and Sciences Core Requirements

You must earn a minimum grade of C in each of the following arts and sciences core requirements:

A. **Written English Requirement:** At least 6 credits must be taken to satisfy the written English requirement (see page 27).

B. **Ethics:** Study of ethics theory, personal values, and the impacts of organizational culture. An understanding of how ethical principles relate to the organizations in which people function, and the effects of the organization's ethics on its reputation, functioning, and performance.

The ethics requirement may be satisfied with credits from ethics-related courses with a grade of C or better [**BUS 323 Business Ethics**].

C. **Microeconomics:** Elementary analysis of economic theory as it relates to the individual consumer and individual firm. Topics covered include supply and demand, consumption and revenue, production and cost, and analysis of output and input markets.

The microeconomics requirement may be satisfied with credits from coursework in any of the following subjects: introductory microeconomics, principles of economics [micro], managerial economics [**ECO 260 Introduction to Microeconomics**].

D. **Macroeconomics:** Study of concepts and methods of economic analysis as well as gross national product, unemployment, money, and theory of national income.

The macroeconomics requirement may be satisfied with credits from coursework in any of the following subjects: introductory macroeconomics, principles of economics [macro] [**ECO 262 Introduction to Macroeconomics**].

E. **Mathematics (at the level of College Algebra [MAT 114 Intermediate Algebra, MAT 120 Precalculus] or higher):** Study of intermediate algebra to identify, classify, and solve standard elementary equations, including linear, quadratic, and radical equations, as well as systems of linear equations. Graph, analyze, and describe the behavior of elementary functions, and obtain information about such a function from its graph. Translate, from the written word to its equivalent mathematical formulation, to solve various application problems.

The course typically precedes precalculus in a college math sequence. Elementary or beginning algebra courses will not apply to the mathematics requirement. The mathematics requirement may be satisfied from coursework in any of the following subjects: college algebra, intermediate algebra (**MAT 114 Intermediate Algebra**), precalculus (**MAT 120 Precalculus**).

F. Statistics: Introduction to the basic concepts of probability and statistics, sample statistics, discrete and continuous probability distributions, confidence intervals, estimation, and regression. The statistics requirement may be satisfied with credits from coursework in any of the following subjects: business statistics, economic statistics, elementary statistics, introductory statistics, statistics for the social sciences, any statistics course that covers descriptive and inferential statistics [**BUS 231 Business Data Literacy**].

G. Organizational Behavior: An overview of human behavior in work organizations. It examines theoretical, empirical, and applications issues from individual, interpersonal, group, and organizational perspectives. Topics include the overview and history of the field, perceptions, attitudes, learning processes, personality, motivation, stress, performance appraisal, group dynamics, leadership, communication, decision making, job design, organizational structure and design, organizational change, and development [**BUS 311 Organizational Behavior**].

H. Quantitative Analysis: Quantitative methods and techniques for decision support in a management environment, including applications of the computer. It will include formal project management tools and techniques, such as Gantt charts, Program Evaluation and Review Techniques (PERT) and Critical Path Method (CPM) charts, use of time series analysis for forecasting, applications of regression analysis in management, and aspects of decision theory and simple modeling. Several components include the use of computer software [**BUS 431 Business Data Analysis**].

BUSINESS COMPONENT (51 CREDITS)
(21 credits at the upper level, 9 of which must be in the concentration)

The business component includes a core requirement that helps you gain basic knowledge in business administration and the underlying discipline of decision making. Many of the required core courses are offered by community colleges, while some may be available only at four-year institutions.

Credit in the business component of your degree is earned from core courses, both lower-level and upper-level business elective courses, and concentration subjects. A grade of C or better is required for applicable credit.

All credit you apply to the business component of your degree must have been earned fewer than 15 years prior to your admission date.

Business Component Core Requirements

The following business subjects comprise the core requirements for the degree program. Refer to the course description section of the catalog beginning on page 264 to locate courses that meet the appropriate subject area. In general, a course or exam worth 3 credits will satisfy each core requirement.

A. Financial Accounting: Financial accounting subjects include, but are not limited to, fundamentals of accounting I, principles of accounting I [**ACC 211 Financial Accounting**].

B. Managerial Accounting: Managerial accounting subjects include, but are not limited to, fundamentals of accounting II, introductory managerial accounting, principles of accounting II [**ACC 212 Managerial Accounting**].

C. Introduction to Business Law (United States business law): Subjects that may be used to satisfy this business component core requirement include, but are not limited to, business law I or II, commercial law I or II, legal environment of business [**BUS 230 Business Law**].

D. Computers: Subjects that may be used to satisfy this business component core requirement include, but are not limited to, computer programming, computer science, data processing, and introduction to management/computer information systems. Word processing credit alone will not satisfy this requirement [**IT 221 Introduction to Computers**].

There are many Excelsior University courses that will apply to the computer requirement. Please refer to our website or contact your advising team for more information. A maximum of 9 credits in Computer courses to include the Computer core requirement, maybe applied to the Business Component of all Baccalaureate Business degrees.

E. Business Communication: Business communications subjects should provide students with knowledge and skills to effectively communicate (oral and written) in global, diverse business environments by using computer technologies and social media tools [**BUS 222 Business Communication**].

F. Principles of Management: Subjects that may be used to satisfy this component include, but are not limited to, introduction to management, management, management concepts [**BUS 341 Management Concepts and Applications**].

G. Principles of Marketing: Subjects that may be used to satisfy this business component core requirement include, but are not limited to, introduction to marketing, marketing concepts, marketing principles [**BUS 351 Marketing Concepts and Application**].

H. Financial Management: Subjects that may be used to satisfy this business component core requirement include, but are not limited to, business finance, corporation finance, principles of finance [**BUS 350 Principles of Finance**].

Courses in personal finance will not satisfy this requirement.

I. International Business: Subjects that may be used to satisfy this business component core requirement include, but are not limited to, global business, international business [**BUS 435 International Business**].

J. Strategic Management (Capstone): [**BUS 499 Strategic Management (Capstone)**]

The capstone course is required and must be taken through Excelsior University and cannot be transferred in.

Identifying Applicable Business Elective Courses

To see what types of courses you may find applicable as business electives, you may wish to review the course titles listed for specific business concentrations on the following pages. Courses that are either required or suggested for concentrations are considered business electives for students pursuing a Bachelor of Science in Business with a concentration in General Business.

UPPER-LEVEL CREDIT REQUIREMENTS

All students in the Bachelor of Science in Business (with concentration) must earn a minimum of 21 upper-level business credits. If you are pursuing a business degree with a general business concentration, you may apply the upper-level credit in any approved business area. If you choose any other concentration, at least 9 of the 21 required credits of upper-level credit must be in your area of concentration.

In addition to college course credit, you may earn upper-level credit by successfully completing courses or examinations evaluated by the American Council on Education (ACE) College Credit Recommendation Service of the Center for Lifelong Learning or the New York State Board of Regents National College Credit Recommendation Service and accepted by the Excelsior University business faculty as upper level.

Some credit recommended as upper-level by ACE or NCCRS may not apply as upper-level credit toward your business degree.

The Excelsior University business faculty will not classify the following as upper-level business electives, even if such courses are numbered at the junior/senior level:

- Business Writing
- Consumer Finance
- Personal Finance

Other faculty and University policies may also affect the classification of upper-level credit.

There are many Excelsior University courses that will apply as upper-level credit in the business degrees. See our website for a list of current course offerings.

ELECTIVE CREDIT COMPONENT (9 CREDITS)

Although you may have already fulfilled the minimum credit requirements in the arts and sciences and business components of your chosen degree, you may still need to earn additional credit to fulfill the total credit requirement of your bachelor's degree. To do this, you may apply any of the following: arts and sciences credit above the minimum required, business credit above the minimum required, or free elective credit.

Free elective credit may be earned in any field of collegiate study, including business and other professional, technical, or vocational areas as well as the arts and sciences. Examples include military science, health, nursing, engineering, education, computer science, home economics, secretarial

science, architecture, drafting, auto mechanics, law, social work, and criminal justice. A maximum of 2 credits for physical education activity courses may be applied.

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Concentrations

In addition to other business component requirements, you must also satisfy requirements specific to your chosen concentration.

The baccalaureate degree program in business offers the following concentrations:

- **Finance**
- **General Accounting**
- **General Business**
- **Logistics Management**
- **Management of Human Resources**
- **Marketing**

Finance

The finance degree curriculum is designed to help you develop a working understanding of financial decision-making processes. It also offers insight into how financial markets function. The finance concentration provides part of the necessary education for students seeking careers in business, industry, financial institutions, government, or not-for-profit organizations in positions such as financial analyst, cost engineer, securities analyst, or commercial or investment banking officer.

Concentration Learning Outcomes

Upon completion of the Finance concentration, the graduate will be able to:

1. Describe managerial functions within global financial markets and banking institutions.

2. Integrate effective strategies for improving the financial management of domestic and foreign corporations.
3. Evaluate organizational financial risks through securities and portfolio analysis.

Subject Requirements for the Finance Concentration

- Advanced Financial Management (sometimes called Advanced Corporate Finance) [**ACC 415 Advanced Financial Management**]
- Financial Markets and Institutions (or Money and Banking) [**BUS 235 Financial Markets & Institutions**]
- Securities Analysis (or Portfolio Management) [**BUS 437 Security Analysis & Investments**]
- Cost Accounting [**ACC 360 Cost Accounting**]
- Individual and Corporate Taxation [**ACC 417 Individual and Corporate Taxation**]

General Accounting

Accounting is a changing profession that demands concern for both theory and practice. Accountants must work with people while simultaneously maintaining awareness of the human, social, legal, and environmental factors vital to the operation of an organization. There are two major types of accounting: managerial accounting and public accounting.

Managerial accountants work with people at all levels of management to develop, monitor, and review a firm's information and financial systems in order to help plan and control business activities. Career opportunities include controllership and corporate or managerial accounting as well as public accounting, internal auditing, and consulting. Public accountants work independently or with auditing firms to establish the credibility of financial reports. They often specialize in tax and other financial matters.

Concentration Learning Outcomes

Upon completion of the General Accounting concentration, students will be able to:

1. Describe Generally Accepted Accounting Principles (GAAP), concepts, and theories.
2. Integrate accounting decision-making tools for evaluating financial statements, conducting audits, and performing cost accounting.
3. Evaluate individual and corporate taxation policies, regulations, and practices of business organizations.

Subject Requirements for the General Accounting Concentration

- Intermediate Accounting I [**ACC 314 Intermediate Accounting I**]
- Intermediate Accounting II [**ACC 315 Intermediate Accounting II**]

- Cost Accounting [**ACC 360 Cost Accounting**]
- Taxation (United States tax) [**ACC 417 Individual & Corporate Taxation**]
- Auditing [**ACC 400 Auditing**]

General Business

Earning the credit required for this concentration helps you create a strong foundation on which to build a career. The Bachelor of Science curriculum is designed to give you an overview of the entire business world. By gaining the knowledge and skills associated with this level of learning, you should acquire the background necessary for a variety of nonspecialist employment opportunities. You may find this option of particular interest if you are considering a career in small business, graduate study in business, or law school following graduation. If Excelsior University does not offer a business concentration in your field of interest, you may choose to demonstrate your preparation in the field by selecting the general business option in a particular business-related field as electives.

Logistics Management

The concentration in Logistics Management focuses on the flow of material and goods throughout the manufacturing and delivery process. Logistics management is a fundamental piece of the global supply chain, which includes procurement, manufacturing, warehousing, distribution, retailing, transportation, and technical services. Employment opportunities include production planning, inventory management, manufacturing management, global distribution, and logistics management—employment in any organization whose success depends on the global fulfillment of customers' requirements.

This concentration prepares the learner for understanding the complex strategic and analytic process of procuring, inventory control, managing, coordinating, maintaining, transporting, and distributing both goods and services. Emphasis is placed on the practical application of supply chain & project management concepts, risk management, quality control, warehousing, and distribution.

Concentration Learning Outcomes

Upon completion of the Logistics concentration, students will be able to:

1. Integrate multidimensional methods to solve inventory control, facilities planning, warehousing, and distribution problems.
2. Analyze logistics, supply chain, and project management operations.
3. Prioritize cost reduction, risk, and maximized profits for logistics operations.

Subject Requirements for the Logistics Management Concentration

A. Required Subjects:

- Supply Chain Management [**BUS 440 Business Supply Chain Management**]
- Lean Logistics [**BUS 443 Lean Logistics**]
- Transportation, Warehousing, and Distribution [**BUS 381 Transportation, Warehousing, and Distribution**]

B. Additional credits in the concentration can be earned from courses such as operations management, purchasing, inventory management, quantitative methods, project management, and other related courses (with approval):

- Purchasing
- Inventory Management [**BUS 442 Inventory Management**]
- Operations Management [**BUS 425 Operations Management**]
- Quality Control
- Project Management [**IT 390 Project Management**]

Management of Human Resources

The curriculum in management of human resources emphasizes the management of individuals and groups in business firms, government agencies, and other organizations. Managers must be competent leaders. They coordinate work and human systems so that employees are motivated. Managers must create an environment conducive to accomplishing the objectives of both the employees and the organization. Employment opportunities in the field include general management, human resource management, labor or industrial relations, and personnel administration.

Concentration Learning Outcomes

Upon completion of the Management of Human Resources concentration, students will be able to:

1. Describe the role and context of human resource management.
2. Integrate personnel management and research to real business scenarios.
3. Evaluate human resources management and strategies to achieve organizational goals.

Subject Requirements for the Management of Human Resources Concentration

A. Required Subjects

- Managing Human Resources [**BUS 312 Managing Human Resources**]
- Managing Diversity [**BUS 380 Managing Diversity in the Workplace**]

B. Additional 9 credits in the concentration can be earned from courses such as leadership, recruitment, human resource technology, employee law, international human resources management, and other related courses (with approval). Below are examples of course options available to students:

- [BUS 313 International Human Resource Management]
- [BUS 315 Labor Relations]
- [BUS 325 Women in Business]
- [BUS 452 Business Leadership]
- [BUS 453 Recruitment and Selection]
- [BUS 454 HR Analytics]

Marketing

Marketing is about how businesses interact with consumers and the processes by which they anticipate, analyze, and meet their needs. It is both a philosophy of doing business and a management activity that puts the customer at the heart of the organization. Whether it is the personal branding of an international celebrity, like Beyoncé, the promotion of a vacation destination, like Disneyland Paris, or the advertising of a global fast food brand, like McDonald's. Marketers both develop and apply a range of techniques—communications, creative, or technological—which will prepare marketing managers to work at both the tactical and strategic levels within organizations and across a range of global industries.

Concentration Learning Outcomes

Upon completion of the Marketing concentration, students will be able to:

1. Describe marketing activities and strategies that are used to shift products and services from vendors to consumers in the retail and wholesale markets.
2. Integrate marketing research to forecast trends of products and services to analyze the international and domestic markets.
3. Evaluate consumer behavior and promotional policy and determine any ethical implications.

Subject Requirements for the Marketing Concentration

A. Required Subjects

- Consumer Behavior [**BUS 225 Consumer Behavior**]
- Marketing Management (sometimes called Product Planning) [**BUS 375 Marketing Management**]
- Market Research [**BUS 460 Marketing Research**]

B. Additional credit in the concentration may be earned from courses such as advertising (or promotional policy), distribution channels management, international marketing, retail/wholesale management, sales management, and other related courses (with approval). [**BUS 310 Entrepreneurial Marketing, BUS 343 International Marketing**].

Bachelor of Science in Criminal Justice

120 CREDITS

General Education and Additional Requirements

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Ethics

Degree-specific requirements

CJ 101 Introduction to Criminal Justice

CJ 110 Introduction to Law Enforcement

CJ 120 Introduction to Corrections

CJ 228 Multicultural Issues in Criminal Justice

CJ 265 Criminal Procedure and Evidence

CJ 324 Criminology

CJ 338 Criminal Justice Administration

PSY 305 Research Methods

CJ 380 Ethics in Criminal Justice

CJ 330 Judicial Process

CONCENTRATION OPTIONS

- ▶ Homeland Security
- ▶ General Concentration

CJ 498 Criminal Justice Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

A bachelor's degree in criminal justice incorporates the theories, history, and legal and ethical issues typically covered in the study of crime and the criminal justice system. Because a number of perspectives and related disciplines exist within the field of criminal justice, students are encouraged to develop depth, breadth, and understanding in one of two areas of concentration: **Homeland Security** or **Non-Concentration**. It is recommended that students also complete coursework outside the criminal justice major in psychology, sociology, and communications to better place their knowledge of the field in its broader social context.

Of the 120 credits for the Bachelor of Science in Criminal Justice, a total of 30 must be earned at the upper level (21 credits in the arts and sciences and 9 in electives). As part of these credits, a minimum of 33 credits must be earned in the field of Criminal Justice, of which 18 must be at the upper level. A minimum GPA of 2.0 is required in the major.

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in Criminal Justice program, students will be able to:

1. Assess the components of the criminal justice system.
2. Evaluate issues in criminal justice from a theoretical framework.
3. Create policy or recommendations that demonstrate ethical considerations.
4. Analyze various criminal justice career opportunities.
5. Assess how diversity affects outcomes in the criminal justice system.

Core Requirements for All Concentrations

1. **CJ 101 Introduction to Criminal Justice**
2. **CJ 110 Introduction to Law Enforcement**
3. **CJ 120 Introduction to Corrections**
4. **CJ 228 Multicultural Issues in Criminal Justice**
5. **CJ 265 Criminal Procedure and Evidence**
6. **CJ 324 Criminology**
7. **CJ 338 Criminal Justice Administration**
8. **PSY 305 Research Methods**
9. **CJ 380 Ethics in Criminal Justice**
10. **CJ 330 Judicial Process**
11. **CJ 498 Criminal Justice Capstone**

Concentrations

Homeland Security Concentration

Concentration Learning Outcomes

Upon completion of the homeland security concentration, students will be able to:

- Explain the interdisciplinary nature of homeland security, emergency management, and policy making.
- Apply knowledge and skills to assume leadership roles in homeland security and emergency management.
- Discuss the ethical issues that may arise in homeland and emergency management
- Appraise security risks based upon organizational needs and resources in both the private and public sectors.
- Describe the influence domestic and global diversity has on homeland security strategies.

Concentration Requirements

A. **HEM 125 Introduction to Homeland Security**

B. **HEM 352 Domestic Terrorism**

C. **HEM 356 Emergency Management**

D. **HEM 350 International Terrorism**

E. **HEM 460 Infrastructure Security and Policy**

Non-Concentration

Choose any 5 courses from this list:

- **CJ 301 Juvenile Delinquency and Justice**
- **CJ 365 Police and the Community**
- **CJ 432 Drugs and Crime**
- **CJ 315 Gangs in America**
- **HEM125 Intro to Homeland Security**
- **HEM 352 Domestic Terrorism**
- **HEM 356 Emergency Management**
- **HEM 350 International Terrorism**
- **HEM 460 Infrastructure Security and Policy**

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Bachelor of Science in National Security

120 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on **page 31** for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Ethics

DEGREE-SPECIFIC REQUIREMENTS

BNS 101 Introduction to National Security

BNS 301 National Security Ethics and Diversity

POL 351 War and Peace After the Cold War

BNS 303 Comparative National Security Analysis

CONCENTRATION OPTIONS

- Topics in National Security
- Intelligence & Security Analysis

BNS 498 National Security Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on **page 31**. Once you are admitted, the **My Academic Planner** tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in National Security program prepares students for employment and advancement in the diverse and challenging national security arena. The program is designed to serve government employees who are in the military or are serving the nation in the Defense, State, Agriculture, Commerce, Education, Energy, or Veterans Affairs departments, among others. National security is an interagency responsibility and a field that broadly affects the life of the nation. This interdisciplinary and flexible degree provides a broad education to enhance students' ability to analyze the security strategies and policies of the United States and other leading nation-states, while learning how the components of national power are developed and used for strategic advantage in the highly competitive international realm. By analyzing case studies, real-world scenarios, and ethical dilemmas, students will address national security at all levels. Learners will evaluate strategic policy; they will research topics, analyze arguments, synthesize their own ideas, and substantiate policy arguments; and, they will explore key concepts and trends in 21st century global security. This is the degree students may wish to pursue to grow as a national security professional. The National Security degree has two concentrations: **Intelligence and Security Analysis** and **Topics in National Security**. The Topics in National Security concentration provides students with infinite possibilities to build a degree program that meets their individual and professional needs.

Of the 120 credits for the Bachelor of Science in National Security, a total of 30 must be earned at the upper level (21 credits in the arts and sciences and 9 in electives). As part of these credits, for the core component of this degree, a minimum of 33 credits must be earned in the field of National Security, of which 18 must be at the upper level. A minimum GPA of 2.0 is required in the major.

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in National Security, students will be able to:

1. Describe the interdisciplinary character of national security (e.g., economics, history, political science, public administration, psychology, sociology).
2. Examine the use and components of national power (e.g., economic, military, social cohesion, quality of leadership and diplomacy, etc.).
3. Evaluate U.S. and other nation-states' national security strategies and policies.
4. Analyze ethical issues in the field of national security.
5. Deliver written communication with appropriate content, organization, syntax, mechanics, and style for the audience and purpose.
6. Pursue national security career planning that incorporates your interests, values, experiences, and analytic works.

Core Requirements

A. **BNS 101 Introduction to National Security**

B. **BNS 301 National Security Ethics and Diversity (with a grade of C or better)**

C. **POL 351 War and Peace After the Cold War**

D. **BNS 303 Comparative National Security Analysis**

E. **BNS 498 National Security Capstone,** must be completed with a grade of C or better.

Concentrations

18 credits in one of the following areas:

Topics in National Security

Courses selected with assistance of academic advisor and approved by faculty program director.

Intelligence and Security Analysis

Concentration Learning Outcomes

Upon completion of the Intelligence and Security Analysis concentration, students will be able to:

1. Evaluate the global security environment, transnational threats, and how nations leverage diplomatic, military, economic and other instruments of power.
2. Analyze intelligence gathering, threat assessment, and provide recommendations on national security matters.

- **BNS 305 Cybersecurity in National Security**
- **BNS 307 Intelligence in National Security**
- **HEM 460 Infrastructure Security and Policy**
- **HEM 350 International Terrorism**
- **HEM 450 Counterterrorism**
- **POL 320 The Geopolitics of Energy and Global Climate Change**

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

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Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Executive Master of Business Administration

Overview

The one-year, hybrid Executive MBA offers a unique blend of industry-involved and location-informed experiences, emphasizing resilient, entrepreneurial, and forward-thinking business practices. With a tight-knit cohort model, you'll emerge as a leader with a comprehensive view of leadership in a dynamic, socially conscious business environment. Join Excelsior for a year of industry projects, experiential opportunities, the chance to explore major metropolitan cities, and network-building that can be leveraged for a lifetime.

This program has predetermined start dates. Check with Admissions for details. It is essential that all students refer to the Executive MBA Program Handbook (link can be found here) as it provides important information regarding admission requirements, curriculum, academic policy and procedures (including exceptions and restrictions) travel and accommodation logistics, attendance, conduct, location information, and location agendas.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 30 credits
All requirements must be completed at Excelsior University.

COURSE NAME	Credits
MBAE 509 Resilient Leadership and Organizational Behavior	3
MBAE 521 Operations and Project Management	3
MBAE 524 Corporate Finance and Accounting	3
MBAE 532 Ethical Risk Management and Compliance	3
MBAE 570 Information Technology	3
MBAE 573 Strategic Brand Marketing	3
MBAE 595 Systems and Sustainability	3
MBAE 596 Strategy and Entrepreneurial Innovation	3
MBAE 508 Managerial Economics	3
MBAE 699 Business Strategy Capstone	3

A minimum grade of C or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Program Learning Outcomes

Upon completion of the Excelsior University Executive Master of Business Administration program, students will be able to:

1. Develop innovative strategies for leading resilient, entrepreneurial, and forward-thinking business practices in organizations.
2. Implement technology-driven solutions for organizational efficiency, competitiveness, and success.
3. Evaluate the impact of strategic decisions using business acumen.
4. Implement initiatives to enhance team inclusivity and performance in diverse contexts.
5. Develop effective communication strategies using multiple channels to align organizational vision with diverse stakeholders.
6. Develop long-term sustainability plans for organizations in dynamic environments and with a forward-looking approach.
7. Initiate collaborative projects to generate new ideas and enhance their business networks.

Master of Business Administration

Overview

The Master of Business Administration (MBA) program emphasizes ethical leadership and decision making, design and development of corporate strategy, multi-geography/site teamwork and management, and the application of theory to practical situations in all concentration areas as well as in the general MBA degree. It facilitates career advancement, especially for those who work in middle management positions in business and in other organizations.

Program concentrations include **Cannabis Control, Data Analytics, Distributed Workforce Management, Finance and Accounting, General Business, Healthcare Management, Homeland Security and Emergency Management, Human Resource Management, Leadership, Marketing, Nutrition, Public Health Equity,** and **Strategic Sustainability.**

The **Cannabis Control concentration** prepares students with the skills and the knowledge base to understand the impacts of legalization of cannabis in our communities, states, and nation. The curriculum incorporates best-practice instructional techniques — including realistic case studies — to foster strong critical thinking skills that will enable students to keep pace with the fast-changing environment. Innovative courses that meld industry and practitioner-based readings with the scientific-based research enable the program to offer much-needed subject matter expertise in the field.

The **Data Analytics concentration** enhances students' analytical abilities and equips them with the skills to uncover new insights that improve strategic business decisions. Through this concentration, students learn how to collect, analyze, and visually represent rich sets of data designed to improve organizational decision making.

The **Distributed Workforce Management concentration** trains students to strategically lead decisively across all functions in organizations, including recruitment and selection, training and development, performance appraisals, health and safety, labor relations, and communications. Students create value for the organizations and communities they serve by solving the complex challenges related to managing within a distributed work environment.

The **Finance and Accounting concentration** is designed to equip graduates with the necessary principles and tools to be successful in management positions in finance, business, management and accounting firms, corporations, government, and nonprofit organizations. It deepens the understanding of financial analysis, corporate disclosure, and nonprofit accounting.

The **General Business concentration** allows students to develop a personalized concentration area that spans multiple concentrations. Students tailor their concentration to their specific life and career goals, providing them with flexibility in developing their knowledge and skills.

The **Health Care Management concentration** prepares students to lead and manage health care organizations effectively. It focuses on strategic management principles and communication strategies essential for health care leaders to navigate the complex health care environment, enhance organizational performance, and improve patient outcomes.

The **Homeland Security and Emergency Management concentration** provides students with knowledge about the threats posed by domestic and international terrorism and strategies for countering those threats. Additionally, students evaluate the best practices behind successful security planning and create threat assessments. Finally, students evaluate and develop emergency and disaster plans that can and should be employed in the face of both man-made and natural threats to the homeland.

The **Human Resource Management concentration** provides students with 21st-century knowledge and skills required of human resource managers and executives who deal with human performance issues. Students are expected to effectively apply contemporary theories and empirical research to successfully perform key functions in human resource management, including staffing, employee relations, conflict resolution, and compensation and benefits.

The **Leadership concentration** equips students with essential skills to manage and inspire high-performing teams in dynamic business environments. This concentration emphasizes the practical aspects of leadership, such as direct team management, crisis handling, and change implementation, making it ideal for those looking to enhance their direct leadership capabilities.

The **Marketing concentration** allows students to learn and apply advanced constructs in digital marketing with a focus on brand development, launch, and management. The concentration traverses the private and public sector industries in the application of business-to-business and business-to-consumer centric marketing methods.

The **Nutrition concentration** equips students to educate individuals, families, and communities about healthful nutrition and the relationships between food and health. It also promotes access to healthy foods in marginalized communities.

The **Public Health Equity concentration** equips students to become transformational public health leaders and agents of change for their communities, particularly those who have historically faced significant health disparities. Interdisciplinary themes are infused throughout the curriculum as a best practice for cultivating enduring change in population health outcomes.

The **Strategic Sustainability concentration** provides students with the knowledge and skills to lead and implement sustainable practices within organizations. It covers environmental sustainability, the science behind sustainability, and strategic leadership for sustainable development, preparing students to drive initiatives that promote environmental responsibility and strategic sustainability.

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Degree Summary

TOTAL PROGRAM HOURS: 30	
Major Core Requirements: 21 credits	
COURSE NAME	Credits
BUS 509 Resilient Leadership and Organizational Behavior	3
BUS 521 Operations and Project Management	3
BUS 524 Corporate Finance and Accounting	3
BUS 532 Ethical Risk Management and Compliance	3
BUS 570 Information Technology	3
BUS 573 Strategic Brand Marketing	3
BUS 699 MBA Business Strategy Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

CONCENTRATION REQUIREMENTS: 9 CREDITS
One of the following must be declared.

CANNABIS CONTROL
All requirements must be completed at Excelsior University.

COURSE NAME	Credits
CBC 600 Implications of Legislation of Cannabis: Policy and Compliance	3
CBC 601 Complexities of Cannabis as Commerce	3
CBC 602 Risk Assessment in Cannabis Control	3

A minimum grade of B or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

DATA ANALYTICS

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 540 Strategic Management of Innovative Technology	3
BUS 563 Data Analytics	3
BUS 564 Big Data and Visualization	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

DISTRIBUTED WORKFORCE MANAGEMENT

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 561 Virtual Training and Development	3
BUS 562 Virtual Team Management	3
IND 522 Leading High Performing Teams	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

FINANCE AND ACCOUNTING

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
ACC 504 Corporate Financial Reporting and Disclosure	3
ACC 505 Financial Statement Analysis	3
BUS 500 Accounting for Managers	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

GENERAL BUSINESS

The following courses are suggestions; however, students may choose any graduate business course not part of the Major Core requirements.

COURSE NAME	Credits
IND 522 Leading High Performing Teams	3
BUS 500 Accounting for Managers	3
BUS 504 Human Resource Management	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

HEALTH CARE MANAGEMENT

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 526 Strategic Management of Health Care Organizations	3
BUS 516 Communication Strategy for the Health Care Leader	3
HSC 517 Contemporary Issues in Health Care Delivery Systems	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

HOMELAND SECURITY AND EMERGENCY MANAGEMENT

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
MCJ 630 Risk Assessment in Homeland Security	3
MCJ 650 Terrorism and Counterterrorism	3
MCJ 651 Overview of Homeland Security and Emergency Management	3

A minimum grade of B or higher is required for these Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

HUMAN RESOURCE MANAGEMENT

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 504 Human Resource Management	3
BUS 514 Employment Law	3
BUS 517 Employee Staffing and Development	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

LEADERSHIP

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 550 Contingency Planning	3
BUS 554 Change Management	3
IND 522 Leading High Performing Teams	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

MARKETING

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
BUS 501 Business Communications	3
BUS 506 Marketing	3
BUS 545 Social Media Marketing	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

NUTRITION

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
HSC 644 Nutrition Science for Health Professionals	3
HSC 645 Nutrition Across the Life Cycle	3
HSC 646 Health Education: A Cross-Cultural Perspective	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

PUBLIC HEALTH EQUITY

Choose 3 of the following options. All requirements must be completed at Excelsior University.

COURSE NAME	Credits
PBH 592 Biostatistics	3
PBH 603 Behavioral Health and Social Environment	3
PBH 604 Epidemiology	3
PBH 610 Environmental Health	3
PBH 613 Program Planning and Evaluation for Public Health	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

STRATEGIC SUSTAINABILITY

All requirements must be completed at Excelsior University.

COURSE NAME	Credits
SUST 601 Environmental Sustainability	3
SUST 602 Sustainability Science	3
SUST 603 Environmental Leadership and Strategic Sustainability	3

A minimum grade of C or higher is required for these concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon completion of the Excelsior University Master of Business Administration program, students will be able to:

1. Develop innovative strategies for leading resilient, entrepreneurial, and forward-thinking business practices in organizations.
2. Implement technology-driven solutions for organizational efficiency, competitiveness, and success.
3. Evaluate the impact of strategic decisions using business acumen.
4. Implement initiatives to enhance team inclusivity and performance in diverse contexts.
5. Develop effective communication strategies using multiple channels to align organizational vision with diverse stakeholders.
6. Develop long-term sustainability plans for organizations in dynamic environments and with a forward-looking approach.
7. Initiate collaborative projects to generate new ideas and enhance their business networks.

Concentration Learning Outcomes

Cannabis Control Concentration

Upon completion of the **Cannabis Control concentration**, students will be able to:

1. Recommend strategies to ensure regulatory compliance in a rapidly evolving regulatory landscape.
2. Create workforce development and public health system responses to cannabis legalization that promote social equity.
3. Conduct risk assessment in communities where cannabis has been legalized.
4. Recommend strategies for ensuring consistent product quality and safe reliable supply chains at state, federal, and international levels.

Data Analytics Concentration

Upon completion of the **Data Analytics concentration**, students will be able to:

1. Formulate technology innovation strategies to communicate strategic data-driven business recommendations to stakeholders.
2. Use data analytics and visualization to improve, illustrate, and monitor organizational performance, while furthering the vision.

Distributed Workforce Management Concentration

Upon completion of the **Distributed Workforce Management concentration**, students will be able to:

1. Emphasize research as vital in both academic and applied settings.
2. Collaborate on projects and case analyses with peers incorporating feedback from outside sources.
3. Focus the application of distributed workforce in a variety of organizations, including health care and nonprofits.
4. Apply managerial skills to help begin as well as advance one's career in distributed workforces.
5. Integrate diversity, equity, and inclusion into content and andragogy on distributed workforce management.
6. Change corporate policy, organizational change, and transformation because of distributed work.

Finance and Accounting Concentration

Upon completion of the **Finance and Accounting concentration**, students will be able to:

1. Apply advanced financial accounting knowledge to corporations, government, and nonprofits.
2. Prepare financial statements and reports.

Health Care Management Concentration

Upon completion of the **Health Care Management concentration**, students will be able to:

1. Manage a diverse workforce providing health care for an increasingly heterogeneous population.
2. Analyze health care funding and delivery trends to provide recommendations for organizational action.

Homeland Security and Emergency Management Concentration

Upon completion of the **Homeland Security and Emergency Management concentration**, students will be able to:

1. Analyze and evaluate contemporary homeland security issues as they relate to criminal justice based on an understanding of the domestic and international processes affecting homeland security.
2. Construct an argument for the relationship between the current theories of emergency management and their practical application within the American criminal justice system.
3. Evaluate risk associated with human-caused, natural, and technological disasters through a myriad of risk management approaches, including best practices use by the homeland security enterprise.

Human Resource Management Concentration

Upon completion of the **Human Resource Management concentration**, students will be able to:

1. Analyze the legal requirements applicable to human resource decisions.
2. Apply human resource management principles to support organizational objectives.

Leadership Concentration

Upon completion of the **Leadership concentration**, students will be able to:

1. Discuss key issues and challenges associated with managing organizational changes.
2. Apply leadership strategies to manage conflicts in the workplace.

Marketing Concentration

Upon completion of the **Marketing concentration**, students will be able to:

1. Discuss key issues and challenges associated with managing digital and global marketing efforts.
2. Apply strategies to manage brand and channel development to benefit the corporations go-to-market efforts.

Nutrition Concentration

Upon completion of the **Nutrition concentration**, students will be able to:

1. Examine the interconnected influences of social determinants of health and nutrition policy on health outcomes for individuals and communities.
2. Use evidence-based decision-making to identify, implement, and evaluate solutions to barriers to healthful nutrition.
3. Evaluate nutritional needs across life stages and for individuals with various health conditions.

Public Health Equity Concentration

Upon completion of the **Public Health Equity concentration**, students will be able to:

1. Evaluate how populations are impacted by social determinants of health.
2. Use data-driven decision-making and community partnering approaches to identify, implement, and evaluate solutions to public health issues.
3. Design culturally sensitive public health strategies to improve health equity and social justice.

Strategic Sustainability Concentration

Upon completion of the **Strategic Sustainability concentration**, students will be able to:

1. Develop comprehensive sustainability strategies that integrate environmental, social, and economic considerations.
2. Apply scientific principles of sustainability to create innovative solutions for environmental challenges.
3. Craft initiatives that promote sustainable practices and drive organizational change toward environmental responsibility.

Master of Public Administration

Overview

The Master of Public Administration (MPA) program helps students to master both the personal and the business side of public administration with courses and assignments that show them how to harness information technology, respond to ethical issues, foster constructive collaboration, and more. Students also gain practical experience in honing their presentation skills, developing strategic plans and financial reports, and analyzing data to make better decisions. Students leave the program with a complete professional portfolio ready to present to prospective or current employers.

The **General concentration** allows students to develop a personalized concentration area that spans multiple concentrations. Students tailor their concentration to their specific life and career goals, providing them with flexibility in developing their knowledge and skills.

The **Cannabis Control concentration** prepares students with the skills and the knowledge base to understand the impacts of legalization of cannabis in our communicates, states, and nation. The curriculum incorporates best-practice instructional techniques—including realistic case studies—to foster strong critical thinking skills that enable students to keep pace with the fast-changing environment. Innovative courses that meld industry and practitioner-based readings with scientific-based research enable the program to offer much-needed subject matter expertise in the field.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World	3
IND 503 Data Driven Decision Making	3
MPA 500 Introduction to Public Administration Theory and Practice	3
MPA 502 Public Management in a Political Environment	3
MPA 511 Public Budgeting and Financial Management	3
MPA 698 Capstone in Public Administration This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

CONCENTRATION REQUIREMENTS: 9 CREDITS

One of the following must be declared.

GENERAL

COURSE NAME	Credits
BUS 501 Business Communications	3
ADR 671 Mediation	3
MPA 651 Contemporary Issues in Nonprofit Management	3

CANNABIS CONTROL

COURSE NAME	Credits
CBC 600 Implications of Legalization of Cannabis: Policy and Compliance	3
CBC 601 Complexities of Cannabis as Commerce	3
CBC 602 Risk Assessment in Cannabis Control	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon completion of the Excelsior University Master of Public Administration, students will be able to:

1. Interpret and analyze data to formulate and influence decision-making.
2. Evaluate financial data and budgets to make sound fiscal decisions for the public sector.
3. Assess the use of technology to assist in solving complex problems and optimizing resources in the public sector.
4. Apply interdisciplinary leadership practices based on evidence that promotes ethical and collaborative sustainable change in the public sector.
5. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse/global workforce.
6. Apply effective communication techniques to address issues and multiple paths for solutions.

Concentration Learning Outcomes

Upon completion of the **Cannabis Control concentration**, students will be able to:

1. Recommend strategies to ensure regulatory compliance in a rapidly evolving regulatory landscape.
2. Create workforce development and public health system responses to cannabis legalization that promote social equity.
3. Conduct risk assessment in communities where cannabis has been legalized.
4. Recommend strategies for ensuring consistent product quality and safe, reliable supply chains at level, state, federal, and international levels.

Master of Science in Criminal Justice

Overview

A master's degree in criminal justice provides current professionals opportunities to secure leadership roles in agencies including the FBI. Students learn how to address legal and ethical dilemmas in the workplace, analyze crime statistics, and how to develop effective crime-fighting strategies based on their findings. They study the police, courts, corrections, and the history of criminology as they conduct criminal justice research projects and write data-based reports that can be used to create new or improved public policies.

The **General concentration** allows students to develop a personalized concentration area that spans multiple concentrations. Students tailor their concentration to their specific life and career goals, providing them with flexibility in developing their knowledge and skills.

The **Cannabis Control concentration** prepares students with the skills and the knowledge base to understand the impacts of legalization of cannabis in our communicates, states, and nation. The curriculum incorporates best-practice instructional techniques—including realistic case studies—to foster strong critical thinking skills that enable students to keep pace with the fast-changing environment. Innovative courses that meld industry and practitioner-based readings with scientific-based research enable the program to offer much-needed subject matter expertise in the field.

The **Homeland Security and Emergency Management concentration** provides students with knowledge about the threats posed by domestic and international terrorism and strategies for countering those threats. Students evaluate the best practices behind successful security planning and create threat assessments. Finally, students evaluate and develop emergency and disaster plans that can and should be employed in the face of both man-made and natural threats to the homeland.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World	3
IND 503 Data Driven Decision Making	3
MCJ 518 Comparative Justice	3
MCJ 522 The Pillars of Criminal Justice	3

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
MCJ 530 Legal and Constitutional Law Issues in Criminal Justice	3
MCJ 698 MCJ Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

CONCENTRATION REQUIREMENTS: 9 CREDITS

One of the following must be declared.

GENERAL

COURSE NAME	Credits
MCJ 652 Mental Health Issues in Criminal Justice	3
MCJ 660 Human Trafficking	3
BUS 501 Business Communications	3

CANNABIS CONTROL

COURSE NAME	Credits
CBC 600 Implications of Legislation of Cannabis: Policy and Compliance	3
CBC 601 Complexities of Cannabis as Commerce	3
CBC 602 Risk Assessment in Cannabis Control	3

HOMELAND SECURITY AND EMERGENCY MANAGEMENT

COURSE NAME	Credits
MCJ 630 Risk Assessment in Homeland Security	3
MCJ 650 Terrorism and Counterterrorism	3
MCJ 651 Overview of Homeland Security and Emergency Management	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Criminal Justice program, students will be able to:

1. Appraise a societal issue using criminal theory and policy through the lenses of the three pillars of criminal justice.
2. Apply best practices from national and international justice systems to bring societal order.
3. Develop data-based recommendations to resolve issues in criminal justice.
4. Interpret the constitution and legal implications facing criminal justice professionals.
5. Apply interdisciplinary leadership practices based on evidence that promote ethical and collaborative sustainable change in criminal justice.
6. Confidently and professionally apply multiple methods of effective communication for diverse audiences.
7. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse/global workforce.

Concentration Learning Outcomes

Upon completion of the **Cannabis Control concentration**, students will be able to:

1. Recommend strategies to ensure regulatory compliance in a rapidly evolving regulatory landscape.
2. Create workforce development and public health system responses to cannabis legalization that promote social equity.
3. Conduct risk assessment in communities where cannabis has been legalized.
4. Recommend strategies for ensuring consistent product quality and safe, reliable supply chains at level, state, federal, and international levels.

Upon completion of the **Homeland Security and Emergency Management concentration**, students will be able to:

1. Analyze and evaluate contemporary homeland security issues as they relate to criminal justice based on an understanding of the domestic and international processes affecting homeland security.
2. Construct an argument for the relationship between the current theories of emergency management and their practical application within the American criminal justice system.
3. Evaluate risk associated with human-caused, natural, and technological disasters through a myriad of risk management approaches, including best practices used by the homeland security enterprise.

Master of Science in Human Resource Management with an Emphasis in Diversity and Technology

Overview

The Master of Science in Human Resource Management with an Emphasis in Diversity and Technology program is structured using an interdisciplinary framework in keeping with research that suggests complex human management issues are interdisciplinary in nature, and human resource leaders must be knowledgeable about leading individuals and teams within an interdisciplinary environment. Human resource management is a multidisciplinary organizational function that draws research and theories from several fields of study, including management, psychology, and economics. This degree program integrates legal, management, and social sciences research with an action learning-based approach toward executive-level leadership education.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 30 credits

COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World	3
IND 503 Data Driven Decision Making	3
BUS 501 Business Communications	3
BUS 514 Employment Law	3
BUS 517 Employee Staffing and Development	3
BUS 553 Organizational Behavior	3
BUS 561 Virtual Training and Development	3
BUS 562 Virtual Team Management	3
BUS 697 Human Resource Management, Diversity and Technology Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Human Resource Management with an Emphasis in Diversity and Technology, students will be able to:

1. Apply interdisciplinary leadership practices based on evidence that promotes ethical and collaborative change within a distributed workforce.
2. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse/global workforce.
3. Interpret complex data to support strategic HR decision-making.
4. Develop strategic human resource planning processes for the key functional areas of a global business organization.
5. Evaluate human resource policies and practices to manage risk and ensure compliance with laws and regulations.
6. Utilize the latest technologies and best practices in communication to develop interdepartmental teams and relationships.

Master of Science in Management

Overview

The Master of Science in Management is a professional degree intended for those who desire to advance their career in the business, nonprofit, military, or government sector. This interdisciplinary program focuses on leadership, organizational behavior, change management, global business environment, and conflict management to enable students to build a strong foundation to qualify for an organizational leadership or management role. Progressive and growing organizations are in constant demand of candidates who possess advanced leadership and project management knowledge. The program integrates theory, case study, and practice to prepare students to grow both their personal and organizational leadership and motivational abilities.

The **General Business concentration** allows students to develop a personalized concentration area that spans multiple concentrations. Students tailor their concentration to their specific life and career goals, providing them with flexibility in developing their knowledge and skills.

The **Human Resource Management concentration** provides students with 21st-century knowledge and skills required of human resource managers and executives who deal with human performance issues. Students are expected to effectively apply contemporary theories and empirical research to successfully perform key functions in human resource management, including staffing, employee relations, conflict resolution, and compensation and benefits.

The **Organizational Leadership concentration** focuses on communication and strategic thinking within the context of leadership. This concentration is suitable for those aiming to lead at an organizational level, combining leadership of teams with strategic communication and innovation management to drive broad organizational objectives.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World	3
BUS 501 Business Communications	3
BUS 502 Global Business Environment	3

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
BUS 530 Project Management Principles and Application	3
BUS 553 Organizational Behavior	3
BUS 698 MSM Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

CONCENTRATION REQUIREMENTS: 9 CREDITS

One of the following must be declared.

GENERAL BUSINESS

College-level coursework from the following subject areas meets the General Business concentration requirements: accounting, business, cannabis control, cybersecurity operations, data analytics, distributed workforce management, enterprise risk management, finance, healthcare management, homeland security and emergency management, human resource management, leadership, marketing, nutrition, organization leadership, public health equity, strategic finance, and strategic sustainability. The following Excelsior courses are recommended to meet the General Business concentration.

COURSE NAME	Credits
BUS 517 Employee Staffing and Development	3
IND 522 Leading High Performing Teams	3
BUS 554 Change Management	3

HUMAN RESOURCE MANAGEMENT

College-level coursework from the following subject areas meets the Human Resource Management requirements: business staffing, employee development, labor relations, conflict resolutions, compensation, and benefits. The following Excelsior courses are recommended to meet the Human Resource Management concentration.

COURSE NAME	Credits
BUS 517 Employee Staffing and Development	3
BUS 512 Compensation and Benefits	3
BUS 515 Labor Relations and Conflict Resolution	3

ORGANIZATIONAL LEADERSHIP

COURSE NAME	Credits
BUS 671 Mediation	3
BUS 552 Leadership	3
BUS 554 Change Management	3

A minimum grade of B or higher is required for all Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Program Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Management program, students will be able to:

1. Apply interdisciplinary leadership practices based on evidence that promotes ethical and collaborative sustainable change in business.
2. Evaluate different methods and strategies used to develop individuals and manage teams in multiple settings.
3. Analyze how different functional areas within a global business organization affect its strategic direction.
4. Apply project management tools and techniques in a business environment.
5. Create sustained and coherent arguments to summarize work for both internal (e.g., management, peers, subordinates) and external audiences.
6. Generate solutions to business problems through the use of information technologies.
7. Integrate theory and practice for the purpose of strategic analysis.
8. Evaluate individual strengths and weaknesses with the desire to update skills and continuously improve.

Concentration Learning Outcomes

Human Resource Management Concentration

Upon completion of the **Human Resource Management concentration**, students will be able to:

1. Analyze the legal requirements applicable to human resource decisions.
2. Apply human resource management principles to support organizational objectives.

Organizational Leadership Concentration

Upon completion of the **Organizational Leadership concentration**, students will be able to:

1. Discuss key issues and challenges associated with managing organizational changes.
2. Apply leadership strategies to manage conflicts in the workplace.

Master of Science in Organizational Leadership with an Emphasis in Technology and Data Analytics

Overview

The Master of Science in Organizational Leadership with an Emphasis in Technology and Data Analytics is a fully online, asynchronous degree program that equips leaders to effectively lead their teams through turbulence and change, make data-driven decisions, and visualize goals and progress to drive their organization forward. The innovative coursework melds industry and practitioner-based experiences. Through coursework in leadership theory, decision making, organization behavior, technology innovation, data analytics, big data and visualization, cybersecurity, and project management, the program prepares emerging leaders to make good use of big data and incorporate technology to advance their bottom line, as well as solve unique challenges impacting organizations today.

Degree Summary

TOTAL PROGRAM HOURS: 30	
Major Core Requirements: 30 credits	
COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World	3
IND 503 Data Driven Decision Making	3
CYS 500 Foundations of Cybersecurity	3
BUS 530 Project Management Principles and Application	3
BUS 540 Strategic Management of Innovative Technology	3
BUS 553 Organizational Behavior	3
BUS 563 Data Analytics	3
BUS 564 Big Data and Visualization	3
BUS 696 Organizational Leadership, Technology, and Analytics Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Organizational Leadership with an Emphasis in Technology and Data Analytics, students will be able to:

1. Apply interdisciplinary leadership practices based on evidence that promotes ethical and collaborative change within the workforce.
2. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse/global workforce.
3. Analyze organizational behavior, culture, and human resources management information to generate strategic decision-making and initiate sustainable change.
4. Implement project and process management techniques to manage teams and innovative projects.
5. Utilize data analytics, big data, and visualizations to communicate effectively with stakeholders throughout the organization.

Graduate Certificate in Advanced Project Management

9 CREDITS

Certificate Description

The Graduate Certificate in Advanced Project Management will provide students with the opportunity to hone their project management and information technology skills from a leadership perspective. Students will manage a technology implementation project from start to finish, evaluating project risks and methods to control those risks, and hone their leadership skills across the three certificate courses.

Certificate Requirements

- **BUS 552 Leadership** (3 credits)
- **BUS 530 Project Management or BUS 572 Technology and Project Management** (3 credits)
- **BUS 570 Information Technology** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Advanced Project Management, students will be able to:

1. Manage IT-related projects from planning through delivery.
2. Evaluate project risks and opportunities to ensure organization needs are met.
3. Apply leadership techniques to build collaborative teams for successful project completion.

Policies Specific to the Graduate Certificate in Advanced Project Management

Policies and procedures that apply specifically to the Graduate Certificate in Advanced Project Management are listed in the following section:

- **Admission Eligibility**: Students must have an earned bachelor's degree for admittance in the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all Advanced Project Management certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Advanced Project Management have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Cannabis Control

9 CREDITS

Certificate Description

The Graduate Certificate in Cannabis Control prepares students with the skills and knowledge base to understand the impacts of legalization of cannabis in our communities, states, and nation. The curriculum incorporates best-practice instructional techniques—including realistic case studies—to foster strong critical thinking skills that will enable students to keep pace with the fast-changing environment. Innovative courses that meld industry and practitioner-based readings with scientific-based research enable the program to offer much-needed subject matter expertise in the field.

Certificate Requirements

- **CBC 600 Implications of Legalization of Cannabis: Policy and Compliance** (3 credits)
- **CBC 601 Complexities of Cannabis as Commerce** (3 credits)
- **CBC 602 Risk Assessment in Cannabis Control** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Cannabis Control, students will be able to:

1. Recommend strategies to ensure regulatory compliance in a rapidly evolving regulatory landscape.
2. Create workforce development and public health system responses to cannabis legalization that promote social equity.
3. Conduct risk assessment in communities where cannabis has been legalized.
4. Recommend strategies for ensuring consistent product quality and safe reliable supply chains at local, state, federal, and international levels.

Policies Specific to the Graduate Certificate in Cannabis Control

Policies and procedures that apply specifically to the Graduate Certificate in Cannabis Control are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all Cannabis Control certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Cannabis Control have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Data Analytics

9 CREDITS

Certificate Description

The Graduate Certificate in Data Analytics enhances students' analytical abilities and equips them with the skills to uncover new insights that improve strategic business decisions. Through this program, students learn how to collect, analyze and visually represent rich sets of data designed to improve organizational decision making.

Certificate Requirements

- **BUS 540 Strategic Management of Innovative Technology** (3 credits)
- **BUS 563 Data Analytics** (3 credits)
- **BUS 564 Big Data and Visualization** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Data Analytics, students will be able to:

1. Formulate technology innovation strategies to communicate strategic data driven business recommendations to stakeholders.
2. Use data analytics and visualization to improve, illustrate, and monitor organizational performance, while furthering the vision.

Policies Specific to the Graduate Certificate in Data Analytics

Policies and procedures that apply specifically to the Graduate Certificate in Data Analytics are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all Data Analytics certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Data Analytics have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Distributed Workforce Management

9 CREDITS

Certificate Description

The Graduate Certificate in Distributed Workforce Management will train students to strategically lead decisively across all functions in organizations, including recruitment and selection, training and development, performance appraisals, health and safety, labor relations, and communications. Graduates will be prepared to fulfill senior and executive positions in the private, public and the non-profit sectors. Students will create value for the organizations and communities they serve by solving the complex challenges related to managing within a distributed work environment.

Certificate Requirements

- **BUS 553 Organizational Behavior** (3 credits)
- **BUS 561 Virtual Training and Development** (3 credits)
- **BUS 562 Virtual Team Management** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Distributed Workforce Management, students will be able to:

1. Emphasize research as vital in both academic and applied settings.
2. Collaborate on projects and case analyses with peers while incorporating feedback from outside sources.
3. Focus the application of distributed workforce in a variety of organizations, including health care and nonprofits.
4. Apply managerial skills to help them begin as well as advance their career in distributed workforces.
5. Integrate diversity, equity, and inclusion into content and andragogy on distributed workforce management.
6. Shape corporate policy, organizational change, and transformation as a consequence of distributed work.

Policies Specific to the Graduate Certificate in Distributed Workforce Management

Policies and procedures that apply specifically to the Graduate Certificate in Distributed Workforce Management are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all Distributed Workforce Management certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Distributed Workforce Management have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Homeland Security and Emergency Management

9 CREDITS

Certificate Description

Few areas of public safety generate broad and intense interest as matters of homeland security and emergency management. Ensuring the safety and security of a nation's homeland—its infrastructure, its institutions, its economy, and most importantly, its people—is a prerequisite for success in all other aspects of societal life. This certificate program teaches students about threats posed by domestic and international terrorism and strategies for countering those threats. Additionally, students will evaluate the best practices behind successful security planning and create threat assessments. Finally, students will evaluate and develop emergency and disaster plans that can and should be employed in the face of both man-made and natural threats to the homeland.

Certificate Requirements

- **MCJ 630 Risk Assessment in Homeland Security and Emergency Management** (3 credits)
- **MCJ 651 Overview: Homeland Security and Emergency Management** (3 credits)
- **MCJ 650 Terrorism and Counterterrorism** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Homeland Security and Emergency Management, students will be able to:

1. Analyze and evaluate contemporary homeland security issues as they relate to criminal justice based on an understanding of the domestic and international processes affecting homeland security.
2. Construct an argument for the relationship between the current theories of emergency management and their practical application within the American Criminal Justice System.
3. Evaluate risks associated with human-caused, natural, and technological disasters through a myriad of risk management approaches, including best practices used by the homeland security enterprise.

Policies Specific to the Homeland Security and Emergency Management

Policies and procedures that apply specifically to the Graduate Certificate in Homeland Security and Emergency Management are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Homeland Security and Emergency Management have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Leadership

12 CREDITS

Certificate Description

The Graduate Certificate in Leadership helps new and aspiring leaders to develop a versatile set of leadership skills and to inspire high-performing teams in a complex world. Through an interdisciplinary approach, students learn about applied leadership theory, strategic talent management, and driving team performance.

Certificate Requirements

- **IND 501 An Interdisciplinary Approach to Ethical Leadership** (3 credits)
- **IND 502 Strategic Talent Management in a Complex World** (3 credits)
- **IND 522 Leading High Performing Teams** (3 credits)
- **Elective—Select one:**
  - **IND 503 Data Driven Decision Making** (3 credits)
  - **HSC 516 Communication Strategy for the Health Care Leader** (3 credits)
  - **PBH 592 Biostatistics** (3 credits)
  - **MPA 502 Public Management in a Political Environment** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Leadership, students will be able to:

1. Use leadership theory and data-driven decision-making to cultivate equitable, inclusive organizations.
2. Apply ethical principles in leading teams and influencing sustainable change.
3. Collaborate within and across disciplines and stakeholder groups to lead change initiatives.

Policies Specific to the Graduate Certificate in Leadership

Policies and procedures that apply specifically to the Graduate Certificate in Leadership are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Leadership have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

College of Liberal Arts and Sciences

SCHOOL OF TECHNOLOGY

Degree and Certificate Programs

College of Liberal Arts and Sciences

SCHOOL OF TECHNOLOGY

Mission Statement

The School of Technology leads in providing students an ethically centered, multidisciplinary, and multimodal technical education through innovative learning that meets the future-focused needs of industry and society.

Vision Statement

The School of Technology cultivates the next generation of leaders by blending technical expertise with practical wisdom and ethical insight. Through innovative programs, hands-on experiences, and industry collaborations, we empower learners across disciplines to thrive in today's technological landscape. We foster a culture of excellence where everyone can contribute and thrive, fully equipped to meet the challenges and opportunities of tomorrow.

Associate in Applied Science in Computer Technologies

Overview

The program focuses on preparing students for technician roles in computer technology-related industries. The goal of the program is to foster the ability of students to apply their knowledge from the degree program to real-world contexts of computer technology-based industries. The general education requirements ensure the student develops college-level competence in arts and sciences areas, including humanities, social sciences/history, and natural sciences/math.

Degree Summary

TOTAL PROGRAM HOURS: 60

Arts and Sciences Requirements: 20 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree. Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3

General Education Requirements: 21 credits

COURSE NAME	Credits
SOC 101 Introduction to Sociology	3
NS 110 Science in Today's World	3
MAT 114 Intermediate Algebra	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 27 credits

COURSE NAME	Credits
TECH 230 Technology and Society This requirement must be completed at Excelsior University.	3
TECH 200 Technical Writing	3
IT 221 Introduction to Computers	3
IT 200 Hardware and Software Essentials	3
IT 380 Overview of Computer Security	3
IT 211 Fundamentals of Programming	3
IT 250 Business Data Communications	3
CYS 220 Cloud Computing and Virtualization	3
TECH 290 Integrated Technology Assessment AAST This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

Elective Requirements: 8 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon completion of the Excelsior University Associate in Applied Science in Computer Technologies program, students will be able to:

1. Demonstrate effective technical oral and written communication skills.
2. Demonstrate introductory college-level proficiency in one or more of the subject areas in mathematics and/or natural sciences.
3. Demonstrate introductory college-level proficiency in one of more of the social sciences.
4. Critically examine relationships between technology and society through cultural diversity and human behavior.
5. Apply technology and problem-solving skills in the concentration area.

Associate in Applied Science in Technical Studies

Overview

The program focuses on preparing students for technician roles in engineering technology-related industries. The program has two technical concentrations: **Electrical Technologies** and **Nuclear Technologies/Power Plant Technologies**. The goal of the program is to foster the ability of students to apply their knowledge from the degree program to real-world contexts of an engineering technology-based industry. The general education requirements ensure the student develops college-level competence in arts and sciences areas, including humanities, social sciences/history, and natural sciences/math.

The **Electrical Technologies concentration** provides students with a comprehensive education that combines both theoretical knowledge and hands-on experience. Students gain a solid understanding of electrical safety practices, blueprint reading, and the principles of electrical systems. This concentration is designed to prepare graduates for a variety of entry-level roles in residential, commercial, and industrial electrical work.

The **Nuclear Technologies/Power Plant Technologies concentration** provides a comprehensive foundation in nuclear power generation and plant operations. Key courses include Energy Industry Fundamentals, Health Physics and Radiation Protection, and Power Plant Components, offering students a deep understanding of the energy sector and the technical skills required for safe and efficient nuclear plant operations. Students learn about nuclear reactor systems, applicable regulations, concepts of control performance, human interface, and quality assurance as they relate to the operation and maintenance of nuclear systems. Emphasis is placed on regulatory compliance, environmental stewardship, and maintaining high standards of health and safety. This concentration prepares students for technician/operator positions in the nuclear industry.

Degree Summary

TOTAL PROGRAM HOURS: 60

Arts and Sciences Requirements: 20 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
SOC 101 Introduction to Sociology	3
PHYS 203 Physics II This topic is required to meet the specified requirement.	3
MAT 114 Intermediate Algebra This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 23 credits

COURSE NAME	Credits
IT 221 Introduction to Computers	3
EGR 210 Introduction to Engineering Analysis This requirement must be completed at Excelsior University.	3
EGR 280 Introduction to 3-D Modeling This requirement must be completed at Excelsior University.	3
TECH 230 Technology and Society This requirement must be completed at Excelsior University.	3

Major Core Requirements: 23 credits

COURSE NAME	Credits
TECH 200 Technical Writing	3
MAT 120 Precalculus	4
PHYS 204 Physics II Lab	1
TECH 290 Integrated Technology Assessment AAST This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

CONCENTRATION REQUIREMENTS: 9 CREDITS

One of the following must be declared.

ELECTRICAL TECHNOLOGIES

COURSE NAME	Credits
TECH 180 Personal Protection Equipment for Electrical Work	3
TECH 185 Blueprint Reading	3
NUC 255 Electrical Theory	3

NUCLEAR TECHNOLOGIES / POWER PLANT TECHNOLOGIES

COURSE NAME	Credits
TECH 260 Energy Industry Fundamentals This requirement must be completed at Excelsior University.	3
NUC 210 Health Physics and Radiation Protection	3
NUC 260 Power Plant Components	3

Elective Requirements: 3 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon completion of the Excelsior University Associate in Applied Science in Technical Studies program, students will be able to:

1. Demonstrate effective technical oral and written communication skills.
2. Demonstrate introductory college-level proficiency in one or more of the subject areas in mathematics and/or natural sciences.
3. Demonstrate introductory college-level proficiency in one of more of the social sciences.
4. Critically examine relationships between technology and society through cultural diversity and human behavior.
5. Apply technology and problem-solving skills in the concentration area.

Concentration Learning Outcomes

Electrical Technologies Concentration

Upon completion of the **Electrical Technologies concentration**, students will be able to:

1. Safely work with electrical systems, utilizing proper protective equipment and adhering to safety regulations.
2. Interpret and analyze electrical diagrams and blueprints for accurate installation and troubleshooting.
3. Apply fundamental electrical theory to design, install, and maintain electrical circuits and systems.
4. Diagnose and repair common electrical issues using appropriate tools and testing equipment.

Nuclear Technologies/Power Plant Technologies Concentration

Upon completion of the **Nuclear Technologies/Power Plant Technologies concentration**, students will be able to:

1. Operate and maintain key systems in nuclear power plants.
2. Implement radiation protection and health physics practices to ensure worker and public safety.
3. Understand and apply industry regulations and environmental protections.
4. Identify key principles in the proper operation, testing, and troubleshooting of boilers, turbines, electric generators, pumps, and other auxiliary equipment.
5. Work in various roles within nuclear power plants, energy production facilities, and other related industries, ensuring the safe, efficient, and compliant generation of energy.

Credit Requirements Specific to the Bachelor of Professional Studies

120 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS	Credit Hours
IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.	3
Written English Requirement	6
Ethics	3
Humanities	6
Social Sciences/History	6
Natural Sciences	3
Mathematics	6
Professional Component	42
Elective	41
INL 102 Information Literacy	1
Capstone The Capstone course must be taken at Excelsior University and cannot be transferred in.	3
TOTAL DEGREE CREDITS REQUIRED	**120**

Bachelor of Professional Studies in Technology Management

120 CREDITS

General Education and Additional Requirements

Refer to chart on **page 127** for an overview of general education and distribution requirements for the bachelor of professional studies degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

Degree-specific requirements

EGR 310 Engineering Ethics

Statistics

Math elective

Science elective

PROFESSIONAL CORE

- BUS 341 Management Concepts and Applications
- BUS 452 Business Leadership
- ACC 211 Financial Accounting
- IT 221 Introductions to Computers
- IT 390 Project Management

TECHNOLOGY MANAGEMENT CORE

- TECH 230 Technology and Society
- TECH 330 Economic Analysis for Technologists
- TECH 340 Intro to Energy Utilization

Professional Component Electives
At least 15 credits in electives must be in one of the following areas: Electrical Technology, Information Technology, Nuclear Technology, or Renewable Energy Technology

TECH 490 Technology Management Capstone: Integrated Technology Assessment
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on **page 127**. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Professional Studies in Technology Management is a flexible, career-oriented program developed for students who want to build upon their knowledge and earn a bachelor's degree within their technical field. The program puts special emphasis on developing the knowledge, skills, attitudes, and values required for a technical person to meet the demands of a 21st-century workforce. To do this, the program has identified 10 different outcomes that provide students with a broad professional foundation in the various functional components of technology and management, as well as with a strong liberal base to ensure students have academic breadth and the commitment to lifelong learning needed to adapt to and succeed in an ever-changing world. Additionally, the program has identified four technical concentrations that provide students with a broad professional and technical foundation in the various functional components of technology. The concentrations combine depth and breadth of study in a recognized math/science-based technology discipline. The goal of the degree program is to foster the ability of students to apply what they have learned within the degree program to the real-world contexts of a technology-based industry.

Of the total 120 credits for the Bachelor of Professional Studies in Technology Management, 30 must be earned at the upper level: 9 in the arts and sciences, 15 in the technology component, and 6 in electives.

The four concentrations are: **Electrical Technology**, **Information Technology**, **Nuclear Technology**, and **Renewable Energy Technology.**

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple, flexible pathways—offering course-based, prior learning assessment, and credit aggregation pathways to degree completion. In this way, the program is customizable and tailored to each student's need and learning style. The Bachelor of Professional Studies in Technology Management is an option for students who seek to apply credit for military and other training toward a bachelor degree.

Program Learning Outcomes

The outcomes are geared toward providing students with a foundational knowledge of professional studies in technology management and the discipline of effective decision making in the technology industry.

Upon successful completion of the Excelsior University Bachelor of Professional Studies in Technology Management program, students will be able to:

1. Apply knowledge of mathematics and natural sciences to problem-solving in technology management contexts.
2. Develop cohesive written and oral arguments in your technical concentration using appropriate supporting evidence.
3. Critically evaluate and propose solutions for technology management problems.
4. Critically evaluate the ethical, legal, and social implications associated with the management of technology in your concentration field.

5. Participate effectively in diverse teams to address technical issues in your technology concentration.
6. Apply project management tools and techniques to plan, manage, and close a project in the applicable technology field.
7. Apply computer applications or computer software packages to solve technical problems in your technical concentration.
8. Apply technological and management concepts in an integrated manner using both local and global perspective.
9. Employ critical thinking skills to interpret and analyze competing arguments and multiple perspectives in a technology environment.
10. Evaluate your individual strengths and weaknesses with the desire to update skills and continuously improve.

Degree Requirements

The Excelsior University Bachelor of Professional Studies in Technology Management program requires a total of 120 credits and comprises three major components — arts and sciences, professional, and additional credit. The three components and their respective requirements are explained in the following sections.

- **30 credits** minimum required in the arts and sciences
- **45 credits** minimum required in the professional component
- **45 credits** required in the additional credit component (to include **INL 102 Information Literacy**)

ARTS AND SCIENCES COMPONENT (30 CREDITS, INCLUDING 9 UPPER-LEVEL)

Excess credits in arts and science may be applied toward the additional credit component as electives.

A. Written English Requirement
At least 6 credits must come from courses or exams that satisfy the written English requirement (see page 27) [**ENG 101 English Composition, ENG 102 English Composition II, ENG 312 Scientific and Technical Writing**]. Minimum grade of C required.

B. Humanities
You must successfully complete at least 9 credits in the humanities, including ethics [**BUS 323 Business Ethics**]. Ethics must be completed with a grade of C or better.

Humanities subjects include, but are not limited to, art, music, literature, foreign language, philosophy, religion, speech, creative writing, and advanced writing. Examinations or courses used to satisfy the written English requirement may not be applied toward the humanities requirement.

C. Social Sciences/History
You must successfully complete a minimum of 6 credits in social sciences/history. Social sciences and history subjects include, but are not limited to, anthropology, sociology, government, political science, psychology, geography, history, and economics.

D. Natural Sciences/Mathematics

You must successfully complete a minimum of 6 credits in mathematics to include a 3-credit course in college algebra [**MAT 114 Intermediate Algebra, MAT 120 Precalculus**] or Statistics [**BUS 231 Business Data Literacy**].

You must successfully complete a minimum of 3 credits in natural sciences [**BIO 110 Biology (Non-Lab), GEOL 108 Earth Science and Society, GEOL 114 Introduction to Oceanography, PHYS 201–203 Physics I–II**]. Natural sciences subjects include, but are not limited to, astronomy, geology, oceanography, anatomy and physiology, microbiology, chemistry, biology, genetics, zoology, and physics. Mathematics courses include intermediate algebra, precalculus, calculus, etc.

Only three college-level math courses below the level of calculus may be applied to degree requirements.

PROFESSIONAL COMPONENT (45 CREDITS, INCLUDING 15 UPPER-LEVEL)

The professional component includes a professional core that helps you gain basic knowledge in business administration and the underlying discipline of decision making, and a technology management core and professional component electives that allow you to apply and synthesize your technical knowledge in one of four concentration areas—**electrical technology, information technology, nuclear technology,** and **renewable energy technology.** A minimum of 15 credits is required in the concentration areas.

At least 15 credits at the upper (junior/senior) level must be completed in the professional component; 9 of these upper-level credits must be in the technology management core and/or professional component electives. Credits may be earned through Excelsior University courses and other approved sources, as well as approved military, business, and industry training. A grade of C or better is required for applicable credit.

Professional Core Requirements

One course required in each professional core area below.

1. General Management [**BUS 341 Management Concepts and Applications**]
2. Leadership [**BUS 452 Business Leadership**]
3. Accounting [**ACC 211 Financial Accounting**]
4. Computer Applications [**IT 221 Introduction to Computers**]
5. Project Management [**IT 390 Project Management**]

Technology Management Core Requirements (9 upper-level credits must be in Technology Management Core or Professional Electives)

One 3-credit course required in each technology management core area below.

1. Technology and Society [**TECH 230 Technology and Society**]
2. Engineering Economics [**TECH 330 Economic Analysis for Technologists**]

3. Introduction to Energy Utilization [**TECH 340 Intro to Energy Utilization**]
4. Integrated Technology Assessment (capstone) [**TECH 490 Technology Management Capstone: Integrated Technology Assessment**—the capstone course is required and must be taken through Excelsior University and cannot be transferred in.]

Concentration Areas

- **Electrical Technology**
- **Information Technology**
- **Nuclear Technology**
- **Renewable Energy Technology**

Students must select a concentration area in one of four areas: electrical technology, information technology, nuclear technology and renewable energy technology. A minimum of 15 credits must be earned in the concentration area.

Concentrations

Electrical Technology

A concentration in electrical technology focuses on training and preparing students with the knowledge and practical skills in electrical technology along with electrical circuits, electrical systems, and electrical equipment. It is centered on design, assembly, testing, maintenance, repairing, and upgrading of electrical circuits, components, and equipment. The electrical technology outcomes are geared toward providing students with fundamental as well as applied knowledge in electrical systems, electrical equipment, and processes. These will prepare the students for positions in operating, repairing, and upgrading electrical circuits, electrical systems, and electrical equipment. Upon successful completion of the Electrical Technology concentration, students will be able to:

1. Identify, formulate, and present solutions to a variety of technical problems in the area of electrical technology.
2. Demonstrate competency in the analysis, interpretation, and application of data in the area of electrical technology.

Suggested Courses

- **ELEC 331 Digital and Analog Communications**
- **NUC 255 Electrical Theory**
- **TECH 225 Applied Instrumentation and Control**
- **TECH 233 Electrical Power Distribution**
- **Electrical Technology Elective**
  Three additional credits must be earned in Electronic/Instrumentation Technologies Subjects.

Information Technology

A concentration in information technology focuses on training and preparing students to stay up-to-date with the rapidly changing technical environment. The information technology concentration is a technical discipline centered on the design, assembly, testing, and maintenance of computer circuitry and peripheral hardware. The concentration also emphasizes the information system concepts, principles, and practices, and problem solving of information technology domains. The information technology outcomes are geared toward providing students with a foundational knowledge of information technology in a wide variety of subject areas and preparing students for positions including information technicians, database management systems, software management, data communications, information security, and network management. Upon successful completion of the Information Technology concentration, students will be able to:

1. Analyze and apply a range of information system concepts, principles, and practices in the context of solving problems across a spectrum of information technology domains.
2. Develop computer-based applications using appropriate information technology concepts and principles.

Suggested Courses

- **IT 250 Business Data Communications**
- **IT 370 Database Management Systems**
- **IT 371 Web Design and Development**
- **IT 380 Overview of Computer Security**
- Three additional credits must be earned in Information Technology subjects.

Only one computer programming course will be accepted as Professional Component.

Nuclear Technology

A concentration in nuclear technology focuses on preparing students for technical background in the nuclear industry. The nuclear technology concentration is a technical discipline centered on the design, materials, operations, and maintenance associated with radiation shielding, radiation detection instrumentation, and emergency planning for nuclear research and power generation facilities. The nuclear technology concentration is geared toward providing students with a foundational knowledge of nuclear technology for positions at nuclear facilities. Upon completion of the Nuclear Technology concentration, students will be able to:

1. Demonstrate a proficiency in the operation and maintenance of nuclear processes and systems.
2. Demonstrate a proficiency in the applicable rules, regulations, and procedures pertaining to radiological safety and radiation protection.
3. Identify the key principles in the proper operation, testing, and troubleshooting of turbines, electric generators, pumps, and other auxiliary plant equipment.

Suggested Courses

- **NUC 250 Introduction to Heat Transfer and Fluid Mechanics**
- **NUC 330 Reactor Core Functions**
- **NUC 350 Plant Systems Overview**
- Six additional credits must be earned in Nuclear Technologies Subjects.

Renewable Energy Technology

A concentration in renewable energy technology focuses on training and preparing students to stay current with the renewable energy industry. The renewable energy technology concentration is a technical discipline centered on renewable energies such as solar, wind, water, and geothermal. The concentration also emphasizes the political and economic influences on the renewable energy business. The renewable energy technology outcomes are geared toward providing students with a foundational knowledge of renewable energy in a wide variety of subject areas and preparing students for positions in the renewable energy industry including an understanding of economics and politics associated with renewable energy. Upon successful completion of the Renewable Energy Technology concentration, students will be able to:

1. Identify and discuss renewable energy technologies being used commercially and residentially.
2. Perform an analysis of political and economic influences on the renewable energy business.

Required Courses

- **NUC 260 Power Plant Components**
- **TECH 233 Electrical Power Distribution**
- **TECH 250 Renewable Energy Overview I**
- **TECH 251 Renewable Energy Overview II**
- **TECH 260 Energy Industry Fundamentals**

Professional Component Electives

Any technology-related credits outside the core are applied as professional component electives.

Technology management credits in excess of the professional component maximum of 45 may be applied to the additional credit component.

ADDITIONAL CREDIT COMPONENT (45 CREDITS, INCLUDING 6 UPPER-LEVEL)

Although you may have already fulfilled the minimum credit requirements in the arts and sciences and professional components of your degree, you may still need to earn additional credit to fulfill the total credit requirement of your Bachelor of Professional Studies in Technology Management. To do this, you may apply any of the following: arts and sciences credit above the minimum required, professional component credit (technology/management) above the minimum required, or free elective credit.

Free elective credit may be earned in any field of collegiate study, including business and other professional, technical, or vocational areas as well as the arts and sciences. Examples include military science, health, nursing, engineering, education, computer science, home economics, secretarial science, architecture, drafting, auto mechanics, law, social work, and criminal justice. A maximum of 2 credits for physical education activity courses may be applied.

Information Literacy Requirement (1 credit)

Students are expected to demonstrate competency in information literacy [**INL 102 Information Literacy**]. See page 29 for more information about this requirement. The information literacy requirement is applied to the additional credit component.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Bachelor of Science in Computer Science

Overview

The Bachelor of Science in Computer Science program is meticulously designed to equip students with a robust foundation in computer science theory coupled with practical skills in software development and systems management. The curriculum is structured to provide a holistic education that prepares students not only for technical challenges but also for the societal and ethical dimensions of computing. Students must be able to demonstrate competence in the use of standard design practices, tools, techniques, and computer hardware and software appropriate to the computer science discipline and the program goals.

Program concentrations include **Artificial Intelligence, Data Science, Networking and Cloud Computing,** and **Software Development**.

The **Artificial Intelligence concentration** immerses students in cutting-edge AI technologies, equipping them to become proficient AI practitioners and ethical AI stewards. Through interdisciplinary courses and hands-on projects, students explore foundational principles and advanced techniques, including machine learning, natural language processing (NLP), computer vision, and deep learning. Emphasizing responsible AI development and ethical considerations, students critically examine societal impacts and navigate complex ethical dilemmas. Collaborative projects hone problem-solving and critical thinking skills, preparing students to drive innovation and make positive contributions to society while upholding ethical principles in the rapidly evolving field of artificial intelligence.

The **Data Science concentration** empowers students with the knowledge and skills necessary to thrive in the dynamic realm of data science while prioritizing social impact and ethical considerations. Through a blend of theoretical learning and hands-on projects, students delve into data collection, preprocessing, analysis, and interpretation using statistical methods, machine learning algorithms, and big data technologies. With a strong emphasis on ethical practices, students explore the societal implications of data usage, including issues of privacy, bias, and fairness. Collaborative projects provide practical experience and foster essential communication, teamwork, and leadership skills. Graduates are poised to pursue diverse career paths in data analysis, machine learning, and business intelligence, and equipped to drive innovation and make meaningful contributions to society while upholding ethical principles in a data-driven world.

The **Networking and Cloud Computing concentration** equips students with the knowledge and skills required to design, implement, and manage robust network infrastructures and cloud-based solutions while emphasizing ethical practices and social impact. Through a blend of theoretical learning and hands-on projects, students explore fundamental principles and advanced technologies in networking, cloud architecture, virtualization, and cybersecurity. With a focus on scalability, reliability, and security, students gain practical experience in configuring network devices, deploying cloud services, and implementing cybersecurity measures, all while considering ethical considerations and societal impacts. Upon completion, graduates are prepared to pursue careers as network engineers, cloud architects, or cybersecurity specialists, contributing to the evolving landscape of

networking and cloud computing with expertise and a commitment to ethical practices and social responsibility.

The **Software Development concentration** equips students with the knowledge and skills essential for thriving in the dynamic field of software engineering, with a focus on creating positive social impact. Through a blend of theoretical learning and hands-on projects, students delve into fundamental software design principles, methodologies, and industry-standard practices. Emphasizing collaboration, innovation, and ethical considerations, students gain practical experience in designing, developing, and maintaining robust, secure, and scalable software solutions that address societal challenges. Upon completion, graduates are equipped to pursue careers as software engineers, developers, or consultants, contributing to the advancement of technology with expertise, creativity, and a commitment to excellence while making meaningful contributions to society.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
TECH 200 Technical Writing	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking This topic is required to meet the specified requirement.	3
HUM 307 Critical Thinking	3
PSY 220 Psychology of Personality	3
PSY 360 Social Psychology	3
PSY 420 Human Motivation	3
NS 110 Science in Today's World	3
MAT 114 Intermediate Algebra This topic is required to meet the specified requirement.	3
MAT 205 Discrete Structures This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 54 credits	
COURSE NAME	Credits
PSY 101 Introduction to Psychology I	3
PSY 340 Psychology of Learning	3
MAT 201 Statistics	3
TECH 230 Technology and Society This requirement must be completed at Excelsior University.	3
TECH 231 Navigating Technology: Concepts, Roles, and Careers This requirement must be completed at Excelsior University.	3
COMM 210 Interpersonal Communication	3

Major Core Requirements: 54 credits (continued from previous page)	
COURSE NAME	Credits
IT 390 Project Management	3
IT 250 Business Data Communications	3
BUS 311 Organizational Behavior	3
IT 211 Fundamentals of Programming	3
IT 313 Intermediate Programming	3
IT 380 Overview of Computer Security	3
CS 330 Data Structures, Algorithms, and Their Societal Impact	3
CS 315 Self-Reliant Language Learning This requirement must be completed at Excelsior University.	3
CS 313 Software Requirements Engineering and Management	3
CS 401 Theory of Computation and Computational Ethics	3
CS 405 Human-Computer Interaction (HCI): AI Integration and Social Impact	3
CS 495 Computer Science Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

CONCENTRATION REQUIREMENTS: 15 CREDITS

One of the following must be declared.

ARTIFICIAL INTELLIGENCE

COURSE NAME	Credits
CS 371 Machine Learning Foundations: Responsible AI Development	3
CS 475 Ethics, Society, and Law in Artificial Intelligence This requirement must be completed at Excelsior University.	3
CS 373 Natural Language Processing (NPL) and Emerging Applications	3
CS 477 Visionary Machines: Exploring Computer Vision Technologies	3
CS 479 Responsible AI: Neural Networks and Deep Learning	3

DATA SCIENCE

COURSE NAME	Credits
CS 331 Foundations of Data Science	3
CS 435 Ethical Data Wrangling and Preprocessing This requirement must be completed at Excelsior University.	3
CS 437 Predictive Analytics and Time Series Forecasting	3
CS 333 Statistical Methods for Data Science	3
CS 439 Big Data Analytics	3

NETWORKING AND CLOUD COMPUTING

COURSE NAME	Credits
CS 351 Cloud Computing Foundations	3
CS 353 Network Design and Management: Integrating Cloud Technologies	3
CS 455 Virtualization and Containerization	3
CS 453 Cloud Networking and Storage Strategies	3
CS 350 Networking and Cloud Security: Principles and Practices	3

SOFTWARE DEVELOPMENT

COURSE NAME	Credits
CS 417 Software Engineering and Practice	3
CS 311 Software Design and Architecture	3
CS 415 Software Testing and Quality Assurance	3
CS 411 Software Project Management	3
CS 419 Software Maintenance and Evolution	3

A minimum grade of C or higher is required for all Concentration requirements.

Arts and Science Electives: 12 credits

Additional credits needed to fulfill the program requirements in the arts and sciences.

Elective Requirements: 2 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Computer Science program, students will be able to:

1. Execute approaches to develop or deploy computer systems and processes that address societal and industry challenges using both current and future leaning technologies.
2. Employ a holistic and interdisciplinary perspective in developing and implementing computer solutions.
3. Demonstrate leadership through a combination of technical skills, interpersonal skills, and industry models to implement solutions that address societal and industry needs.
4. Engage in collaborative projects to implement teamwork and communication skills while considering individuals' perspective and life experience in a global community.
5. Apply learned skills to real-world projects, integrating critical thinking and ethical reasoning to ensure a positive impact on the business, industry, and society.

Concentration Learning Outcomes

Upon completion of the **Artificial Intelligence concentration**, students will be able to:

1. Explain the principles of supervised learning, unsupervised learning, and reinforcement learning algorithms, as well as foundational principles of Natural Language Processing and computer vision technologies.
2. Demonstrate proficiency in utilizing popular machine learning frameworks, implementing machine learning algorithms on real-world datasets, and articulating the underlying principles of advanced Natural Language Processing tasks and computer vision algorithms while critically evaluating their societal implications.
3. Analyze the societal implications of AI technologies on diverse demographic groups, assess the societal impact of responsible vs. irresponsible AI development, evaluate the effectiveness of legal frameworks in addressing ethical concerns in AI, and propose strategies to mitigate bias and enhance fairness in AI algorithms.
4. Illustrate key findings from AI model outputs with diverse visualizations, assess the societal implications of Natural Language Processing, analyze the broader implications of computer

vision technologies considering ethical considerations and societal impact, and evaluate the effectiveness of different neural network architectures in solving complex problems and addressing ethical concerns.

5. Apply machine learning algorithms and Natural Language Processing techniques in practical scenarios across diverse contexts, evaluate responsible and ethical AI guidelines such as fairness, accountability, transparency, and explainability (FATE), and identify potential societal implications of deep learning technologies.
6. Integrate insights from case studies and practical experiences to form a holistic perspective of the ethical dimensions within neural networks and deep learning.

Upon completion of the **Data Science concentration**, students will be able to:

1. Explain fundamental concepts and theories in data science, including data preprocessing, statistical analysis, machine learning, and big data analytics.
2. Demonstrate proficiency in selecting and applying statistical methods and tools to analyze data, interpret results, and derive meaningful insights for decision-making purposes while effectively translating theoretical concepts into practical skills by applying data science techniques and methodologies to solve real-world problems.
3. Demonstrate proficiency in identifying, analyzing, and proposing data-driven solutions to real-world problems across various domains, showcasing competence in implementing both basic and advanced machine learning techniques to analyze data, build predictive models, and extract valuable insights to support decision-making processes while emphasizing problem-solving skills and critical thinking.
4. Effectively communicate data analysis results, insights, and recommendations to diverse stakeholders, including technical and non-technical audiences, through written reports, oral presentations, and data visualizations.
5. Critically evaluate the ethical implications of data collection, preprocessing, analysis, and interpretation, demonstrating a commitment to responsible data practices and considering societal impacts, equity, and biases.
6. Collaborate effectively in multidisciplinary teams to tackle complex data science projects, demonstrating teamwork, communication, and leadership skills while considering diverse perspectives and leveraging individual strengths.

Upon completion of the **Networking and Cloud Computing concentration**, students will be able to:

1. Articulate the pros and cons of different cloud deployment models, explain the fundamental principles of networking and cloud computing, articulate foundational concepts underlying virtualization technologies, and explain the theoretical basis for network security principles.
2. Assess the implications of virtualization on system security and reliability, identify areas for optimization in system performance, perform hands-on tasks to set up and customize virtualized resources, assess cloud storage technologies, and implement encryption mechanisms effectively.
3. Discuss the societal and environmental impacts of cloud computing, evaluate design choices in the broader context of network and cloud computing, evaluate innovative approaches and

solutions in virtualization and containerization, analyze the alignment of cloud networking and storage with business requirements and global policy, and develop access control policies across network and cloud services.

4. Analyze the suitability of different cloud service models for real-world scenarios, assess the potential benefits and challenges of integrating innovative technologies, communicate ethical considerations associated with virtualization and containerization technologies, and develop comprehensive, integrated solutions for cloud networking and storage considering diverse national laws and data jurisdiction.
5. Evaluate the adaptability of security strategies to changes in technology landscapes and emerging threats, analyze the intersection of traditional network design principles with emerging technologies, analyze how virtualization and containerization technologies contribute to societal transformations, identify issues of data sovereignty and privacy compliance within global cloud environments, and formulate security policies aligning with industry standards and best practices.
6. Critique the role of cloud technologies in promoting digital inclusion, job creation, and innovation, while considering potential challenges.

Upon completion of the **Software Development concentration**, students will be able to:

1. Identify fundamental design principles, evaluate design patterns, analyze testing strategies, utilize software development-centric approaches in project planning and management, and improve existing software code with refactoring techniques.
2. Analyze the ethical dimensions of design decisions, implement proactive security measures, analyze software performance and security, and integrate ethical guidelines into the software development life cycle.
3. Analyze software performance and design decisions, apply contemporary software architectural practices, evaluate quality assurance practices, demonstrate strategies for building and maintaining project teams, and analyze documentation alignment with industry standards.
4. Integrate knowledge of emerging technologies, craft secure and scalable software systems, communicate the pros and cons of testing techniques, develop guidelines for future-proofing software systems, and create ethical guidelines for software development.
5. Engage in reflective analysis of project outcomes, implement security measures in software design, evaluate software development case studies, design comprehensive project plans, and create coding standards that promote sustainable software development practices.
6. Demonstrate the ability to balance competing priorities within defined business constraints.

Bachelor of Science in Cybersecurity

Overview

The Bachelor of Science in Cybersecurity program is aligned with the academic requirements for cybersecurity set by the National Security Agency (NSA) and Department of Homeland Security (DHS) and will provide students with the ability to enhance technical knowledge and skills in cybersecurity. The program is designed to prepare learners for cybersecurity-related jobs in the U.S. Cyber Command, the NSA's signal intelligence operations, the Federal Bureau of Investigation, law enforcement agencies, and corporate environments. As Excelsior is a Center of Academic Excellence in Cyber Defense (CAE-CD), the program supports the belief of the NSA that cybersecurity should be integrated in all aspects of a person's career. The degree program begins to prepare the student to take several industry certification exams such as CISP, CEH, Security+, Network+, CHFI, SSCP, and ESCP. Typical occupational areas associated with cybersecurity include incident response analyst, cyber compliance analyst, cyber threat management, cyber network operations planner, cyber systems analyst, systems administrator, and cyber systems and operations engineer.

Program concentrations include **Cyber Operations** and **General.**

The **Cyber Operations concentration** equips students with the necessary skills to address advanced cyber threats, cybercrime, and terrorism. This track focuses on both technical and organizational aspects of cybersecurity, including understanding the behavior of organizations, reverse engineering, and large-scale cybercrime.

The **General concentration** provides a broad understanding of cybersecurity principles and practices, equipping students with essential skills for securing diverse technological environments. This flexible concentration allows students to tailor their coursework to fit individual career goals, drawing from a variety of areas, including business continuity, computer forensics, and securing mobile and cloud environments. Students may also choose from courses offered in the Cyber Operations concentration to deepen their expertise in specific areas of interest.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
TECH 200 Technical Writing	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking This topic is required to meet the specified requirement.	3
HUM 307 Critical Thinking	3
HIS 120 World History I	3
PSY 101 Introduction to Psychology I	3
PSY 360 Social Psychology	3
NS 110 Science in Today's World	3
MAT 114 Intermediate Algebra This topic is required to meet the specified requirement.	3
MAT 205 Discrete Structures This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all General Education requirements. The preferred and required courses for this degree program are listed above.

Major Core Requirements: 48 credits

COURSE NAME	Credits
MAT 201 Statistics	3
TECH 230 Technology and Society This requirement must be completed at Excelsior University.	3
TECH 231 Navigating Technology: Concepts, Roles, and Careers This requirement must be completed at Excelsior University.	3
IT 390 Project Management	3
IT 250 Business Data Communications	3
IT 211 Fundamentals of Programming	3
CYS 260 Governance Legal and Compliance	3
IT 380 Overview of Computer Security	3
CYS 345 Cybersecurity Defense in Depth	3
CYS 220 Cloud Computing and Virtualization	3
CYS 426 Cyber Attacks and Defenses	3
CYS 450 Security Focused Risk Management	3
CYS 403 Network and Application Security	3
IT 460 System Administration	3
IT 360 Operating Systems	3
CYS 496 Cybersecurity Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

CONCENTRATION REQUIREMENTS: 15 CREDITS

One of the following must be declared.

GENERAL

COURSE NAME	Credits
BUS 311 Organizational Behavior This topic is required to meet the specified requirement.	3
IT 321 Computer Systems Architecture	3

continued on next page

CONCENTRATION REQUIREMENTS: 15 CREDITS

One of the following must be declared.

GENERAL

COURSE NAME	Credits
CYS 455 Business Continuity	3
IT 406 Computer Forensics	3
CYS 456 Securing Mobile and Cloud Computing Environments	3

The preferred and required courses for this degree program are listed above.

CYBER OPERATIONS

COURSE NAME	Credits
BUS 311 Organizational Behavior	3
IT 321 Computer Systems Architecture	3
CYS 401 Organizational Information Security	3
CYS 400 Reverse Engineering	3
CYS 475 Large Scale Cybercrime and Terrorism	3

A minimum grade of C or higher is required for all concentration requirements.

Arts and Sciences Electives: 18 credits

Additional credits needed to fulfill the program requirements in the arts and sciences.

Elective Requirements: 2 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in Cybersecurity, students will be able to:

1. Describe defensive network architecture that use multiple layers of protection.
2. Analyze technologies and processes that monitor, maintain, and protect the data of an institution.
3. Evaluate and apply industry tools to respond to cyber incidents.
4. Create and disseminate cybersecurity reports to stakeholders.
5. Conduct risk and vulnerability assessments of existing and proposed security systems.
6. Develop and implement organizational cybersecurity policies and procedures.
7. Demonstrate the ability to understand professional, ethical, and social responsibility, including the effect of culture, diversity, and interpersonal relations.
8. Demonstrate proficiency in communicating technical information in formal reports, documentation, and oral presentations to users and information technology professionals.
9. Demonstrate a commitment to professional development and to continue to engage in lifelong learning.

Concentration Learning Outcomes

Upon completion of the **Cyber Operations concentration**, students will be able to:

1. Develop the skills to assess, identify, and defend against sophisticated cyber threats, cybercrime, and terrorism, using advanced technical tools and methodologies.
2. Demonstrate the ability to deconstruct and analyze software and hardware systems to discover potential vulnerabilities, exploits, and malicious code.
3. Evaluate and apply organizational security frameworks to safeguard critical data and infrastructure within various business and governmental environments.
4. Design and implement effective cybersecurity strategies to address large-scale cybercrime and terrorism, ensuring national and organizational security.
5. Develop the interpersonal and leadership skills necessary to work in cybersecurity operations teams, understanding organizational behavior and its impact on security strategies.

Upon completion of the **General Cybersecurity concentration**, students will be able to:

1. Acquire a foundational knowledge of cybersecurity concepts, techniques, and frameworks applicable to various technological and organizational environments.
2. Gain the skills to identify security risks and implement protective measures for mobile and cloud platforms, ensuring the integrity and confidentiality of data.
3. Design and implement business continuity plans to ensure organizational resilience and minimize downtime during and after cyber disruptions.

4. Develop the ability to investigate, analyze, and interpret digital evidence in the context of cybercrime and legal processes, contributing to incident response and legal compliance.
5. Demonstrate flexibility in applying cybersecurity strategies to various industries and roles, ensuring effective defense mechanisms tailored to specific environments.

Bachelor of Science in Electrical Engineering Technology

124 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

DEGREE-SPECIFIC REQUIREMENTS

EGR 310 Engineering Ethics

Communications

MATHEMATICS COMPONENT (24 credits total)

- 12 credits at the level of College algebra or above, including Calculus I and II and Differential Equations (MAT 220 Calculus I and MAT 221 Calculus II)

NATURAL SCIENCE COMPONENT

- PHYS 201 Physics I
- PHYS 202 Physics I Lab or PHYS 204 Physics II Lab
- PHYS 203 Physics II
- CHE 101 Chemistry

LAB REQUIREMENT

- Seven Technology labs are required. Four must be from the following: DC Circuits, AC Circuits, Digital Electronics, Electronics I, Electronics II, Microprocessors. The other three must be in the concentration.

ELECTRICAL ENGINEERING TECHNOLOGY COMPONENT CORE REQUIREMENTS

- ELEC 152 Circuit Theory I
- ELEC 153 Circuit Theory II
- ELEC 160 Electronics I
- ELEC 161 Electronics II
- ELEC 201 Digital Electronics
- ELEC 202 Microprocessors
- Computer Programming
- Project Management

CONCENTRATION REQUIREMENTS

One of the following concentrations must be declared.

- Electronics
  IT 250 Business Data Communications, ELEC 306 Advanced Digital Design, ELEC 307 Microcontrollers, ELEC 321 Control Systems, ELEC 331 Digital and Analog Communications
- Power Systems
  ELEC 210 Programmable Logic Controllers, ELEC 345 Electric Machines, ELEC 350 Power Electronics, ELEC 360 Generation and Transmission of Electric Power, ELEC 370 Instrumentation and Data Acquisition

ELEC 495 Integrated Technology Assessment Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in Electrical Engineering Technology program focuses on preparing students for electrical and engineering technology positions in technology-related industries such as electronics, electrical power, semiconductors, and computers. The program is designed specifically to advance job skills by ensuring a breadth of knowledge in technology concepts as well as a depth of understanding and skill in a chosen concentration area. The program has two technical concentrations that provide students with a broad professional and technical foundation in the various functional components of electrical engineering technology. Each concentration combines depth and breadth of study in a recognized math/science-based technology discipline. The goal of the degree program is to foster the ability of students to apply what they have learned within the degree program to the real-world contexts of a technology-based industry. The two concentrations are: **Electronics** and **Power Systems.**

Of the total 124 credits for the Bachelor of Science in Electrical Engineering Technology, 16 must be earned at the upper level in the technology component.

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple flexible pathways—online courses, credit by exam, and credit aggregation. In this way, the program is customizable and tailored to each student's need and learning style.

Specialized Accreditation/Recognition: *The Bachelor of Science in Electrical Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET,* https://www.abet.org, *under the commission's General Criteria and Program Criteria for Electrical/Electronic(s) Engineering Technology and Similarly Named Programs.*

Program Educational Objectives

As an Excelsior University bachelor's-level electrical engineering technology graduate, within a few years of graduation, you are expected to:

1. Apply general and discipline-specific concepts and methodologies to identify, analyze, and solve technical problems in the electrical discipline.
2. Demonstrate an individual desire and commitment to remain technically current with, and adaptive to, changing technologies through continuous learning and self-improvement.
3. Demonstrate independent thinking, function effectively in team-oriented settings, and maintain a high level of performance in a professional/industrial environment.
4. Communicate effectively in written and oral forms in a professional/industrial environment.
5. Perform ethically and professionally in business, industry, and society.
6. Demonstrate and utilize leadership principles in the field of electrical engineering technology.

Program (Student) Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Electrical Engineering Technology program, students will be able to:

1. Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the electrical engineering technology discipline.
2. Demonstrate an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the electrical engineering technology discipline.
3. Apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and be able to identify and use appropriate technical literature.
4. Conduct standard tests, measurements, and experiments and be able to analyze and interpret the results to improve processes.
5. Function effectively as a member as well as a leader on technical teams, and apply project management techniques in team project activities.

Degree Requirements

The Bachelor of Science in Electrical Engineering Technology requires a minimum of **124 credits** distributed as follows:

- **60 credits** minimum required in the arts and sciences component
- **57 credits** minimum required in the electrical engineering technology component
- **7 credits** required in the free elective component (to include **IND 101/301 Cornerstone and INL 102 Information Literacy**)

ARTS AND SCIENCES COMPONENT (60 CREDITS)

The distribution requirement ensures basic college-level competence in three arts and sciences areas: humanities, social sciences/history, and natural sciences/mathematics.

A. **Humanities and Social Sciences/History**
   At least 24 credits must be earned in the humanities and social sciences/history and are distributed as follows:

   1. **Communications:** At least 9 credits must be earned in communications courses, including 6 credits to satisfy the written English requirement, completed with a minimum grade of C [**ENG 101 English Composition, ENG 312 Scientific and Technical Writing**]. Courses in speech, written composition, technical writing, or similar courses in either written or oral communications are applicable toward the communications requirement.
   2. **Ethics:** At least 3 credits must be earned in ethics with a minimum grade of C. [**EGR 310 Engineering Ethics**].

3. **Humanities Electives:** At least 3 credits must be earned in a humanities elective such as art, music, literature, foreign language, philosophy, and speech.
4. **Social Sciences/History:** At least 9 credits must be earned in subjects such as sociology, economics, history, psychology, and anthropology.

B. Mathematics and Natural Sciences

Students are required to complete at least 24 semester hours of credit in the combined areas of mathematics and natural sciences, with at least 12 credit hours in math at the level of college algebra or above [**MAT 120 Precalculus**], including Calculus I [**MAT 220 Calculus I**] and Calculus II [**MAT 221 Calculus II**], and Differential Equations.

There is no minimum credit hour requirement for natural sciences. Rather, students must complete specific required courses in the natural sciences: Physics I , Physics II, and Chemistry I (with at least one physics lab) [**PHYS 201 Physics I, PHYS 203 Physics II, PHYS 202 Physics I Laboratory, PHYS 204 Physics II Laboratory, CHE 101 General Chemistry I or equivalent**].

C. Arts and Sciences Electives

The remaining 12 credits needed to satisfy the 60-credit requirement may be earned in any arts and sciences subjects.

ELECTRICAL ENGINEERING TECHNOLOGY COMPONENT (57 CREDITS)

The electrical engineering technology component ensures college-level competence in the major functional areas of electrical engineering technology. A grade of C or better is required for applicable credit.

Core Requirements

The following core requirements must be completed:

- DC Circuits [**ELEC 152 Circuit Theory I**]
- AC Circuits [**ELEC 153 Circuit Theory II**]
- Electronics I [**ELEC 160 Electronics I**]
- Electronics II [**ELEC 161 Electronics II**]
- Digital Electronics [**ELEC 201 Digital Electronics**]
- Microprocessors [**ELEC 202 Microprocessors**]
- Computer Programming [**IT 210 Object-Oriented Programming**]
- Project Management [**IT 390 Project Management**]
- Integrated Technology Assessment (capstone)
  [**ELEC 495 Integrated Technology Assessment**]—The capstone course is required and must be taken through Excelsior University, and completed with a grade of C or above. It cannot be transferred in.

- Four labs from the following core courses must be completed:
  - DC Circuits
  - AC Circuits
  - Electronics I
  - Electronics II
  - Digital Electronics
  - Microprocessors

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Concentrations

One of the following concentrations must be declared:

- **Electronics**
- **Power Systems**

Electronics

A concentration in Electronics focuses on training and preparing students to stay up-to-date with the rapidly changing electronics hardware and software technology environment. This concentration is a technical discipline centered on the analysis, design, assembly, testing, upgrading, and maintenance of electronics, computers, and communications hardware. The concentration also emphasizes the analysis, design, development, operation, and troubleshooting of control systems, software, and computer-based process controls. This concentration's outcomes are geared toward providing students with a foundational knowledge of electronics hardware and software in a wide variety of subject areas and preparing students for positions including circuit design engineer, hardware technician, communications engineer, software developer, or network engineer.

Concentration Learning Outcomes

Upon successful completion of the Electronics concentration, students will be able to:

1. Analyze and design different types of digital and analog electronic communication systems.
2. Design, integrate, and analyze digital and analog control systems.
3. Use high-level computer languages to develop techniques for designing and modeling electronic systems.

Requirements

Minimum of 15 credits, including 9 upper-level. At least three courses must have labs.

Concentration Requirements

- Business Data Communications [**IT 250 Business Data Communications**]
- Advanced Digital Design [**ELEC 306 Advanced Digital Design**]
- Microcontrollers [**ELEC 307 Microcontrollers**]
- Control Systems [**ELEC 321 Control Systems**]
- Digital and Analog Communications [**ELEC 331 Digital and Analog Communications**]

Power Systems

A concentration in Power Systems focuses on training and preparing students to stay up-to-date with the rapidly modernizing power electronics and power systems technology environment. This concentration is a technical discipline centered on the analysis, design, assembly, testing, upgrading, and maintenance of DC/AC power conversion systems, electric power generation and distribution, and power control technologies. The concentration also emphasizes the analysis, design, development, operation, and troubleshooting of single-phase and three-phase electric motors and electric machines, data acquisition, and instrumentation. This concentration's outcomes are geared towards providing students with a foundational knowledge of electric power systems in a wide variety of subject areas and preparing students for positions including power electronics design engineer, electrical power generation and grid maintenance technician, HVDC maintenance engineer, or instrumentation engineer.

Concentration Learning Outcomes

Upon successful completion of the Power Systems concentration, studentswill be able to:

1. Identify, analyze, and discuss methods used for generation, transmission, and control of electric power.
2. Design, integrate, and analyze DC/AC power conversion systems and related instrumentation.
3. List and describe techniques for analysis and design of power electronics systems.

Requirements

Minimum of 15 credits, including 9 upper-level. At least three courses must have labs.

Concentration Requirements

- Programmable Logic Controllers [**ELEC 210 Programmable Logic Controllers**]
- Electric Machines [**ELEC 345 Electric Machines**]
- Power Electronics [**ELEC 350 Power Electronics**]
- Generation and Transmission of Electric Power [**ELEC 360 Generation and Transmission of Electric Power**]
- Instrumentation and Data Acquisition [**ELEC 370 Instrumentation and Data Acquisition**]

Electrical Engineering Technology Electives

Any remaining credits in the electrical engineering technology component may be satisfied by approved electrical/computer technology electives. Please note that only two of these electives may be approved information or cyber technology courses. Only one programming course can apply toward the degree. Since computer programming is a core requirement, additional computer programming courses will not apply toward the degree. Please check with your academic advisor for approval prior to registering for electrical engineering technology electives.

Laboratory Requirement

The degree requires at least eight laboratories. Of those eight, one physics laboratory is required in the natural sciences/mathematics area and the remaining seven must be in the electrical engineering technology component. Of the seven technology labs, four must be in the following electrical engineering technology core content areas: DC Circuits, AC Circuits, Electronics I, Electronics II, Digital Electronics, and Microprocessors. The remaining three laboratories must be in your area of concentration.

Students must be able to demonstrate competence in the use of standard design practices, tools, techniques, and computer hardware and software appropriate to the electrical discipline and the program goals.

Level Requirement

Of the 57 credits required for the electrical engineering technology component, at least 16 must be upper level. Nine of the upper-level credits must be in the area of concentration. A course is generally considered upper level if it is offered at the junior or senior level and clearly not introductory in content. Courses taken at two-year institutions may not be used to satisfy upper-level requirements. No upper-level credit is awarded for introductory coursework in computer languages. The acceptance of coursework for credit toward the upper-level requirement is subject to faculty review.

A grade or "C" or higher is needed for all core requirements.

FREE ELECTIVE COMPONENT (7 CREDITS)

The Bachelor of Science in Electrical Engineering Technology allows room for up to 7 credits in free electives. Applied to this component is the 1 credit for the Excelsior University information literacy requirement [**INL 102 Information Literacy**] and the 3 credit cornerstone requirement [**IND 101/301 Cornerstone**]. See page 29 or refer to our website for more information about information literacy.

You may earn the remaining 3 credits in any field of college study, including professional or technical subjects as well as in the arts and sciences. A maximum of 2 credits in physical education activity courses may be applied to the degree.

Bachelor of Science in Information Technology

120 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

DEGREE-SPECIFIC REQUIREMENTS

IND 203 Professional Ethics

Communications

MAT 205 Discrete Structures

BUS 231 Business Data Literacy or MAT 201 Statistics

One additional math course at the level of College Algebra or above.

INFORMATION TECHNOLOGY COMPONENT

Core Requirements

- IT 211 Fundamentals of Programming
- IT 313 Intermediate Programming
- IT 250 Business Data Communications
- IT 321 Computer Systems Architecture
- IT 360 Operating Systems
- IT 370 Database Management Systems
- IT 371 Web Design and Development
- IT 375 Human-Computer Interactive Design
- IT 380 Overview of Computer Security
- IT 390 Project Management
- IT 460 System Administration

CONCENTRATION REQUIREMENTS

One of the following concentrations must be declared.

- General (15 credits in approved IT electives)
- Cybersecurity Technology
  IT 406 Computer Forensics, CYS 426 Cyber Attacks and Defenses, CYS 455 Business Continuity, CYS 403 Network and Application Security, CYS 401 Organizational Information Security
- Network Operations
  IT 422 Advanced Networking, IT 424 Network Operating Systems, IT 426 Wireless Technology, IT 428 Telecommunications Management, IT 430 Network System Design and Management Security

IT 495 Integrated Technology Assessment Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in Information Technology program focuses on preparing students to stay at the forefront of the rapidly changing technical environment, and training students to be the leaders in the Information Technology field. To accomplish this goal, the program is centered on the fundamental concepts, skills, applications, and practices across a wide variety of information technology domains, including software and web development, computer systems, database management, data communication, information security, and project management. Built upon this core knowledge foundation, our program has identified two technical concentrations: **Cybersecurity Technology** and **Network Operations.** These concentrations represent the high-demand job areas in the IT industry, and equip students with in-depth specialties in order for them to excel in the workplace. To allow students the flexibility to design a study plan that meets their career goals, a **General Option** concentration is also available, in which students can compile their own course milestones toward the degree.

Of the total 120 credits for the Bachelor of Science in Information Technology, 15 must be earned at the upper level in the technology component.

In addition to the necessary technical knowledge and skills, the strong liberal arts component of our program helps students maintain academic breadth and prepare students with quantitative, communication, and interpersonal skills, as well as with an awareness of business ethics and social responsibility. Our goal is to prepare students to be critical thinkers and problem solvers, and to become committed lifelong learners.

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple flexible pathways—online courses, credit by exam, and credit aggregation. In this way, the program is customizable and tailored to each student's need and learning style.

Specialized Accreditation/Recognition: *The Bachelor of Science in Information Technology is accredited by the Computing Accreditation Commission of ABET,* https://www.abet.org, *under the General Criteria and the Information Technology Program Criteria.*

Program Educational Objectives

As an Excelsior University bachelor's-level information technology graduate, within a few years of graduation, you are expected to:

1. Apply general and discipline-specific concepts and methodologies to identify, analyze, and solve technical problems in the information technology discipline.
2. Demonstrate an individual desire and commitment to remain technically current with, and adaptive to, changing technologies through continuous learning and self-improvement.
3. Demonstrate independent thinking, function effectively in team-oriented settings, and maintain a high level of performance in a professional/industrial environment.
4. Communicate effectively in a professional/industrial environment.
5. Perform ethically and professionally in business, industry, and society.
6. Demonstrate and utilize leadership principles in the field of information technology.

Program (Student) Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Information Technology program, students will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgements in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to information technology.
6. Identify and analyze user needs and to take them into account in the selection, creation, integration, evaluation, and administration of computing-based systems.

Degree Requirements

The Bachelor of Science in Information Technology requires 120 semester hours of credit distributed as follows:

- **60 credits** minimum required in the arts and sciences.
- **51 credits** minimum required in the information technology component with at least 15 credits at the upper level.
- **9 credits** required in the free elective component (to include **INL 102 Information Literacy and IND 101/301 Cornerstone course**).

ARTS AND SCIENCES COMPONENT (60 CREDITS)

The Bachelor of Science in Information Technology requires a minimum of 60 credits in the arts and sciences distributed as follows:

A. **Humanities and Social Sciences**

At least 24 credits must be earned in the humanities and social sciences and are distributed as follows:

1. **Communications:** At least 9 credits must be earned in communications courses, including 6 credits to satisfy the written English requirement, completed with a minimum grade of C [**ENG 101 English Composition, ENG 312 Scientific and Technical Writing**]. Courses in speech, technical writing, or similar courses in either written or oral communications are applicable toward the communications requirements.

2. **Ethics:** At least 3 credits must be earned in ethics with a minimum grade of C [**IND 203 Professional Ethics**].
3. **Humanities Electives:** At least 3 credits must be earned in humanities electives. Humanities subjects include, but are not limited to, advanced writing, literature, foreign languages, religion, philosophy, art, and music.
4. **Social Sciences/History:** At least 9 credits must be earned in such subjects as sociology, economics, history, psychology, and anthropology.

B. Natural Sciences/Mathematics
At least 12 credits must be earned in the natural sciences/mathematics and in include:

- 3 credits in a natural science
- **MAT 205 Discrete Structures**
- **BUS 231 Business Data Literacy** or **MAT 201 Statistics**
- One additional Mathematics course at the level of College Algebra or above.

C. Arts and Sciences Electives
At least 24 additional credits in any arts and sciences areas must be completed.

INFORMATION TECHNOLOGY COMPONENT (48 CREDITS)

The Bachelor of Science in Information Technology requires a grade of C or better for applicable credit, and a minimum of 48 credits in the area of information technology distributed as follows:

Core Requirements

The following core requirements must be met:

- Fundamentals of Programming [**IT 211 Fundamentals of Programming**]
- Intermediate Programming [**IT 313 Intermediate Programming**]
- Data Communications and Networking [**IT 250 Business Data Communications**]
- Computer System Architecture [**IT 321 Computer Systems Architecture**]
- Operating Systems [**IT 360 Operating Systems**]
- Database Concepts [**IT 370 Database Management Systems**]
- Web Design and Development [**IT 371 Web Design and Development**]
- Human-Computer Interaction [**IT 375 Human-Computer Interactive Design**]
- Overview of Computer Security [**IT 380 Overview of Computer Security**]
- Project Management [**IT 390 Project Management**]
- System Administration [**IT 460 System Administration**]
- Integrated Technology Assessment Capstone
  [**IT 495 Integrated Technology Assessment (capstone)**]—The capstone course is required and must be taken through Excelsior University. It cannot be transferred in.

Level Requirement

Of the 51 credits required for the information technology component, at least 15 must be upper level. No upper-level credit is awarded for introductory coursework in computer languages. A course is generally considered upper level if it is offered at the junior or senior level and clearly not introductory in content. Courses taken at two-year institutions may not be used to satisfy upper-level requirements. The acceptance of coursework for credit toward the upper-level requirement is subject to faculty review.

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing INL 102 Information Literacy within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

Concentrations

One of the following concentrations must be declared. See below for specific requirements for each Information Technology concentration. A minimum of 15 credits is required for each concentration.

- **Cybersecurity Technology**
- **General Option**
- **Network Operations**

Cybersecurity Technology

The Cybersecurity Technology concentration focuses on providing broad coverage on the technical, operational, and legal dimensions of cybersecurity. Students of this concentration will attain a holistic view of implementing effective cybersecurity programs appropriate to the environment. The curriculum focuses on areas such as organizational, network, application security issues as well as penetration testing, incidence response, and digital forensics. This will enable students to utilize a variety of cybersecurity tools and techniques in protecting information assets in organizations. The Cybersecurity Technology concentration will prepare students to pursue careers in cybersecurity in positions such as security analyst, security architect, IT security coordinator, data protection analyst, incident responder, or penetration tester.

Concentration Learning Outcomes

Upon completion of the Cybersecurity technology concentration, students will be able to:

1. Apply cybersecurity best practices in managing various computing environments comprised of heterogeneous devices and services.
2. Define and protect data assets in organizations by mitigating risks and integrating business continuity.
3. Identify and analyze the impact of large scale cybercrime incidents on international security and terrorism.

Concentration Requirements

Minimum of 15 credits

- Computer Forensics [**IT 406 Computer Forensics**]
- Cyber Attacks and Defenses [**CYS 426 Cyber Attacks and Defenses**]
- Business Continuity [**CYS 455 Business Continuity**]
- Network and Application Security [**CYS 403 Network and Application Security**]
- Organizational Information Security [**CYS 401 Organizational Information Security**]

General Option

Recognizing that the Information Technology field is continuously evolving, the Bachelor of Science in Information Technology program offers the general option concentration. This customizable concentration provides flexibility in designing students' area of focus in order to meet ever-changing job demands and also to build upon students' current achievements. Students of this concentration can choose from approved IT electives to meet the degree requirements. Our course offerings cover a wide range of IT specialties, which help students stay competitive in today's job market.

Concentration Requirements

- Approved IT Electives

Network Operations

The Network Operations concentration focuses on providing students with the critical knowledge and skills in telecommunications and networking, and preparing students for careers including, but not limited to, network technician, network administrator, network engineer, and network architect. Our curriculum incorporates courses in network design and network project management, network operating systems and network administration, wireless systems, RFID technology, and network security, which is designed to guide students through the process of planning, designing, managing, and securing network and telecommunications systems.

Concentration Learning Outcomes

Upon completion of the Network Operation concentration, students will be able to:

1. Apply advanced networking techniques and network operating system principles toward the operation of a robust network.
2. Integrate wireless technology solutions into the network infrastructure.
3. Apply telecommunication management principles into the management of networks.

Concentration Requirements

Minimum of 15 credits

- Advanced Networking [**IT 422 Advanced Networking**]
- Network Operating Systems [**IT 424 Network Operating Systems**]
- Wireless Technology [**IT 426 Wireless Technology**]
- Telecommunication Management [**IT 428 Telecommunications Management**]
- Network Systems Design and Management [**IT 430 Network Systems Design and Management**]

Free Elective Component (9 credits)

The Bachelor of Science in Information Technology allows room for up to 9 credits in free electives. Applied to this component is the 1 credit for the Excelsior University information literacy requirement [**INL 102 Information Literacy**] and the 3 credit cornerstone requirement [**IND 101/301 Cornerstone**]. See page 29 or visit our website for more information about information literacy.

You may earn the remaining 5 credits in any field of college study, including professional or technical subjects as well as in the arts and sciences.

A maximum of 2 credits in physical education activity courses may be applied to the degree.

Degree-Specific Policies

Policies and procedures that apply specifically to the Bachelor of Science in Information Technology follow.

Programming Language Cap

Excelsior University has placed a 9-credit cap on introductory programming language courses in the information technology component, which includes the following languages:

- JAVA
- PYTHON
- Visual Basic
- C
- C++
- C#

No upper-level credit is awarded for coursework in introductory computer languages.

Bachelor of Science in Mechanical Engineering Technology

Overview

The Bachelor of Science in Mechanical Engineering Technology program provides students with a comprehensive understanding of complex systems, emphasizing problem-solving skills for careers spanning design, installation, manufacturing, testing, technical sales, innovation, and maintenance of mechanical components and systems. Focused on the mechanics behind system functionality and production methods, the program addresses complex systems and emerging technological advancements, including those in artificial intelligence, automation, robotization, 3D printing, machine learning, and big data. With a commitment to tackling societal challenges, students gain problem-solving and design expertise to innovate, engineer, implement, and maintain cost-effective solutions in mechanical engineering technology. The program culminates in a multidisciplinary capstone experience, involving collaborative team projects, formal design, implementation, and rigorous validation and testing procedures. Graduates are prepared for employment across diverse industries such as aerospace, automotive, construction, defense, consumer goods, marine, manufacturing, machining, materials and metals, rail, and utilities.

Program concentrations include **Nuclear Engineering, Renewable Energy,** and **Robotics**.

The **Nuclear Engineering concentration** equips students with the expertise required for various roles in the nuclear sector, encompassing responsibilities related to nuclear design and processing. Graduates are prepared for careers in areas such as nuclear engineering, reactor safety, power plant design, and related fields. Whether engaged in designing nuclear systems or contributing to nuclear processing, graduates emerge with a robust skill set and a profound understanding of the intersection between mechanical engineering and the dynamic field of nuclear technology.

The **Renewable Energy concentration** prepares students for careers in areas such as energy policy, supervision, and related fields. Whether involved in the design of renewable energy systems or contributing to advancements in the field, graduates of the Renewable Energy concentration emerge with a robust skill set and a profound understanding of the intersection between mechanical engineering and the dynamic realm of renewable energy technology.

The **Robotics concentration** offers students an immersive and comprehensive understanding of the dynamic and rapidly evolving field of robotics technology. Students are prepared for opportunities in diverse career paths in industries such as automation, manufacturing, aerospace, health care, and research and development. Whether designing robotic arms for precision manufacturing or developing autonomous vehicles, graduates develop a robust skill set and a deep understanding of the intersection between mechanical engineering and the rapidly advancing world of robotics.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 34 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
TECH 200 Technical Writing	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking This topic is required to meet the specified requirement.	3
HUM 306 Creative Problem Solving	3
SOC 101 Introduction to Sociology	3
HIS 350 World War I	3
PSY 360 Social Psychology	3

continued on next page

General Education Requirements: 34 credits

COURSE NAME	Credits
MAT 114 Intermediate Algebra This topic is required to meet the specified requirement.	3
MAT 120 Precalculus This topic is required to meet the specified requirement.	4
CHE 101 General Chemistry I This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program.

Major Core Requirements: 65 credits

COURSE NAME	Credits
TECH 230 Technology and Society This requirement must be completed at Excelsior University.	3
MAT 220 Calculus I	4
MAT 221 Calculus II	4
CHE 101L General Chemistry I Lab	1
PHYS 201 Physics I	3
PHYS 203 Physics II	3
PHYS 202 Physics I Laboratory	1
PHYS 204 Physics II Laboratory	1
IT 211 Fundamentals of Programming	3
NUC 255 Electrical Theory	3
IT 390 Project Management	3
EGR 210 Introduction to Engineering Analysis This requirement must be completed at Excelsior University.	3
EGR 280 Introduction to 3-D Modeling	3
EGR 290 Advanced 3-D Modeling	3
NUC 245 Thermodynamics	3

continued on next page

Major Core Requirements: 65 credits (continued from previous page)	
COURSE NAME	Credits
NUC 323 Material Science	3
NUC 250 Introduction to Heat Transfer and Fluid Mechanics	3
MET 225 Strength of Materials	3
MET 220 Statics	3
MET 360 Manufacturing Processes	3
MET 270 Dynamics	3
MET 380 Applied Finite Element Analysis This requirement must be completed at Excelsior University.	3
MET 495 MET Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

CONCENTRATION REQUIREMENTS: 15 CREDITS

One of the following must be declared.

NUCLEAR ENGINEERING

COURSE NAME	Credits
TECH 330 Economic Analysis for Technologists This requirement must be completed at Excelsior University.	3
NUC 210 Health Physics and Radiation Protection	3
NUC 260 Power Plant Components	3
NUC 271 Fundamentals of Reactor Safety This requirement must be completed at Excelsior University.	3
NUC 350 Plant Systems Overview This requirement must be completed at Excelsior University.	3

RENEWABLE ENERGY

COURSE NAME	Credits
TECH 330 Economic Analysis for Technologists This requirement must be completed at Excelsior University.	3
TECH 250 Renewable Energy Overview I: Solar and Geothermal	3
TECH 251 Renewable Energy II: Wind and Water	3
TECH 260 Energy Industry Fundamentals This requirement must be completed at Excelsior University.	3
TECH 340 Introduction to Energy Utilization	3

ROBOTICS

COURSE NAME	Credits
TECH 330 Economic Analysis for Technologists This requirement must be completed at Excelsior University.	3
MET 275 Introduction to Microprocessors and Microcontrollers	3
MET 280 Mechanics for Robotics	3
MET 390 Robotic Control Systems	3
MET 400 Robotics and Automation	3

A minimum grade of C or higher is required for all Concentration requirements.

Elective Requirements: 2 credits

Additional credits needed to fulfill the program requirements in any academic area.

Program Educational Objectives

As an Excelsior University bachelor's-level mechanical engineering technology graduate, within a few years of graduation, you are expected to:

1. Apply both general and discipline-specific concepts and methodologies to proficiently identify, analyze, and resolve technical problems within the field of mechanical engineering technology, including understanding and addressing associated societal and institutional aspects;
2. Exhibit a personal commitment to remaining technologically current and adaptable to changing technologies, with a dedication to continuous learning and self-improvement;

3. Demonstrate independent critical thinking, function effectively in team-based environments, and consistently maintain a high level of performance in the professional and industrial settings characteristic of the field;
4. Communicate adeptly in both written and oral forms within professional and industrial contexts, ensuring effective and clear dissemination of ideas and information;
5. Uphold a code of ethics and professionalism while operating within the realms of business, industry, and society, contributing positively to these spheres; and
6. Display and effectively apply leadership principles specific to the field of mechanical engineering technology.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Mechanical Engineering Technology program, students will be able to:

1. Apply knowledge, techniques, skills, and modern tools of mathematics, science, engineering, and technology to solve broadly defined engineering problems appropriate to mechanical engineering technology discipline.
2. Demonstrate an ability to design systems, components, or processes meeting specified needs for broadly defined engineering problems appropriate to mechanical engineering technology discipline (this will include societal considerations, ethical practices, professional codes, standards, quality, continuous improvement, etc.)
3. Apply written, oral, and graphical communication in broadly defined technical and non-technical environments and identify and use appropriate technical literature.
4. Conduct standard tests, measurements, and experiments and be able to analyze and interpret the results to improve processes.
5. Function effectively as a member as well as a leader on technical teams.

Concentration Learning Outcomes

Upon completion of the **Nuclear Engineering concentration,** students will be able to:

1. Create innovative solutions to real-world industry challenges using fundamental concepts in nuclear engineering, including nuclear materials, health physics, radiation protection, power plant components, reactor safety, and nuclear power plant design.
2. Apply theoretical knowledge to address practical challenges in the design, operation, and safety of nuclear systems.
3. Perform economic analysis to assess the economic viability and feasibility of nuclear technologies and projects.
4. Plan and execute nuclear power plant projects with consideration to power plant components and design principles.

5. Create safety plans for radiation protection in nuclear environments.
6. Develop professional code of conduct attributes inclusive of societal and ethical responsibility in the planning and execution of nuclear power plant projects.

Upon completion of the **Renewable Energy concentration**, students will be able to:

1. Develop renewable energy technologies knowledge, including their principles, applications, and potential impact on the energy industry.
2. Apply theoretical knowledge to address practical challenges in the design, implementation, and utilization of renewable energy systems.
3. Evaluate the economic viability and feasibility of renewable technologies and projects.
4. Create efficient utilization of energy resources plans, with an emphasis on renewable energy solutions and sustainable practices.
5. Develop expertise in energy policy, including an understanding of regulatory frameworks, incentives, challenges, and societal considerations associated with the deployment and integration of renewable energy technologies.
6. Apply ethical considerations in the development and implementation of renewable energy technologies to underscore the importance of sustainability in engineering practices.

Upon completion of the **Robotics concentration**, students will be able to:

1. Create autonomous system designs and innovative solutions to address real-world design challenges using fundamental concepts in robotics, including kinematics, dynamics, control systems, sensor actuators, computer vision, artificial intelligence, and mechatronic integration.
2. Apply theoretical knowledge to solve practical problems related to the design, analysis, and implementation of robotic systems.
3. Evaluate the cost-effectiveness and feasibility of deploying robotic solutions in diverse industrial and technological contexts.
4. Analyze complex case studies and issues in robotics technology.
5. Develop professional code of conduct attributes inclusive of societal and ethical responsibility to design and deploy robotic technologies.

Bachelor of Science in Nuclear Engineering Technology

124 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The Cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

EGR 310 Engineering Ethics

DEGREE-SPECIFIC REQUIREMENTS

Communications

Physical Sciences: PHYS 201 Physics I, PHYS 202 Physics I Lab, PHYS 203 Physics II, PHYS 204 Physics II Lab, CHE 101 Chemistry I, CHE 101 L Chemistry I Lab, NUC 245 Thermodynamics, NUC 246 Thermodynamics Lab (if transferring in Thermodynamics without a Lab), NUC 240 Atomic and Nuclear Physics

Mathematics
12 credits at the level of College algebra or above, including Calculus I and II (MAT 220 and 221)

NUCLEAR ENGINEERING TECHNOLOGY COMPONENT CORE REQUIREMENTS

- IT 221 Introduction to Computers
- IT 390 Project Management
- NUC 210 Health Physics and Radiation Protection
- NUC 211 Radiation Measurement Lab
- NUC 250 Introduction to Heat Transfer and Fluid Mechanics
- NUC 255 Electrical Theory
- NUC 260 Power Plant Components
- NUC 271 Fundamentals of Reactor Safety
- NUC 323 Material Science
- NUC 330 Reactor Core Fundamentals
- NUC 350 Plant Systems Overview

CONCENTRATION REQUIREMENTS

- General: Up to 15 credits in Free Electives
- Nuclear Leadership: BUS 311 Organizational Behavior, BUS 452 Business Leadership, NUC 280 Leading Change in the Nuclear Industry, NUC 285 Leadership Communication in the Nuclear Industry, NUC 360 Nuclear Leadership-Leadership Courage/Risk Management
- Nuclear Cybersecurity: IT 380 Overview of Computer Security, CYS 260 Governance, Legal and Compliance, CYS 350 Cybersecurity Defense in Depth for the Nuclear Industry, CYS 455 Business Continuity, CYS 465 Cybersecurity Investigation and Case Studies for the Nuclear Industry

NUC 495 Integrated Technology Assessment BNX
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in Nuclear Engineering Technology program focuses on preparing students for technical positions in the nuclear industry. The program is designed specifically to advance job skills by ensuring a breadth of knowledge in nuclear engineering technology concepts. The program emphasizes the practical applications of engineering technology principles related to the nuclear industry. The program provides students with knowledge in areas such as reactor operations, health physics, quality assurance, chemistry, and instrumentation and control related to the nuclear engineering technology field. The goal of the degree program is to foster the ability of students to apply what they have learned to the real-world contexts of the nuclear industry.

Student progress within the degree program is based on the demonstration of proficiency, and is attainable through multiple flexible pathways—online courses, credit by exam, and credit aggregation. In this way, the program is customizable and tailored to each student's need and learning style.

Of the total 124 credits for the Bachelor of Science in Nuclear Engineering Technology, 15 must be earned at the upper level in the technology component.

The three concentrations are: **General Option, Nuclear Cybersecurity, and Nuclear Leadership.**

Specialized Accreditation/Recognition: *The Bachelor of Science in Nuclear Engineering Technology is accredited by the Engineering Technology Accreditation Commission of ABET,* https://www.abet.org*, under the commission's General Criteria and Program Criteria for Nuclear Engineering Technology and Similarly Named Programs.*

Program Educational Objectives

As an Excelsior University bachelor's level nuclear engineering technology graduate, within a few years of graduation, you are expected to:

1. Apply general and discipline-specific concepts and methodologies to identify, analyze, and solve technical problems in the nuclear discipline, including understanding and addressing the societal and institutional issues related to nuclear technology.
2. Demonstrate an individual desire and commitment to remain technically current with, and adaptive to, changing technologies through continuous learning and self-improvement.
3. Demonstrate independent thinking, function effectively in team-oriented settings, and maintain a high level of performance in a professional/industrial environment.
4. Communicate effectively in a professional/industrial environment, including communicating effectively to stakeholders external to the nuclear industry.
5. Perform ethically and professionally in business, industry, and society.
6. Demonstrate and utilize leadership principles in the field of nuclear engineering technology.

Program (Student) Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Nuclear Engineering Technology program, students will be able to:

1. Apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the nuclear engineering technology discipline.
2. Demonstrate an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the nuclear engineering technology discipline.
3. Apply written, oral, and graphical communications in broadly-defined technical and non-technical environments; and be able to identify and use appropriate technical literature.
4. Conduct standard tests, measurements, and experiments, and be able to analyze and interpret the results to improve processes.
5. Function effectively as a member as well as a leader on technical teams, and apply project management techniques in team project activities.
6. Demonstrate comprehension of currently applicable rules and regulations in the areas of: radiation protection, operations, maintenance, quality control, quality assurance, and safety.
7. Demonstrate an understanding of and commitment to professional, ethical, and social responsibilities, including the impacts of culture, diversity, and interpersonal relations.

Degree Requirements

The Bachelor of Science in Nuclear Engineering Technology requires **124 semester hours of credit** distributed as follows:

- **60 credits** minimum required in the arts and sciences component
- **48 credits** minimum required in the nuclear engineering technology component
- **16 credits** required in the concentration or free elective component (to include **INL 102 Information Literacy and IND 101/301 Cornerstone Course**)

ARTS AND SCIENCES COMPONENT (60 CREDITS)

This distribution requirement ensures basic University-level competence in three arts and sciences areas: humanities, social sciences/history, and natural sciences/mathematics.

A. **Humanities and Social Sciences**
At least 24 credits must be earned in the humanities and social sciences and are distributed as follows:

1. **Communications**: At least 9 credits must be earned in communications courses, including 6 credits to satisfy the written English requirement, completed with a minimum grade of

C [**ENG 101 English Composition and TECH 200 Technical Writing**]. Courses in speech, written composition, technical writing, or similar courses in either written or oral communications are applicable toward the communications requirement.

2. **Ethics:** At least 3 credits must be earned in ethics with a minimum grade of C. [**EGR 310 Engineering Ethics**].
3. **Humanities Elective:** At least 3 credits must be earned in a humanities elective. Humanities subjects include, but are not limited to, advanced writing, literature, foreign languages, religion, philosophy, art, and music.
4. **Social Sciences/History:** At least 9 credits must be earned in such subjects as sociology, economics, history, psychology, and anthropology.

B. Mathematics and Natural Sciences

Students are required to complete at least 26 semester hours of credit in the combined areas of mathematics and natural sciences, with at least 12 credit hours in math at the level of college algebra or above [**MAT 120 Precalculus**], including Calculus I and II [**MAT 220 Calculus I and MAT 221 Calculus II**].

There is no minimum credit hour requirement for natural sciences. Rather, students must complete specific required courses in the natural sciences:

1. Chemistry (with lab) [**CHE 101 General Chemistry I and CHE 101L General Chemistry Laboratory I**]
2. Physics I and II and Physics Lab I and II [**PHYS 201, 203 Physics I and II, PHYS 202, 204 Physics Laboratory I and II**]
3. Atomic Physics [**NUC 240 Atomic and Nuclear Physics**] (also satisfies *Nuclear Physics*)
4. Nuclear Physics [**NUC 240 Atomic and Nuclear Physics**] (also satisfies *Atomic Physics*)
5. Thermodynamics [**NUC 245 Thermodynamics**]

C. Arts and Sciences Electives

The remaining credits needed to satisfy the 60-credit requirement may be earned in any arts and sciences subjects.

NUCLEAR ENGINEERING TECHNOLOGY COMPONENT (48 CREDITS)

A. Core Requirements

The nuclear engineering technology component ensures basic college-level competence in the major functional areas of nuclear engineering technology. A grade of C or better is required for applicable credit.

The following core requirements must be completed:

1. Electrical Theory [**NUC 255 Electrical Theory OR ELEC 152 Circuit Theory I and ELEC 153 Circuit Theory II (both ELEC 152 and 153 must be completed to satisfy this requirement)**]
2. Computer Applications [**IT 221 Introduction to Computers**]
3. Fundamentals of Reactor Safety [**NUC 271 Fundamentals of Reactor Safety**]

4. Material Science [**NUC 323 Material Science**]
5. Health Physics/Radiation Protection [**NUC 210 Health Physics and Radiation Protection**]
6. Radiation Measurement Lab [**NUC 211 Radiation Measurement Lab**]
7. Plant Systems Overview [**NUC 350 Plant Systems Overview**]
8. Reactor Core Fundamentals [**NUC 330 Reactor Core Fundamentals**]
9. Fluids [**NUC 250 Introduction to Heat Transfer and Fluid Mechanics**] (also satisfies *Heat Transfer*)
10. Heat Transfer [**NUC 250 Introduction to Heat Transfer and Fluid Mechanics**] (also satisfies *Fluids*)
11. Power Plant Components [**NUC 260 Power Plant Components**]
12. Project Management [**IT 390 Project Management**]
13. Integrated Technology Assessment (capstone) [**NUC 495 Integrated Technology Assessment**] — The capstone course is required and must be taken through Excelsior University and must be completed with a C or above. It cannot be transferred in.

B. Nuclear Engineering Technology Electives

You may apply electives from nuclear and related subject areas toward completion of the 48-credit requirement of the technology component. Sample titles include Instruments and Controls, Reactor Safety, Quality Assurance Regulations, Radiation Biology, Radiochemistry, Radiation Waste Processing, and others, as approved. Be sure to contact your academic advisor for approval before registering for courses.

C. Laboratory Requirement

Students must complete the following five labs:

- **CHEM 101L Chemistry I Lab**
- **PHYS 202 Physics I Lab**
- **PHYS 204 Physics II Lab**
- **NUC 211 Radiation Measurement Lab**
- **NUC 245/246 Thermodynamics/Thermodynamics Lab**

D. Level Requirement

Of the 48 credits required for the nuclear engineering technology component, at least 15 must be upper level. A course is generally considered upper level if it is offered at the junior or senior level and is clearly not introductory in content. Courses taken at two-year institutions cannot be used to satisfy upper-level requirements.

A grade of "C" or higher is needed for all technology core requirements.

Information Literacy

All student must meet the Excelsior University information literacy requirement by completing **INL 102 Information Literacy** within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Capstone

All students must meet the Excelsior University Capstone requirement by completing the capstone course that aligns with their degree program, with a grade of C or better.

CONCENTRATION OR FREE ELECTIVE COMPONENT (16 CREDITS)

One of the following concentrations must be declared. See below for specific requirements for each Nuclear Engineering Technology concentration. A minimum of 16 credits is required for each concentration/free elective component.

- **General Concentration**
- **Nuclear Cybersecurity**
- **Nuclear Leadership**

General Concentration

The General Concentration allows room for up to 16 credits in free electives, to include Information Literacy and the Cornerstone course. These credits may be earned in any field of college study, including professional or technical subjects as well as in the arts and sciences. A maximum of 2 credits in physical education activity courses may be applied to the degree.

Nuclear Cybersecurity

With the rising number of cybersecurity threats on our nation's infrastructure, the Cybersecurity Technology concentration is designed to enable students to earn a bachelor's degree that focuses on cybersecurity within the nuclear industry. The concentration emphasizes the concepts associated with governance, legal, and compliance of cybersecurity pertaining to the nuclear industry. With completion of this degree, students will gain foundational knowledge of cybersecurity, the impacts of cyber attacks on nuclear facilities, and preparing them for cybersecurity positions in the nuclear industry. The cybersecurity concentration will prepare students for a variety of positions in engineering technology and security.

Concentration Learning Outcomes

Upon completion of the Cybersecurity concentration, students will be able to:

1. Assess security risk and vulnerability of existing and proposed information systems in the nuclear industry.
2. Explain incident response handling, incident coordination, and ethical and legal issues.
3. Assess the effect of cyber attacks in the nuclear industry and the impact on nuclear facilities.
4. Utilize the best sources of information available related to cybersecurity issues, threats, and recovery.

Concentration Requirements

Minimum of 15 credits.

- Computer Security [**IT 380 Overview of Computer Security**]
- Governance, Legal, and Compliance [**CYS 260 Governance, Legal, and Compliance**]
- Cybersecurity Defense [**CYS 350 Cybersecurity Defense in Depth for the Nuclear Industry**]
- Business Continuity [**CYS 455 Business Continuity**]
- Cybersecurity Investigation [**CYS 465 Cybersecurity Investigation and Case Studies for the Nuclear Industry**]

Nuclear Leadership

The Bachelor of Science in Nuclear Engineering Technology—Nuclear Leadership concentration is designed to prepare students to earn a bachelor's degree related to nuclear engineering technology with an emphasis on nuclear leadership. The concentration emphasizes leadership topics such as business leadership, organizational behavior, change management, leadership communications, and leadership courage/risk management. The nuclear leadership concentration will prepare students for a variety of leadership positions in the nuclear industry.

Concentration Learning Outcomes

Upon completion of the Nuclear Leadership concentration, students will be able to:

1. Apply strategies in effective leadership, diverse work environments, and resolving conflicts.
2. Demonstrate an understanding of ethical and unethical leadership behaviors in regard to the nuclear industry.
3. Explain the roles of leaders in leading change, risk management, and communicating effectively in the nuclear industry.
4. Summarize leadership challenges in the nuclear industry including risk management perspectives.
5. Integrate leadership theories to improve an organization's behaviors and organizational standards in support of management priorities.

Concentration Requirements

Minimum of 15 credits.

- Organizational Behavior [**BUS 311 Organizational Behavior**]
- Business Leadership [**BUS 452 Business Leadership**]
- [**NUC 280 Leading Change in the Nuclear Industry**]
- [**NUC 285 Leadership Communications in the Nuclear Industry**]
- [**NUC 360 Nuclear Leadership—Leadership Courage/Risk Management**]

Degree-Specific Policies

Policies and procedures that apply specifically to the Bachelor of Science in Nuclear Engineering Technology follow.

Credits from Training Programs Completed at United States Nuclear Power Plants That Are Accredited by the Nuclear Industry Accredited Training Programs (NUAP)

The Excelsior University Nuclear Engineering Technology Faculty evaluated several of the standardized training programs at nuclear power facilities that are accredited by NUAP. The 10 utility training programs that have been evaluated for college credit are:

- Shift Technical Advisor
- Senior Reactor Operator
- Reactor Operator
- Non-licensed Operator
- Engineering Support Personnel
- Radiation Protection Technician
- Chemistry Technician
- Electrical Maintenance Technician
- Instrumentation and Controls Technician
- Mechanical Maintenance Technician

Students may earn between 24 and 52 credits, depending on the utility training program completed. Contact a technology academic advisor for details

Credits from Training Programs Completed at the United States Navy Nuclear Power School and Prototype

The Excelsior University Nuclear Engineering Technology Faculty evaluated several of the standardized training programs at the United States Navy Nuclear Power School and Prototype, and Excelsior University recognizes the credit recommendations of the ACE College Credit Recommendation Service.

Graduates of the United States Navy Nuclear Power School and Prototype may earn between 59 and 76 credits, depending on the specific training program completed. Contact a technology academic advisor for details.

Master of Science in Cybersecurity

Overview

The Master of Science in Cybersecurity is designed to enable students to pursue their career goals within the critically important cybersecurity field. This program provides professionals with the techniques and knowledge to protect the organization's cyber assets by focusing on prevention, detection, countering, and recovery from cyber incidents. The curriculum focuses on aspects of cybersecurity, including strategies, policy, ethics and legal compliance, operational process, and technology to secure and defend an organization's cyber assets. This program is suited for professionals who aim to pursue senior-level technical or managerial positions in cybersecurity such as information security officer, cybersecurity manager, senior security analyst, security and compliance manager, director IT security and governance, digital crime investigator, or penetration tester.

The **General concentration** provides students with a comprehensive understanding of key areas essential for modern cybersecurity professionals. This concentration emphasizes security policy and compliance, global cyber capabilities, and cloud security measures. Students will gain hands-on experience and practical knowledge through laboratory assignments, preparing them for industry certifications such as ISC2 Certified Cloud Security Professional (CCSP). By completing this concentration, students will be well-equipped to protect organizational assets, respond to cyber threats, and implement robust security policies and technologies in various environments.

The **Information Assurance concentration** is designed as a specialization for individuals who wish to be hands-on while combating cybersecurity threats. The focus is on software control management tools, software integration, cyber defense mitigation, and digital forensics. The three classes within this concentration enable students to gain the needed knowledge of both hardware and software issues. Individuals who specialize in cyber operations will be prepared to be on the front line of defense for companies.

Degree Summary

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
IND 501 An Interdisciplinary Approach to Ethical Leadership This requirement must be completed at Excelsior University.	3
IND 502 Strategic Talent Management in a Complex World This requirement must be completed at Excelsior University.	3
CYS 500 Foundations of Cybersecurity	3

TOTAL PROGRAM HOURS: 30

Major Core Requirements: 21 credits

COURSE NAME	Credits
CYS 528 Legal Compliance Issues in Cybersecurity	3
CYS 504 Network and Communication Security	3
CYS 560 Information Assurance	3
CYS 596 Capstone Project in Cybersecurity This requirement must be completed at Excelsior University.	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

CONCENTRATION REQUIREMENTS: 9 CREDITS

One of the following must be declared.

GENERAL

COURSE NAME	Credits
CYS 545 Security Policy and Compliance	3
CYS 577 Global Cybersecurity	3
CYS 610 Cloud Technologies and Data Security	3

INFORMATION ASSURANCE

COURSE NAME	Credits
CYS 523 Software and Application Security	3
CYS 526 Cyber Attacks and Defense	3
CYS 586 Digital Forensics and Investigation	3

A minimum grade of B or higher is required for all Major Core and Concentration requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

Acceptance of Transfer Credit

Students may transfer up to 15 credits, based on the regulations outlined in the Transfer Credit Sources and the Grade Scale, GPA, and Credit Application policies.

Program Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Cybersecurity program, students will be able to:

1. Continuously monitor, maintain, and enhance the protection of enterprise-wide information assets through effective industry accepted information management and risk management techniques.
2. Detect, analyze, and respond to cyberattacks on networks and computer systems.
3. Conduct risk and vulnerability assessments of existing and proposed information systems.
4. Utilize the best sources of information available related to cybersecurity issues, threats, and recovery.
5. Apply interdisciplinary leadership practices based on evidence that promote ethical and collaborative sustainable change in cybersecurity.
6. Demonstrate proficiency in communicating technical information in formal reports, documentation, and oral presentations to users and information technology professionals.
7. Demonstrate a commitment to professional development and to continue to engage in lifelong learning.
8. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse/global workforce.

Concentration Learning Outcomes

Upon completion of the **General concentration**, students will be able to:

1. Analyze, critique, and write security policies with a strong focus on legal, ethical, privacy, and governance issues.
2. Understand the global cybersecurity capabilities and trends, evaluating cyber-related strategies and policies of nation-states and non-state actors.
3. Implement and manage cloud security measures, ensuring the protection of cloud-based systems, data, and infrastructure.

Upon completion of the **Information Assurance concentration**, students will be able to:

1. Develop a security coding environment to maintain and protect source code for securing applications.
2. Recommend software appropriate for defending against cyberattacks.
3. Demonstrate knowledge of digital forensics and how it can be used to assist with an investigation.

Graduate Certificate in Cybersecurity Operations

9 CREDITS

Certificate Description

The Graduate Certificate in Cyber Operations is designed as a specialization for an individual who wishes to be hands-on while combating cybersecurity threats and conducting risk analysis. The focus is on threat detection and incident response, information assurance, as well as cyber defense mitigation. The three classes within this concentration will allow students to gain the needed knowledge to utilize devices, computer programs, and techniques that are designed to maintain a secure environment that will affect all aspects of cyberspace. Individuals who specialize in cyber operations will be prepared to be on the front line of defense for companies.

Certificate Requirements

- **CYS 560 Information Assurance** (3 credits)
- **CYS 575 IT Risk Analysis and Management** (3 credits)
- **CYS 526 Cyber Attacks and Defense** (3 credits)

Certificate Learning Outcomes

Upon completion of the Excelsior University Graduate Certificate in Cybersecurity Operations, students will be able to:

1. Apply risk analysis methodologies to identify potential vulnerabilities, associated impacts, and recommend appropriate responses.
2. Apply appropriate protocols, tools, and techniques to maximize security in the network environment.
3. Construct cybersecurity strategies that use information technology to measurably improve cybersecurity performance.

Policies Specific to the Graduate Certificate in Cybersecurity Operations

Policies and procedures that apply specifically to the Graduate Certificate in Cybersecurity Operations are listed in the following section:

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Cybersecurity Operations have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

College of Nursing and Health Sciences

Message from the Executive Dean

Dr. Robin Goodrich

Dear Student,

On behalf of the faculty and staff in the College of Nursing and Health Sciences, congratulations on embarking on this exciting journey to further your education and pursue your calling in health care. We are excited to support your dreams and guide you toward reaching your desired career goals.

As an Excelsior University student, you join thousands of others who since 1971 have chosen Excelsior's student-centered and engaging learning experiences. Our programs prepare and empower students to provide care, advocate for health outcomes, and lead change. Every day, our graduates make an impact on our healthcare system across the United States and positively affect the people in their communities and their communities as a whole.

The education you receive at Excelsior University will prepare you to practice in nursing and health sciences. Excelsior University is accredited by the Middle States Commission on Higher Education, and our nursing programs have specialty accreditation. The RN to BS in Nursing, RN to MS in Nursing dual degree programs, and master's nursing programs at Excelsior University are accredited by the Accreditation Commission for Education in Nursing (ACEN). Excelsior University's associate-level nursing program is programmatically accredited by the New York State (NYS) Board of Regents, State Education Department Office of the Professions (the Regents).

This catalog provides detailed information about our nursing and health sciences programs. Please take the time to read it carefully, particularly paying attention to the student policy references, and be sure to review the student policy section on the website. I encourage you to use the learning resources that are available to help you satisfy the program requirements, and to always stay in communication with the faculty and staff.

Again, congratulations and much success!

Sincerely,

Robin Goodrich

Robin S. Goodrich, EdD, RN
Executive Dean, College of Nursing and Health Sciences

College of Nursing and Health Sciences

Mission Statement

The College of Nursing and Health Sciences prepares and empowers students to provide outstanding care, advocate for healthy populations, and lead positive change. Student-centered and engaging learning experiences make it possible for students to elevate their personal and professional lives while benefiting their communities.

Vision Statement

The College of Nursing and Health Sciences seeks to educate and empower leaders and lifelong learners who will be global change agents and local community advocates in healthcare, practicing with the highest level of compassion and excellence.

College of Nursing and Health Sciences

SCHOOL OF ALLIED HEALTH

Degree and Certificate Programs

College of Nursing and Health Sciences
SCHOOL OF ALLIED HEALTH

Mission Statement

The School of Allied Health prepares and empowers students to critically engage in innovation and transformation of healthcare systems to develop stronger ecosystems that improve care across patient populations through research and technological foundations.

Vision Statement

The School of Allied Health trains emerging cross-sectional leaders in community health to contribute to eliminating inequities in healthcare, expanding access, and promoting culturally competent care among global citizens.

Associate in Science in Health Sciences

Overview

The Associate in Science (AS) in Health Sciences is a 60-credit program composed of courses in arts and sciences as well as in the health sciences. The program is designed as an academic gateway for individuals pursuing a career in the health sciences or for those already working in the field who want to build on their existing knowledge and skills to advance their career. The AS in Health Sciences program lays the foundation for continued education at the baccalaureate level. Through coursework in the arts and sciences and health sciences components of the curriculum, students engage in learning that fosters information literacy, critical thinking, and effective communication and builds a strong foundation for lifelong learning and career success.

Degree Summary

TOTAL PROGRAM HOURS: 60

Arts and Sciences Requirements: 30 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree. Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
HIS 102 United States History II	3

General Education Requirements: 21 credits

COURSE NAME	Credits
PSY 235 Lifespan Developmental Psychology This topic is required to meet the specified requirement.	3
BIO 110 Biology (Non-Lab)	3
MAT 101 Mathematics for Everyday Life	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program.

Major Core Requirements: 12 credits

COURSE NAME	Credits
HSC 112 Medical Terminology	3
HSC 121 Health Care in the United States	3
HSC 124 Professionalism in Health Care	3
HSC 292 Associate in Health Sciences Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C or higher is required for all Major Core requirements.

Health Sciences Electives: 14 credits

College-level coursework from the following subject areas meet the health sciences electives: cardiovascular technology, dental hygiene, medical laboratory technology, nursing, pharmacy technology, radiology, arts and sciences subjects supportive of the health sciences, and Excelsior-evaluated health care credentials as outlined on the Start with More Credit page. The following Excelsior courses are recommended to meet the Health Sciences Electives.

COURSE NAME	Credits
BIO 115 Anatomy and Physiology I (Non Lab)	3
BIO 115L Anatomy and Physiology I Lab	1
BIO 116 Anatomy and Physiology II (Non Lab)	3
BIO 116L Anatomy and Physiology II Lab	1

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Health Sciences Electives: 14 credits	
COURSE NAME	Credits
BIO 212 Microbiology	3
PSY 101 Introduction to Psychology I	3

A minimum grade of C or higher is required for all Health Sciences Electives requirements.

ARTS AND SCIENCES ELECTIVES REQUIREMENTS: 9 CREDITS

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

Program Learning Outcomes

Upon successful completion of the Associate in Science in Health Sciences program, students will be able to:

1. Demonstrate effective oral and written communication.
2. Demonstrate critical thinking skills for guiding decision-making in various health care scenarios.
3. Describe the structure and function of the health care delivery system in the United States.
4. Explain the various roles and responsibilities of health professionals.
5. Critique current trends and opportunities that improve the provision of health care.

Bachelor of Science in Health Care Management

Overview

The Bachelor of Science in Health Care Management program is an interdisciplinary approach to education by incorporating both arts and sciences courses along with specialized health sciences courses. Students gain a comprehensive understanding of the health care landscape. The emphasis on administrative leadership is particularly valuable as it equips students with the knowledge and skills needed to supervise and manage health care facilities. This program prepares students for interprofessional collaboration with training to engage effectively among teams, which is essential in modern healthcare. In an industry where efficient management is crucial, this focus area is highly relevant with curriculum in finance, economics, human resources, marketing, and other disciplines focused on management that opens doors to various career opportunities. Graduates are well-equipped not only for immediate entry into the healthcare workforce but also for pursuing advanced graduate-level studies, making it an excellent choice for individuals aiming to excel in the dynamic and challenging field of healthcare management.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
SOC 101 Introduction to Sociology This topic is required to meet the specified requirement.	3
PSY 235 Lifespan Developmental Psychology	3
MAT 101 Mathematics for Everyday Life This topic is required to meet the specified requirement.	3
MAT 201 Statistics This topic is required to meet the specified requirement.	3
BIO 110 Biology (Non-Lab)	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program

Major Core Requirements: 45 credits	
COURSE NAME	Credits
HSC 112 Medical Terminology	3
ECO 260 Introduction to Microeconomics	3
ECO 262 Introduction to Macroeconomics	3
HSC 302 Principles of Health Care Management	3
HSC 310 Writing and Communication in the Health Science Professions	3
HSC 312 Ethics of Health Care	3
PSY 305 Research Methods	3
HSC 414 Budget and Finance in Health Care Organizations	3

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Major Core Requirements: 45 credits

COURSE NAME	Credits
BUS 311 Organizational Behavior	3
BUS 312 Managing Human Resources	3
BUS 351 Marketing Concepts and Application	3
BUS 380 Managing Diversity in the Workplace	3
HSC 432 Introduction to the Health Care Delivery System	3
HSC 450 Economics of Health Care	3
HSC 470 Healthcare Management Capstone This requirement must be completed at Excelsior University.	3

A minimum grade of C is required for all Major Core requirements.

HEALTH CARE ELECTIVES: 26 CREDITS

College-level course work from the following subject areas meet the health care electives: business, cardiovascular technology, dental hygiene, medical laboratory technology, nursing, pharmacy technology, radiology, arts and sciences subjects supportive of the health sciences, and Excelsior-evaluated health care credentials as outlined on the Start with More Credit page. The following Excelsior courses are recommended to meet the Health Care Electives.

COURSE NAME	Credits
BIO 115 Anatomy and Physiology I (Non Lab)	3
BIO 115L Anatomy and Physiology I Lab	1
BIO 116 Anatomy and Physiology II (Non Lab)	3
BIO 116L Anatomy and Physiology II Lab	1
HSC 121 Health Care in the United States	3
HSC 124 Professionalism in Health Care	3
BIO 212 Microbiology	3
HSC 330 Legal and Regulatory Environment of Health Care	3
PSY 420 Human Motivation	3
HSC 445 Introduction to Health Care Informatics	3

A minimum grade of C is required for all Health Care Electives requirements.

Arts and Sciences Electives: 12 credits

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Health Care Management, students will be able to:

1. Implement management practices in healthcare settings that reflect leadership and organizational theories.
2. Apply resource management principles within diverse health care organizations.
3. Explain the role of the manager in maintaining a legal and ethical environment.
4. Determine effective communication strategies when interacting with stakeholders.
5. Use evidence-based practice to guide decision making and promote quality in health care settings.

Bachelor of Science in Health Sciences

120 CREDITS

GENERAL EDUCATION AND ADDITIONAL REQUIREMENTS

Refer to chart on page 31 for an overview of general education and distribution requirements for all bachelor's degree programs.

IND 101 Cornerstone A: Foundations or IND 301 Cornerstone B: Pathways
The cornerstone course must be taken in the first term at Excelsior University and cannot be transferred in.

HSC 312 Ethics of Health Care

DEGREE-SPECIFIC REQUIREMENTS

CORE COMPONENT

- HSC 310 Writing and Communication in the Health Science Professions
- HSC 320 Health Care Issues in Culturally Diverse Populations
- PSY 305 Research Methods
- HSC 432 Introduction to the Health Care Delivery System
- HSC 445 Health Care Informatics

AREA OF EMPHASIS REQUIREMENTS

Complete 9 credits in one of the following

- Health and Wellness
- Management
- Public Health
- No Emphasis

HSC 464 Health Sciences Capstone
The Capstone course must be taken at Excelsior University and cannot be transferred in.

This chart shows degree specific requirements. These requirements will fit into total credits for the degree and will apply toward the overall credits listed on page 31. Once you are admitted, the My Academic Planner tool will specify how credits (transfer and remaining) apply.

Program Description

The Bachelor of Science in Health Sciences is a 120-credit program composed of courses in the arts and sciences as well as in the health sciences. It is designed to provide learning opportunities to foster knowledge and skills necessary to engage with interprofessional teams to promote quality care, expand career potential, and lay the foundation for study at the graduate level.

Of the total 120 credits for the Bachelor of Science in Health Sciences, 27 must be earned at the upper level, 15 in the Health Science core, 9 in the emphasis and 3 in the capstone.

Program Learning Outcomes

Upon completion of the Excelsior University Bachelor of Science in Health Sciences program, students will be able to:

1. Use evidence-based practice to guide decision making that promotes quality in health care settings.
2. Explain the implications of health ethics and governmental policy on the delivery of health services.
3. Recognize the need for diversity, equity, and inclusion when delivering health services.
4. Utilize current and evolving technology when planning, implementing, and evaluating health services.
5. Use effective communication strategies to engage with stakeholders and interdisciplinary teams.

Program Requirements

The Bachelor of Science in Health Sciences degree program requires a total of 120 credits, including 60 credits in arts and sciences and 60 credits in the health sciences.

ARTS AND SCIENCES COMPONENT (60 CREDITS)

The study of the arts and sciences is an essential part of preparation for professional practice in that it contributes both knowledge and an intellectual approach to problem solving. The arts and sciences requirements ensure that the student will develop college-level competence in the humanities, social sciences/history, and natural sciences/math.

A. **Written English Requirement**
   A minimum of 6 credits are required in expository writing, which may be at the freshman level. *(*See the written English requirement section on page 27 for specific details.*)*

B. **Humanities**
   A minimum of 9 credits must be earned in the humanities. The humanities include subjects such as art, literature, ethics, philosophy, religion, theatre, speech, and foreign languages. Within the 9 credits, 2 must be in ethics with a minimum grade of C earned.

C. Social Sciences/History

A minimum of 9 credits must be earned in the social sciences/history field. The social sciences include subjects such as geography, economics, cultural anthropology, political science, sociology, and psychology.

D. Natural Sciences/Mathematics

A minimum of 9 credits must be earned in natural sciences/mathematics. A minimum of 2 credits is required in natural sciences subjects (biology, chemistry, physics, etc.) to meet the general education requirements. A minimum of 2 credits in statistics with a minimum grade of C is required to fulfill the core requirement.

E. Arts and Sciences Electives

The remaining 27 credits may be distributed among the arts and sciences areas of the humanities, social sciences/history, and natural sciences/mathematics.

HEALTH SCIENCES COMPONENT (60 CREDITS)

The Health Sciences component provides students with a strong foundation in the health care field and allows the flexibility to choose an area of emphasis in order to develop skills and knowledge in a specific area.

The Health Sciences component is composed of

- **15 credits** of health sciences core courses,
- **9 credits** in an area of emphasis,
- **3 credits** for the Health Sciences Capstone,
- **1 credit** for **INL 102 Information Literacy**

AND

- **32 credits** in health sciences electives.

Health Sciences Core (15 credits)

Bachelor of Science in Health Sciences students must complete the following five core courses with a minimum grade of C in each: **HSC 310 Writing and Communication in the Health Science Professions** (3 credits), **HSC 320 Health Care Issues in Culturally Diverse Populations** (3 credits), **PSY 305 Research Methods** (3 credits), **HSC 432 Introduction to the Health Care Delivery System** (3 credits), and **HSC 445 Introduction to Health Care Informatics** (3 credits).

Areas of Emphasis

Bachelor of Science in Health Sciences students must select one of the following areas of emphasis:

Health and Wellness Emphasis (9 credits)

To satisfy the Health and Wellness emphasis requirement, three upper-level courses must be completed with a minimum grade of C: **HSC 375 Health and Wellness** *(required)* and two courses (6.0 semester hours) in approved Health and Wellness electives.

Suggested courses: HSC 402 Managing Stress, HSC 403 Nutrition for Wellness

Management Emphasis (9 credits)

To satisfy the Management emphasis requirements, the following three courses must be completed with a minimum grade of C: **HSC 414 Budget and Finance in Health Care Organizations** (3 credits), **BUS 312 Managing Human Resourcess** (3 credits), and **BUS 311 Organizational Behavior** (3 credits).

Public Health Emphasis (9 credits)

To satisfy the Public Health emphasis requirement, three upper-level courses must be completed with a minimum grade of C: **PUBH 304 Introduction to Epidemiology** *(required)*, **PUBH 301 Introduction to Public Health** *(required)* and one course (3.0 semester hours) of an approved Public Health elective.

No Emphasis (9 credits)

To satisfy the no emphasis requirement, 9 upper-level credits must be completed with a minimum grade of C from any of the approved Health Sciences electives.

HEALTH SCIENCES ELECTIVES (32 CREDITS)

Elective credit in the health sciences includes coursework from fields such as: radiology, dental hygiene, cardiovascular technology, pharmacy technology, nursing, and medical laboratory technology. Arts and sciences credit that is supportive of the health sciences may also be applied to this area.

Additionally, elective credit in the health sciences may be awarded for licenses and certifications that have been reviewed and approved by the faculty. The faculty periodically review other licenses and certifications in various areas of health care for which health sciences elective credit may be awarded.

Information Literacy (1 credit)

At least 1 credit must be earned in information literacy. The Excelsior University INL 102 Information Literacy fulfills this requirement. See the information literacy requirement section on page 29 for more specific information on this requirement. This requirement must be completed within the first 13 Excelsior University credits attempted.

Cornerstone Course

All students must meet the Excelsior University Cornerstone requirement by completing **IND 101 Cornerstone A: Foundations** or **IND 301 Cornerstone B: Pathways** with a grade of C or better, in their first term of credit-bearing activity after admission to Excelsior University.

Health Sciences Capstone (3 credits)

HSC 464 Health Sciences Capstone must be completed at Excelsior University with a minimum grade of C. To be eligible for the Capstone, students must have successfully completed all other health sciences requirements, including the core, area of emphasis, information literacy, and elective requirements as well as the written English requirement and be within 9 credits of completing the arts and sciences component.

Bachelor of Science in Public Health

Overview

Driven by the critical needs identified by the COVID-19 pandemic, evolving social trends, and rapid advancements in technology and artificial intelligence, the Bachelor of Science in Public Health program provides an alignment of both present and emerging public health challenges. The curriculum is designed to guide students to be critical thinkers in consuming, evaluating, and distributing information related to healthcare, public health care delivery, and the administration of services and products. Additionally, the curriculum incorporates activities designed to cultivate leadership skills and promote collaborative teamwork. To enhance the learning experience, the program includes experiential learning opportunities designed to engage students in activities directly applicable to real-world public health scenarios. The program learning outcomes meet industry needs and align with Council on Education for Public Health (CEPH) core competencies.

Bachelor of Public Health students must select either the Health and Wellness or the Management concentration.

The **Health and Wellness concentration** delves into the forefront of health promotion, empowering the student to become adept health advocates and champions of well-being within communities. Through a comprehensive curriculum blending theory with practical application, students explore a range of topics aimed at fostering physical, mental, and social wellness.

The **Management concentration** is designed to cultivate the next generation of leaders who are equipped to navigate the complex landscape of healthcare management and drive positive change within organizations and communities.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
HUM 307 Critical Thinking	3
SOC 101 Introduction to Sociology	3
PSY 101 Introduction to Psychology I	3
HIS 102 United States History II	3
MAT 101 Mathematics for Everyday Life This topic is required to meet the specified requirement.	3
MAT 201 Statistics This topic is required to meet the specified requirement.	3
BIO 110 Biology (Non-Lab)	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program

Major Core Requirements: 40 credits	
COURSE NAME	Credits
PUBH 301 Introduction to Public Health	3
PUBH 302 Research Methods in Public Health	3
PUBH 303 Public Health Policy and Leadership	3
PUBH 304 Introduction to Epidemiology	3
PUBH 305 Environmental Public Health	3
PUBH 306 Critical Issues in Public Health	3
PUBH 401 Biostatistics in Public Health	3
PUBH 402 Global Health	3
PUBH 403 Social and Behavioral Health	3
PUBH 404 Health Disparities This requirement must be completed at Excelsior University.	3
PUBH 405 Health Education: A Cross-Cultural Perspective	3
PUBH 406 Health Promotions This requirement must be completed at Excelsior University.	3
PUBH 407 Public Health Capstone This requirement must be completed at Excelsior University.	4

A minimum grade of C is required for all Major Core requirements.

CONCENTRATION REQUIREMENTS: 15 CREDITS

One of the following must be declared.

HEALTH AND WELLNESS

COURSE NAME	Credits
PSY 362 Psychology of Human Sexuality	3
PSY 360 Social Psychology	3
HSC 375 Health and Wellness	3
HSC 402 Managing Stress	3
HSC 403 Nutrition for Wellness	3

MANAGEMENT	
COURSE NAME	Credits
PSY 362 Psychology of Human Sexuality	3
HSC 414 Budget and Finance in Health Care Organizations	3
BUS 312 Managing Human Resources	3
BUS 311 Organizational Behavior	3
HSC 450 Economics of Health Care	3

A minimum grade of C or higher is required for all Concentration requirements.

Arts and Sciences Electives: 28 credits

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

Program Learning Outcomes

Upon successful completion of the Excelsior University Bachelor of Science in Public Health program, students will be able to:

1. Identify and evaluate different types of evidence used in public health research and practice and apply evidence-based approaches to develop and implement public health interventions.
2. Analyze the impact of health care policies and regulations on public health outcomes and how the organizations of public health and health care systems respond at the local, national, and global levels.
3. Show the ability to apply program planning and management principles to design, implement, and evaluate effective public health interventions, and develop strategies for engaging stakeholders and communities.
4. Analyze the development and implementation of public health policies at different levels and devise effective strategies for advocating for policies that promote public health and reduce health inequities.
5. Demonstrate effective leadership skills in public health practice, including strategic planning, decision-making, and team building by developing a personal leadership plan to advance their careers in public health.
6. Develop and implement communication strategies to effectively communicate public health information to diverse audiences using various media and technologies to promote public health and prevent disease.

7. Demonstrate an understanding of the roles and responsibilities of different professions in public health practice to address complex public health problems.
8. Apply systems thinking approaches to analyze complex public health problems and develop and implement interventions to address public health problems.

Master of Science in Healthcare Administration

36 CREDITS

DEGREE REQUIREMENTS

CORE COMPONENT

- IND 501 An Interdisciplinary Approach to Ethical Leadership
- IND 502 Strategic Talent Management in a Complex World
- HSC 516 Communication Strategy for the Health Care Leader
- HSC 517 Contemporary Issues in Health Care Delivery Systems
- HSC 525 Informatics for Health Care Leaders
- HSC 528 Health Care Finance
- HSC 561 Quality Management in Health Care

HEALTH SCIENCE ELECTIVE REQUIREMENT (3 credits)

CONCENTRATION COMPONENT

- General
  Any nine (9) graduate-level credits supportive of health care administration.

HSC 698 MS in Health Care Administration Capstone

The Capstone course must be taken at Excelsior University and cannot be transferred in.

Program Description

The Master of Science in Health Care Administration prepares working adults to become leaders in the healthcare field. This degree equips people seeking promotional opportunities and those seeking a new career in the rapidly growing healthcare administration field to be ethical leaders and data driven decision makers around critical aspects of individual and community health care. Our courses provide students with knowledge and skills in quality improvement, patient safety, removing health disparities, ensuring sound financial management, leading technological innovations, human resources and talent management, and project management. Graduates work in a wide array of areas, including healthcare systems, hospitals, outpatient clinics, health departments, government, research and development, and consulting.

This degree program is highly experiential. Students learn through doing. Coursework includes case study analysis, projects that reinforce learning and prepare students for what is expected in their careers, and simulations that are highly relevant in today's healthcare settings. The program consists of a 24-credit core component, a 9-credt concentration component, a 3-credit elective, and a 3-credit capstone.

Program Learning Outcomes

Upon completion of the Excelsior University Master of Science in Health Care Administration program, students will be able to:

1. Execute effective communication strategies within the health care environment and with external stakeholders.
2. Apply interdisciplinary leadership practices based on evidence that promotes ethical, and collaborative sustainable change in the healthcare sector.
3. Apply principles of risk management and quality improvement to achieve desired outcomes.
4. Implement financial management strategies commonly used by healthcare leaders.
5. Analyze contemporary issues impacting the health care environment.
6. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse workforce.

Program Requirements (36 credits)

GRADUATE HEALTH SCIENCE CORE (24 CREDITS)

- Ethical Leadership (3 credits) [**IND 501 An Interdisciplinary Approach to Ethical Leadership**]

IND 501 must be taken through Excelsior University and cannot be transferred in.

- Strategic Talent Management (3 credits) [**IND 502 Strategic Talent Management in a Complex World**]

- Communication Strategy (3 credits) [**HSC 516 Communication Strategy for the Health Care Leader**]
- Contemporary Issues (3 credits) [**HSC 517 Contemporary Issues in Health Care Delivery Systems**]
- Informatics (3 credits) [**HSC 525 Informatics for Health Care Leaders**]
- Finance (3 credits) [**HSC 528 Health Care Finance**]
- Quality Management (3 credits) [**HSC 561 Quality Management in Health Care**]

ELECTIVE REQUIREMENT (3 CREDITS)

Concentration

General track (9 credits)

Any 9 graduate-level credits supportive of Health Care Administration. Students are required to complete a compilation of graduate-level coursework from health sciences fields. This will include Excelsior University graduate courses as well as approved courses transferred in from other institutions.

GRADUATE HEALTH SCIENCES CAPSTONE (3 CREDITS)

- **HSC 698 MS in Health Care Administration Capstone** may be taken when students are in their final trimester and have completed at least 30 credits, including all core courses.

The capstone course is required. It must be taken through Excelsior University and cannot be transferred in.

Policies Specific to the Master of Science in Health Care Administration

Acceptance of Transfer Credit

Students may transfer up to 18 credits. Excelsior will require a minimum grade of B- for any approved graduate course accepted for transfer credit. Excelsior University does not use pluses or minuses, so such grades will be converted to the full letter grade. To accept a course that is transferring in with a P grade, the Excelsior department/faculty member issuing the P grade must verify that it is equivalent to a B- or better.

Master of Science in Health Sciences

36 CREDITS

DEGREE REQUIREMENTS

CORE COMPONENT

- IND 501 An Interdisciplinary Approach to Ethical Leadership
- IND 502 Strategic Talent Management in a Complex World
- IND 503 Data Driven Decision Making
  OR PBH 592 Biostatistics (as part of the Public Health Specialization)
- HSC 510 Health Care Policy, Politics, and Power
- HSC 517 Contemporary Issues in Health Care Delivery Systems
- HSC 525 Informatics for Healthcare Leaders

CONCENTRATION COMPONENT

One of the following concentrations must be declared:

- General Concentration
  Student must complete fifteen (15) credits from among the Health Sciences courses.
- Public Health
  PBH 603 Behavioral Health and Social Environment, PBH 604 Epidemiology, PBH 609 Critical Issues in Public Health, PBH 613 Program Planning and Evaluation for Public Health, PBH 647 Vulnerable Populations
- Cannabis Control
  CBC 600 Implications of Legalization: Policy and Compliance, CBC 601 Complexities of Cannabis as Commerce, CBC 602 Risk Assessment in Cannabis Control, HSC 516 Communications Strategies for the Healthcare Leader, and:
  PBH 647 Vulnerable Populations **OR** PBH 609 Critical Issues in Public Health **OR** BUS 554 Change Management

HSC 697 Graduate Health Sciences Capstone

The Capstone course must be taken at Excelsior University and cannot be transferred in.

Program Description

The **Master of Science in Health Sciences** prepares working adults to become leaders in the healthcare and public health fields. This degree equips students to be ethical leaders and data driven decision makers around critical aspects of individual and population health care. Our courses provide students with knowledge and skills in communication with a wide array of stakeholder groups, particularly around ethical leadership, data-driven decision making, and actively working to promote diversity, equity, and inclusion across the health and public health systems. Students acquire foundational knowledge in research, healthcare policy, advocacy, and applying the social determinants of health in their professional lives.

This degree program is highly experiential. Students learn through doing. Coursework includes case study analysis, projects that reinforce learning and prepare students for what is expected in their careers, and simulations that are highly relevant in today's healthcare settings. The program consists of an 18-credit core component, a 15-credit concentration component, and a 3-credit capstone.

Students have the opportunity to choose from three concentrations: **Public Health, Cannabis Control** and a **No Concentration** option.

The **Public Health Concentration** is designed for students interested in developing specialized skills to address existing and emerging population health issues. The field of public health is highly interdisciplinary in nature and attracts students with various professional backgrounds with one common goal—improving the health of populations. Students are introduced to the five overarching disciplines that make up public health, each through an equity lens: behavioral science and public health education, epidemiology, biostatistics, environmental health, and health services administration. This concentration also leads to a graduate certificate.

Program Learning Outcomes

Upon completion of the Excelsior University Master of Science in Health Sciences program, students will be able to:

1. Demonstrate proficiency in using multiple strategies of communication to convey complex thoughts and ideas.
2. Use research findings to explain and direct the resolution of practice-related issues and challenges.
3. Apply interdisciplinary leadership practices based on evidence that promotes ethical, collaborative, and sustainable change in the healthcare sector.
4. Evaluate healthcare policies and delivery systems to advance professional practice.
5. Analyze new and emerging trends within the health care industry.
6. Evaluate interdisciplinary approaches to problem solving and opportunities to lead a diverse workforce.

Program Requirements (36 credits)

HEALTH SCIENCE CORE (18 CREDITS)

- Ethical Leadership (3 credits) [**IND 501 An Interdisciplinary Approach to Ethical Leadership**]

IND 501 must be taken through Excelsior University and cannot be transferred in.

- Strategic Talent Management (3 credits) [**IND 502 Strategic Talent Management in a Complex World**]
- Decision Making (3 credits) [**IND 503 Data Driven Decision Making or PBH 592 Biostatistics** (3 credits)]

PBH 592 Biostatistics is required for the Public Health Specialization.

- **HSC 510 Health Care Policy, Politics, and Power** (3 credits)
- **HSC 517 Contemporary Issues in Health Care Delivery Systems** (3 credits)
- **HSC 525 Informatics for Healthcare Leaders** (3 credits)

Concentrations

Public Health Concentration (15 credits)

- **PBH 603 Behavioral Health and Social Environment** (3 credits)
- **PBH 604 Epidemiology** (3 credits)
- **PBH 609 Critical Issues in Public Health** (3 credits)
- **PBH 613 Program Planning and Evaluation for Public Health** (3 credits)
- **PBH 647 Vulnerable Populations** (3 credits)

Concentration Learning Outcomes

Upon completion of the Public Health Concentration, students will be able to:

- Apply an epidemiological framework to public health issues.
- Examine the influence of social determinants of health on populations.
- Develop evidence-based strategies to address public health issues.

General Concentration (15 credits)

Students are required to complete a compilation of graduate-level coursework from health sciences fields. This will include Excelsior University graduate courses as well as approved courses transferred in from other institutions.

Cannabis Control (15 credits)

The growing cannabis industry is going to impact all aspects of our current societal process. The regulation of cannabis spans from growing, transportation, public health, and city services to new businesses, financing, and supply chains that cross jurisdictional lines. The concentration in Cannabis Control will give students a solid foundation in compliance, risk assessment and cannabis as commerce. Completing all three of these courses will also get you a Graduate Certificate in Cannabis Control on your way to completing your master's degree.

Concentration Learning Outcomes

Upon completion of the Cannabis Control concentration, students will be able to:

1. Recommend strategies to ensure regulatory compliance in a rapidly evolving regulatory landscape.
2. Create workforce development and public health system responses to cannabis legalization that promote social equity.
3. Conduct risk assessment in communities where cannabis has been legalized.
4. Recommend strategies for ensuring consistent product quality and safe reliable supply chains at local, state, federal, and international levels.

Required Subjects

- Policy and Compliance (3 credits) [**CBC 600 Implications of Legalization: Policy and Compliance**]
- Commerce (3 credits) [**CBC 601 Complexities of Cannabis as Commerce**]
- Risk Assessment (3 credits) [**CBC 602 Risk Assessment in Cannabis Control**]
- Communications Strategies for the Healthcare Leader (3 credits) [**HSC 516 Communications Strategies for the Healthcare Leader**]
- Three credits in approved concentration courses

GRADUATE HEALTH SCIENCES CAPSTONE (3 CREDITS)

HSC 697 Graduate Health Sciences Capstone may be taken when students are in their final trimester and have completed at least 30 credits, including all core courses.

The capstone course is required. It must be taken through Excelsior University and cannot be transferred in.

Policies Specific to the Master of Science in Health Sciences

Acceptance of Transfer Credit

Students may transfer up to 18 credits. Excelsior will require a minimum grade of B- for any approved graduate course accepted for transfer credit. Excelsior University does not use pluses or minuses, so such grades will be converted to the full letter grade. To accept a course that is transferring in with a P grade, the Excelsior department/faculty member issuing the P grade must verify that it is equivalent to a B- or better.

Graduate Certificate in Nutrition

Certificate Description

The Graduate Certificate in Nutrition is designed for people seeking to obtain nutrition and health promotion training, advance in their careers, or shift career focus from an illness to prevention focus. It includes a four-course, 12-credit requirement, with themes in health education and equity. The curriculum aligns seamlessly with current global, federal, and regional imperatives to promote health outcomes through both prevention and interventions for chronic and acute disease. The primary goals are two-fold: 1) to equip students to educate individuals, families and communities about healthful nutrition and the relationships between food and health and 2) to promote access to healthy foods in marginalized communities.

Certificate Requirements

- **HSC 644 Nutrition Science for Health Professionals** (3 credits)
- **HSC 645 Nutrition Across the Life Cycle** (3 credits)
- **HSC 646 Health Education: A Cross-Cultural Perspective** (3 credits)

  Select One Elective:

  - **HSC 510 Policy Politics and Power** (3 credits)
  - **HSC 648 Nutrition and Chronic Disease** (3 credits)
  - **PBH 647 Vulnerable Populations** (3 credits

Certificate Learning Outcomes

Upon completion of the Graduate Certificate in Nutrition, students will be able to:

1. Examine the interconnected influences of social determinants of health and nutrition policy on health outcomes for individuals and communities.
2. Use evidence-based decision-making to identify, implement, and evaluate solutions to barriers to healthful nutrition.
3. Evaluate nutritional needs across life stages and for individuals with various health conditions.

Policies Specific to the Graduate Certificate in Nutrition

Policies and procedures that apply specifically to the Graduate Certificate in Cannabis Control are listed in the following section. All policies can be found in their entirety within the student policy pages of the Excelsior University website.

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Nutrition have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

Graduate Certificate in Public Health Equity

Certificate Description

The Graduate Certificate in Public Health Equity equips students to become transformational public health leaders and agents of change for their communities, particularly those that have historically faced significant health disparities. Essential skills in public health are taught throughout the curriculum, with opportunities to practice and develop expertise. Interdisciplinary themes are infused throughout the curriculum as a best practice for cultivating enduring change in population health outcomes. Graduates of this certificate gain in-depth knowledge and essential skills in public health. This certificate is ideal for professionals who want to explore or advance careers in public health and who want to center their careers around an equity focus.

Certificate Requirements

- **PBH 603 Behavioral Health and Social Environment** (3 credits)
- **PBH 592 Biostatistics** (3 credits)
- **PBH 604 Epidemiology** (3 credits)
- **PBH 613 Program Planning and Evaluation for Public Health** (3 credits)
- **PBH 610 Environmental Health** (3 credits)

Certificate Learning Outcomes

Upon completion of the Graduate Certificate in Public Health Equity, students will be able to:

1. Evaluate how populations are impacted by social determinants of health.
2. Use data-driven decision-making and community partnering approaches to identify, implement and evaluate solutions to public health issues.
3. Design culturally sensitive public health strategies to improve health equity and social justice

Policies Specific to the Graduate Certificate in Public Health Equity

Policies and procedures that apply specifically to the Graduate Certificate in Public Health Equity are listed in the following section. All policies can be found in their entirety within the student policy pages of the Excelsior University website.

- **Admission Eligibility**: Students must have earned a bachelor's degree for admittance into the certificate program.
- **Acceptance of Transfer Credit:** Students must complete all certificate courses at Excelsior University—no credits will be transferred in to meet the requirements.
- **Maximum Time to Complete the Certificate:** Students pursuing the Graduate Certificate in Public Health Equity have two years from the date of admission to complete all requirements.
- **Minimum GPA for Graduation**: A cumulative grade point average (GPA) of 3.0 is required to graduate.

College of Nursing and Health Sciences

SCHOOL OF NURSING

Degree and Certificate Programs

College of Nursing and Health Sciences
SCHOOL OF NURSING

Mission Statement

The School of Nursing empowers students at the associate, baccalaureate, and master's levels to achieve their professional goals by ensuring a seamless transition along the educational continuum. Through access to high-quality nursing education, the school serves a diverse and underrepresented population of adult learners, meeting the global demand for nurses. By fostering excellence, integrity, and a culture of continuous improvement, the School of Nursing contributes to the development of a skilled and compassionate nursing workforce that advances health and well-being for all.

Vision Statement

The School of Nursing is integral to the success and well-being of Excelsior University. Faculty and staff inspire students to become lifelong learners by fostering an environment that supports both individual and collective academic achievement. Excellence in nursing education is ensured through innovation, advocacy, and a commitment to continuous improvement. A culture of respect for diversity in program missions, curricula, students, and faculty is promoted. By preparing a compassionate and skilled nursing workforce, the goal is to lead the profession and positively impact lives for the public good.

College of Nursing and Health Sciences Honor Societies

Organization for Associate Degree Nursing Alpha Delta Nu Honor Society

Excelsior University has been chartered as the Zeta Chi Chapter of Alpha Delta Nu. This honor society recognizes Excelsior associate degree nursing students who demonstrate academic excellence and professionalism. Eligible students are invited to join as provisional members and gain full membership upon graduation. The induction ceremony takes place around the time of Commencement.

Tau Kappa At-Large Chapter, Sigma Theta Tau International, Honor Society of Nursing

Tau Kappa At-Large, the Excelsior University and Empire State University chapter of Sigma Theta Tau International, Honor Society of Nursing, was originally chartered in July of 2004. It shares the vision of Sigma Theta Tau International—to create a global community of nurses who lead using scholarship, knowledge, and technology to improve the health of the world's people. Eligible bachelor's and master's degree students are invited for induction. Specific information about the chapter and its activities is available on a link from the Excelsior University website.

Excelsior University Nursing Pin

Excelsior University has a nursing school pin available to all graduates of the nursing programs. The pin features a reproduction of the Excelsior University logo. The nursing pin is a symbol of accomplishment, knowledge, and competence in nursing. *Students will be notified that they are eligible to purchase a pin when they complete their degree program.*

Goals of the School of Nursing

- Maintain national leadership in nursing and distance education and serve as an advocate for innovative and alternative educational models.
- Continuously improve the student experience; promoting improved access, satisfaction, and success.
- Maintain a healthy and diverse work environment in which faculty and staff can grow and develop intellectually and professionally.
- Expand and enhance learning support services that are responsive to students' needs and reflect best practices.
- Provide evidence-based, high-quality, rigorous, learner-centered academic programs.
- Provide flexible, dynamic, caring curricula with sound objective assessments that assure achievement of learning outcomes.

Philosophy

The faculty of the School of Nursing is committed to an educational philosophy that emphasizes competency assessment and learning at a distance. The faculty supports programs that are designed to meet the educational goals of a diverse population of adult learners who bring varied lifelong knowledge and experience to the learning encounter. The faculty views adult independent learning as a process of knowledge acquisition attained through exposure to varied planned educational strategies unconstrained by time and/or place.

The curricula in the School of Nursing are based on the tenets of Patricia Benner's Novice to Expert Nursing Theory. This nursing theory supports the process of nurses developing competence and expertise in patient care over time through formal education coupled with experiential learning.

We believe in the metaparadigm concepts of person, environment, health, and nursing. A person is a unique, diverse, complex holistic being with fundamental physiological, psychological, and spiritual attributes. A person is influenced by society and their cultural, moral, ethical, and spiritual persuasion. Nurses engage with patients in a dynamic partnership reflecting dignity, values, and respect. The environment consists of all persons, places, and health care policies that impact individuals, families, and communities. The environment influences access to care, health care delivery systems, health care providers, and health outcomes. The environment provides the context within which the nurse and individuals, families, and communities interact for the provision of health care.

We view health as the actualization of human potential. Health is manifested uniquely in multidimensional and dynamic patterns and processes across the life span in response to changes in the environment. Optimal health is a right of all individuals, families, and communities. Health and illness are viewed on a continuum. Health care providers collaborate with the person in decision making for maximizing human potential or achieving a peaceful death.

Nursing is a caring profession. The faculty believes nursing is a scientific discipline with a distinct body of knowledge, including principles of nursing leadership, ethical-legal practice, critical thinking, nursing process, and communication. Nursing collaborates with inter-professional health care teams

to shape and improve patient outcomes. The focus of nursing is the health promotion and wellness, illness, disease, and injury prevention; and restoration of health of individuals, families, communities, populations, and systems. Nurses engage in professional role development throughout their career. This includes personal growth, learning new concepts, and developing a more sophisticated worldly view of health care. The nurse uses evidence-based practice and information technology to advance the science and practice of nursing.

Nursing Education

The School of Nursing offers associate, baccalaureate, and master's degree programs to promote academic progression and provide adult learners with the opportunity to achieve professional goals. The faculty believes that nursing education requires a solid foundation in the arts, sciences, humanities, and technology. The curricula build across the three programs and increase in complexity to meet the demands of the current health care environment.

The faculty and students are partners in the educational process to prepare graduates for practice in a complex, dynamic environment to provide safe, quality care. The faculty believes that curricula are best designed using consensus-building by a national faculty of content experts, nurse educators, researchers, and clinicians. These curricular decisions are based on principles of adult learning, internally generated data, and evidence of best practice in nursing education. The faculty believes that knowledge related to adult learning and assessment of competence support distance nursing education. The faculty believes that society's health care needs can be served by nurses with different levels of education.

Nursing Curricula

Organizing Framework for the Nursing Curricula

The organizing framework reflects the philosophy of the School of Nursing faculty and guides the curricula across the associate, baccalaureate, and master's programs. The faculty believes the metaparadigm concepts of nursing, person, health, and environment are interconnected with the concepts of nursing education, patient-centeredness, nursing judgment, professional identity, and spirit of inquiry. These are foundational to contemporary nursing practice and reflected in student learning outcomes for each program, which increase in complexity and promote academic progression.

Metaparadigm Concepts: Definitions

Communication

Deliver written communication with appropriate content, organization, syntax, mechanics, and style for the audience and purpose (Excelsior University, 2023).

Nursing Judgment

Encompasses the processes of critical thinking, problem solving, and ethical reasoning in reaching decisions through collaboration and integration of best evidence into nursing practice (NLN, 2010).

Patient

The individual within the context of the family (NLN, 2010).

Patient-Centeredness

An orientation to care that integrates and reflects respect for the dignity and uniqueness of individuals, their culture, values, personal preferences, and family traditions. Patient-centeredness supports respectful, efficient, safe quality nursing care to patients through all levels of care (NLN, 2010, p. 68). It advocates for patients to promote their self-fulfillment, integrity, and ongoing growth and development.

Professional Identity

"Involves the internalization of core values (caring, diversity, ethics, excellence, holism, integrity, and patient-centeredness) and perspectives recognized as integral to the art and science of nursing. These core values become self-evident as the nurse learns, gains experience, and grows in the profession" (NLN, 2010, p. 68) and promote the ideals of the nursing profession.

Spirit of Inquiry

"A persistent sense of curiosity that drives learning, practice," and the profession. The nurse "raises questions, challenges traditional and existing practices, and seeks creative approaches to problems… in ambiguous and unpredictable situations" (NLN, 2010, p. 69).

The nursing degree programs meet the standards for registration by the New York State Education Department. The programs' curricula are comparable to campus-based instructional programs. In the associate degree program, the student is able to demonstrate appropriate knowledge and competencies through credit earned from accredited colleges, completion of nursing courses, and demonstrate competencies for nursing practice.

In the bachelor's degree program, the student is able to demonstrate generalist knowledge and competence through participation in online discussion, assessment of knowledge and experiential learning, evaluation of credit earned from regionally accredited colleges, and professional certification.

In the master's degree program, the student is able to demonstrate expert/specialty knowledge and skills through participation in online discussion, assessment of knowledge and experiential learning, and evaluation of credit earned from regionally accredited colleges.

Licensure

Excelsior University nursing programs are designed in accordance with the requirements for Registered Nurse programs in New York State. The associate degree program prepares students for the National Council Licensure Examination for Registered Nurses (NCLEX-RN)®.

Our graduates are eligible for licensure by examination or endorsement in a number of other states as well. It is important to note that Registered Nurse education and licensure eligibility rules vary from state to state. In many states, Excelsior graduates are eligible for licensure by examination or endorsement without additional requirements or stipulations. In certain states, however, Excelsior University

nursing graduates either are not eligible for RN licensure or must meet additional requirements or stipulations to become eligible for RN licensure.

We communicate this information to you prior to admission based on your designated address and where applicable, whenever you inform us of a change to your designated address. Individuals who plan on relocating during or after their course of study, or who intend to practice in a state different from their current state of residence when they apply, are strongly advised to carefully review and consider state licensure rules. For additional information, visit our State Board Requirements page detailing this information or email us at: stateboards@excelsior.edu.

You must contact the boards of nursing in the states where you wish to practice for information about their specific licensure requirements.

Individuals convicted of felonies or certain misdemeanors or individuals with a history of substance abuse may not be eligible for licensure or eligible to take the required clinical experiences for the Excelsior University nursing degree.

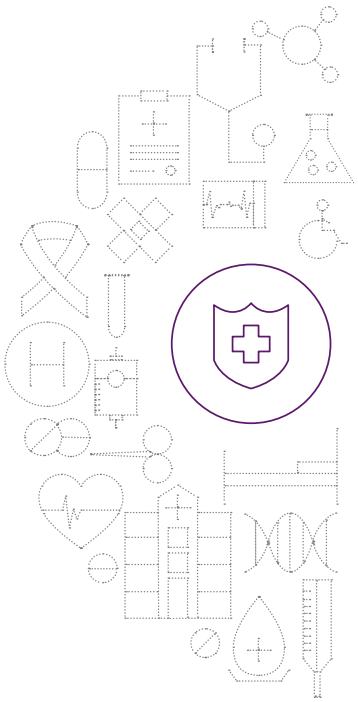
The School of Nursing supports our students and graduates in their preparation for the NCLEX-RN by providing resources to assist with their success. The resources vary depending upon the student's admission date. The faculty and State Board team will assist students in accessing resources to assist with their success.

You are encouraged to obtain a copy of the NCLEX-RN® Test Plan for the National Council Licensure Examination for Registered Nurses from the National Council of State Boards of Nursing Inc., 676 N. St. Clair St., Suite 550, Chicago, IL, 60611-2921, www.ncsbn.org.

Clinical Practice Requirements

All students are required to submit credentialing information prior to in-hospital clinical practice experiences. This information includes, but is not limited to, a national background check, current CPR certification, vaccination, and health records (including current physical examination, current tuberculosis screening, MMR vaccination, Varicella vaccination, Hepatitis B vaccination, current influenza vaccination, COVID-19 vaccine), and drug screening. Individual hospitals may have additional credentialing requirements. Students unable or unwilling to provide appropriate documentation may not be able to meet the learning outcomes for the course. Refer to your nursing course syllabus for detailed information regarding these requirements.

Associate in Applied Science in Nursing Program



Beliefs About the Practice of Associate Degree Nursing

The faculty believe Registered Nurses educated at the associate degree level are valued members of the nursing profession providing patient-centered care in a variety of settings, including acute and long term care, as well as in the home and in the community. The focus of nursing practice is care of individuals and their families throughout the life span. Nurses prepared at the associate degree level rely on evidence-based practice findings and standards of professional nursing practice to assist patients and families to restore and/or maintain optimal health and guide individuals with chronic disease toward self-management. They collaborate with other members of the health care team and function as patient advocates within legal and ethical parameters to assure quality outcomes for patients and families across the health care continuum. Students in this program are guided to embrace the metaparadigm concepts of the School of Nursing: patient-centered care, nursing judgment, professional identity, and spirit of inquiry. Graduates demonstrate mastery of the skills, knowledge, and abilities essential to enter the practice of professional nursing and are accountable to society and the profession of nursing.

Purpose of the Associate in Applied Science in Nursing Degree Program

The purpose of the Excelsior University Associate in Applied Science in Nursing program is to provide an alternative educational approach to earning an associate degree in nursing. The student's qualifications as a learned individual and a competent member of the nursing profession are assessed in general education and nursing education designed to promote:

- proficiency in the delivery of safe, quality patient-centered care.
- a sense of social responsibility and personal fulfillment by emphasizing the need for students to evaluate their own learning and potential achievements in terms of professional relevance and personal goals.
- a foundation for lifelong learning.

Associate in Applied Science in Nursing

Overview

In the Associate in Applied Science in Nursing program, LPNs, LVNs, paramedics, and certain military personnel can build their knowledge of nursing theory through educational experiences and demonstrate RN-level competency in a clinical setting. The nursing component is designed to ensure students possess competence in theory and performance in nursing comparable to that of graduates of campus-based associate degree programs. The program requires outstanding critical thinking skills and nursing judgment and commitment to academic rigor.

Degree Summary

TOTAL PROGRAM HOURS: 65

Arts and Sciences Requirements: 20 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree. Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 21 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
COMM 125 Public Speaking	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
PSY 235 Lifespan Developmental Psychology This topic is required to meet the specified requirement.	3

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General Education Requirements: 21 credits

COURSE NAME	Credits
SOC 101 Introduction to Sociology This topic is required to meet the specified requirement.	3
BIO 212 Microbiology This topic is required to meet the specified requirement.	3
MAT 101 Mathematics for Everyday Life	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program.

Some state boards have specific requirements regarding the above listed areas of study (e.g., some require a laboratory component for the science courses). Please be sure to check the licensure requirements in the state of your choice when planning your degree program.

Prerequisites to the Major Core Requirements: 6 credits

COURSE NAME	Credits
BIO 115 Anatomy and Physiology I (Non Lab) This topic is required to meet the specified requirement.	3
BIO 116 Anatomy and Physiology II (Non Lab) This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all Prerequisites to the Major Core requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program.

Major Core Requirements: 34 credits

These requirements must be completed at Excelsior University.

PHASE I

COURSE NAME	Credits
NUR 104 Essentials of Nursing Care: Health Safety	3
NUR 105 Essentials of Nursing Care: Health Differences	3
NUR 101 Introduction to Professional Nursing	2
NUR 109 Foundations in Nursing Practice	3

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Major Core Requirements: 34 credits (continued from previous page) These requirements must be completed at Excelsior University.	
PHASE II	
COURSE NAME	Credits
NUR 209 Reproductive Health	3
NUR 211 Health Differences Across the Life Span 1	3
NUR 212 Health Differences Across the Life Span 2	3
NUR 213 Health Differences Across the Life Span 3	3
PHASE III	
COURSE NAME	Credits
NUR 250 Clinical Nursing Practicum: Care of Patients Across the Lifespan Requires submission of new Verification of Health Care Experience (VHCE) form no more than three months prior to receiving approval to register for this course.	4
NUR 275 Competencies for Contemporary Nursing Practice	3
NUR 290 Nursing Capstone: Advanced Clinical Practicum	4

A minimum grade of C or higher is required for all Major Core requirements. Students must receive approval from an academic advisor before registering for Major Core requirements.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University Associate in Applied Science in Nursing degree program, students will be able to:

1. Use a caring holistic approach to provide and advocate for safe quality care for patients and families in an environment that values the uniqueness, dignity, and diversity of patients.
2. Apply the nursing process to make nursing judgments, substantiated with evidence to provide safe, quality patient care across the lifespan.
3. Use principles of management and delegation to implement plans of care with members of the intra-professional team to achieve safe, quality, patient outcomes.
4. Demonstrate the standards of professional nursing practice.
5. Apply principles of leadership and interprofessional collaboration to improve patient outcomes.
6. Use evidence-based findings and information technology to improve the quality of care for patients.
7. Apply effective written communication methods applicable to the nursing profession.

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The end-of-program student learning outcomes are guided by the competencies developed by the National League for Nursing (2021) and the Quality and Safety Education for Nursing Institute, QSEN (2014).

National League for Nursing (2010). Outcomes and competencies for graduates of practical/vocational, diploma, associates, baccalaureate, master's, practice doctorate, and research doctorate program in nursing. New York, NY. Author.

QSEN Institute. (2014) Competencies: Pre-licensure KSAS. Retrieved from http://www.qsen.org/competencies/.

Policies Specific to the Associate in Applied Science in Nursing Degree

The Excelsior University student policy pages are your resource for understanding the academic and administrative policies that are important to your academic success. It includes a wide range of information from important federal policies, including your right to privacy, to grading policies and policies and procedures concerning refunds, withdrawals, and other administrative issues. It is your responsibility to be familiar with these policies.

Transfer Credit

Credits from external degree-level nursing courses are not applicable to the Major Core requirements of the Associate in Applied Science in Nursing degree program.

Licensure Requirement

Students are required to maintain an active and unencumbered LPN or paramedic license while in the Associate in Applied Science in Nursing degree program. Students whose license becomes inactive or encumbered during the program will not be permitted to register for a nursing course until the license is reactivated and unencumbered.

Minimum Academic Average

Undergraduate nursing students must maintain a nursing GPA of at least 2.0 for satisfactory academic progression in the program. Students with a nursing GPA below 2.0 will be academically dismissed from the program.

Nursing Course Policies

Polices on Repeating Online Courses

Students are required to earn a passing grade on a failed nursing course before being permitted to register for other nursing courses. Refer to the Repeating Sources of Credit policy for more information.

Nursing Online Courses

Online courses have a defined start and end date within an eight-week term during which students are required to complete weekly assignments and interact with other students and the faculty. They are similar to campus-based courses in this regard. However, since they are offered primarily in an asynchronous format, students have some flexibility as to when they log in and participate in learning activities.

Online courses require weekly online discussions, writing assignments, and quizzes. Embedded simulated practice experiences using virtual patients are threaded throughout all phases of the associate degree nursing curriculum. Students should plan to spend 18 hours or more per week to complete coursework.

Nursing Hybrid Courses combine all online course features described above with additional synchronous laboratory and in-person clinical experiences within an eight-week term.

Students must receive approval from an academic advisor before registering.

Please note that it takes six (6) business days from the end of a course term until course grades are official and available. Students who choose to take online courses for their requirements must pay close attention to the Excelsior University academic calendar, and must work closely with their academic advisors regarding the timing of course terms and when approval can be granted.

Laboratory Experiences

A variety of asynchronous and synchronous lab experiences occur in the program. The synchronous lab experiences last 1-2 hours. Students are scheduled and required to be present for the laboratories during daytime, weekday hours. Students must have a desktop or laptop computer with a webcam and audio capability for the laboratory experiences.

Additionally, Excelsior University is required to abide by the provisions of Section 504 of the Rehabilitation Act of 1973 which protect otherwise qualified individuals from discrimination based on their disability. In order to be otherwise qualified, a student with a disability must be capable, either with or without accommodation, of fulfilling the essential requirements of the educational program.

Individuals requesting reasonable accommodations are required to self-disclose to the disability services coordinator and submit a request in writing or an accessible format appropriate for their limitation, which generates a durable record.

The request must be accompanied by official documentation of the disability from an appropriate licensed professional, which must address the current functional limitation(s), the prognosis, and recommendation(s) of appropriate accommodation. Once eligibility has been established, accommodations are requested on a course-by-course basis.

You can find information about disability services, examples of accommodation, and the accommodation request process on our website at www.excelsior.edu/disability-services.

Clinical Experiences

Students must complete these requirements through Excelsior University.

Clinical courses require students to travel to clinical sites for multi-day experiences in NUR 250 and NUR 290. Students are responsible for travel and associated expenses to the clinical site. Students must comply with clinical facility requirements for a health status report, immunizations, criminal background checks, and certification in Basic Life support. These are subject to change based on facility annual requirements. Students who are unable to comply with these requirements cannot be guaranteed registration into clinical courses. Clinical experiences cannot be waived.

Technical Standards for the Clinical Experiences

Technical standards are the required and essential abilities that an individual taking clinical courses must effectively demonstrate as an Excelsior University Associate in Applied Science in Nursing degree student.

Clinical experiences assess student's application of competency of nursing practice, the nursing process, and technical components for nursing practice in the care of adults and children in the acute care setting. Therefore, the nursing student must be able to perform the following:

- Assess, perceive, and understand the condition of assigned patients.
- See, hear, smell, touch, and detect subtle changes in colors.
- Communicate (verbally and in writing) with English-speaking patients and/or family members/significant others as well as members of the health care team, including nurses, physicians, support staff, and faculty.
- Read and understand documents written in English.
- Perform diagnostic and therapeutic functions necessary for the provision of general care and emergency treatment to the patient.
- Stand, sit, move, and tolerate the physical exertion necessary to meet the demands of providing safe clinical care.
- Solve problems involving measurement, calculation, reasoning, analysis, and synthesis.
- Perform nursing skills in the face of stressful conditions and exposure to infectious agents and blood-borne pathogens.

Requesting Accommodations for the Clinical Experiences

Excelsior University is committed to the principle that every individual should have an equal opportunity to pursue an Excelsior University degree program, to register for courses in order to demonstrate their knowledge and skills under appropriate conditions, and to complete a degree. Excelsior seeks to assure access by providing reasonable accommodations to individuals with physical, mental, or learning disabilities recognized under the Americans with Disabilities Act of 1990 (ADA) and the ADA Amendments Act of 2008 (ADAAA). Reasonable accommodation is the provision of aids, or modification to testing, services, or a program of study, that allows access by individuals with disabilities.

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The ADA defines a disability as "any mental or physical condition that substantially limits an individual's ability to perform one or more major life activities" as compared with the average person in the general population. Major life activities include, but are not limited to, walking, seeing, hearing, speaking, breathing, performing manual tasks, concentrating, caring for one's self, working, learning, and the operation of a major bodily function such as those of the immune system, respiratory system, etc.

The ADA requires an institution of higher education to provide reasonable accommodations to a qualified individual with a documented disability, provided that the accommodation does not create undue hardship. An undue hardship refers to any accommodation that would be unduly costly, substantially disruptive, or that would fundamentally alter the nature of the program. Both matriculated and non-matriculated students may request reasonable accommodations from Excelsior University.

Planning for Degree Completion

You are encouraged to matriculate in Excelsior University to receive the necessary academic advisement necessary for degree completion.

Students should plan carefully, consulting with their academic advisors, about the courses to take to fulfill degree requirements. We recommend that students obtain prior approval from an academic advisor before registering for a course from Excelsior University. If seeking approval for a course offered by another accredited institution, students must provide the course title, course number, and the name of the institution to the academic advisor; in some cases, it may be necessary for the student to submit a course syllabus as well, so the advisor can determine whether the course is applicable. In choosing courses to meet the general education requirements, students should consider selections that will help to meet future educational or professional goals.

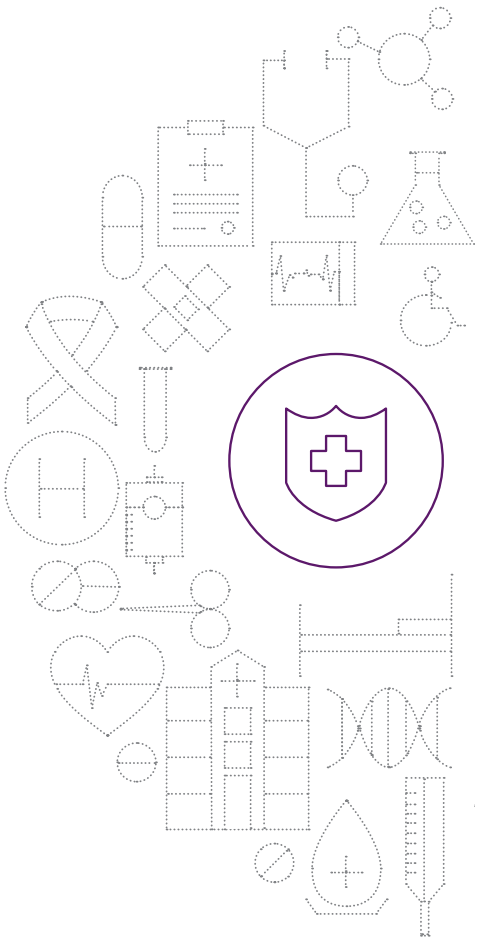
Learning Resources and Assistance for Nursing Students

The primary learning resource for each requirement is a course syllabus and required course materials. Students are expected to purchase or have access to the required course materials and skills kit for nursing requirements.

Other learning resources and assistance include:

- Excelsior University online library—no fee
- Access to academic advisors via phone and Excelsior University Message Center to assist with program planning—no fee

Bachelor of Science Program in Nursing



Beliefs About the Practice of Bachelor's Degree Nursing

The faculty believes that bachelor's degree nursing practice requires an intellectual focus, the application of nursing theory, an extensive knowledge base, and the use of a scientific mode of inquiry. Nurses prepared at the bachelor's level use a distinct body of knowledge as well as intellectual and practice skills to provide culturally appropriate care to clients across the life span and at various points on the health-illness continuum. They are educated to deliver patient-centered care as a member of an interprofessional team emphasizing evidence-based practice, quality improvement approaches, and prevention. Nursing practice is built on nursing knowledge, theory, and research, and the nurse applies and adapts knowledge from other fields and professions as appropriate.

The mission of the Baccalaureate Nursing Program at Excelsior University is to meet students where they are in their lives and careers and use innovative distance-learning education to empower them to lead health care teams of the future. Graduates will be prepared to deliver population-based health care to a complex, diverse society at local, national, and global levels.

The program framework is based on the National League for Nursing's Outcomes and Competencies for Graduates of Practical/Vocational, Diploma, Associate Degree, Baccalaureate, Master's, Practice Doctorate, and Research Doctorate Programs in Nursing (NLN, 2010). This publication identifies curricular elements and expected outcomes and provides the educational framework for the preparation of professional nurses. Achievement of these outcomes enables graduates to practice in an ever-changing and complex health care environment. Concepts such as patient-centered care, nursing judgment, cultural sensitivity, professionalism, and spirit of inquiry are emphasized in the curriculum. A solid base of liberal education helps students develop an expanded world view that supports critical problem solving in addressing complex health care challenges.

RN to Bachelor of Science in Nursing

Overview

In this fully online RN to Bachelor of Science in Nursing program, students will build on their prior learning and gain knowledge that will prepare them for graduate-level education and the pursuit of lifelong learning, which is essential for practice in the nursing profession. The general education requirements ensure the student develops college-level competence in arts and sciences areas including humanities, social sciences/history, and natural sciences/math. Credits may be earned through courses, or transferred from accredited, degree-granting institutions or approved examination programs. The nursing component focuses on knowledge and professional competencies expected of graduates of bachelor's programs. It emphasizes the integration of nursing and related arts and sciences knowledge in complex situations related to nursing care of individuals, families, aggregates, and communities. The nursing component requires outstanding critical thinking skills and nursing judgment as well as commitment to academic rigor.

Degree Summary

TOTAL PROGRAM HOURS: 120

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits

COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the specified requirement.	3
COMM 125 Public Speaking	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
PSY 360 Social Psychology	3
SOC 101 Introduction to Sociology This topic is required to meet the specified requirement.	3
MAT 114 Intermediate Algebra This topic is required to meet the specified requirement.	3
MAT 201 Statistics This topic is required to meet the specified requirement.	3
NS 110 Science in Today's World	3

A minimum grade of C or higher is required for all General Education requirements. The above are the preferred courses; however, course topics with a footnote are required for this degree program

Prerequisites to the Major Core Requirements: 42–45 credits

30–33 semester hours of nursing credit granted for prior learning validated by nursing education and successful completion of the NCLEX-RN.

COURSE NAME	Credits
PSY 235 Lifespan Developmental Psychology This topic is required to meet the specified requirement.	3
BIO 115 Anatomy and Physiology I (Non Lab) This topic is required to meet the specified requirement.	3
BIO 116 Anatomy and Physiology II (Non Lab) This topic is required to meet the specified requirement.	3
BIO 212 Microbiology This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all Prerequisites to the Major Core requirements.

Major Core Requirements: 26 credits

These requirements must be completed at Excelsior University.

PHASE I

COURSE NAME	Credits
NUR 301 Bridge for Professional Socialization	2
NUR 338 Introduction to Informatics for Nurses	2
NUR 342 Holistic Health Care Across the Lifespan	4
NUR 356 Leadership and Management in Nursing	4

PHASE II

COURSE NAME	Credits
NUR 430 Research in Nursing	3
NUR 446 Teaching and Learning in a Diverse Society	3
NUR 448 Community Health Nursing: Caring for the Public's Health	4

PHASE III

COURSE NAME	Credits
NUR 462 Nursing Capstone	4

A minimum grade of C or higher is required for all Major Core requirements.

Nursing Elective: 3 credits

COURSE NAME	Credits
HSC 403 Nutrition for Wellness	3

This is not required for graduates of the Associate in Applied Science in Nursing degree program from Excelsior University. A minimum grade of C or higher is required for the Nursing Elective requirements.

ARTS AND SCIENCES ELECTIVES REQUIREMENTS: 12 CREDITS

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

End-of-Program Student Learning Outcomes

Upon completion of the Excelsior University RN to Bachelor of Science in Nursing program, students will be able to:

1. Apply principles of nursing scholarship to optimize health care outcomes.
2. Integrate equitable, person-centered care standards to improve care across diverse settings.
3. Employ ethical, fiscally sound strategies in the management of population health.
4. Collaborate with stakeholders to optimize healthcare outcomes.
5. Assess strategies that create a culture of quality and safety.
6. Apply information and healthcare technologies to manage the delivery of care.
7. Apply the role of the professional nurse leader in the empowerment of others to deliver quality care.
8. Apply effective written communication methods for diverse audiences to support decision-making.

Program Requirements

Students are required to maintain an active, unencumbered RN license. The University utilizes the Nursys e-Notify service as our database management system. Students must provide the University with the following information for submission to Nursys e-Notify:

- RN license number
- State of licensure
- Last four digits of your SSN
- Year of birth

Students whose license becomes inactive or encumbered during the program will not be permitted to register for a nursing course until the license is reactivated and unencumbered.

Policies Specific to the Bachelor of Science in Nursing

The Excelsior University student policy pages are your resource for understanding the academic and administrative policies that are important to your academic success. It includes a wide range of information from important federal policies, including your right to privacy, to grading policies and policies and procedures concerning refunds, withdrawals, and other administrative issues. It is your responsibility to be familiar with these policies.

Technical Standards for RN to BS Program

Technical standards are the required and essential abilities that an individual in the RN to BS program must effectively demonstrate in selected courses as an Excelsior University nursing degree student.

The components of the RN to BS program test a student's application of the nursing process and technical components for nursing practice. In addition, students must possess sufficient intellectual

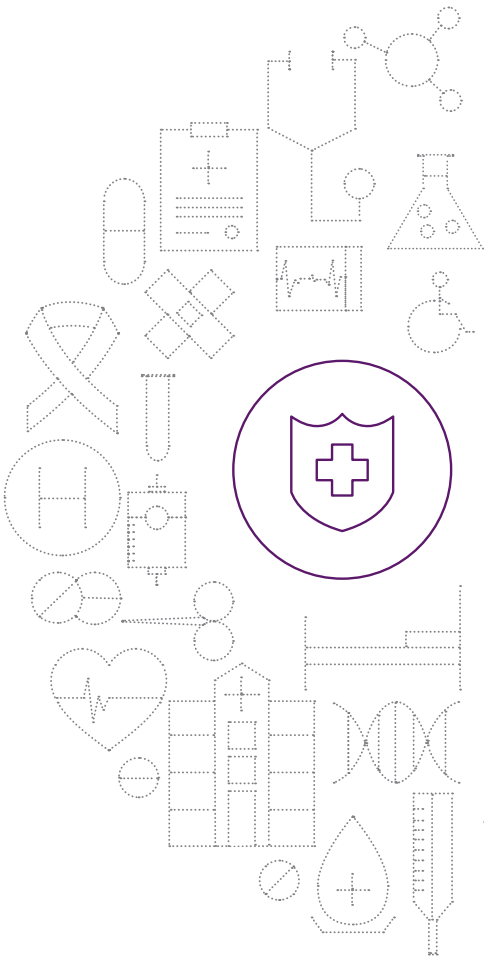
abilities and emotional health required for safe and effective practice. Therefore, the nursing student must possess sufficient skills for the following:

- Perform a physical examination on another person, including the skills of: observation/inspection, palpation, auscultation, and percussion.
- See, hear, smell, touch, and detect subtle changes in color.
- Perform parts of a physical examination in an online simulation experience, including sufficient-hearing, and vision and manual dexterity for an online experience.

Transfer Credit

Credits from external degree-level nursing courses are not applicable to the Major Core requirements of the Bachelor of Science in nursing degree programs.

Graduate Degree Programs in Nursing



Beliefs About Master's Degree Practice

The faculty believes that master's-prepared nurses in the fields of nursing leadership and administration, nursing informatics, and nursing education use knowledge from nursing and other professions to influence health policy, research, and professional practice in a variety of academic and service settings. They become leaders in creating collaborative environments that advance and promote professional practice. A master's-prepared nurse will have the skills to implement safe quality care in a variety of settings and roles that influence health care outcomes for individuals, populations, or systems.

The mission of the Master's Degree in Nursing Program is to provide an accessible avenue for career advancement for professional nurses. Through degree programs in informatics, education, and leadership, the faculty strive to enhance specialty nursing practice, empowering the next generation of nurses with the competencies to transform global health.

The program framework is based on the curricular elements and expected outcomes identified by the National League for Nursing in its Outcomes and Competencies for Graduates of Practical/Vocational, Diploma, Associate Degree, Baccalaureate, Master's, Practice Doctorate, and Research Doctorate Programs in Nursing (NLN, 2010). The program builds upon and extends students' existing knowledge and competencies gained from professional experiences and prior coursework. It emphasizes, as stated in the NLN's Outcomes and Competencies document, that "Master's-prepared nurses are expected to serve as leaders, members of interprofessional teams, and scholars who advance the profession, particularly in their chosen areas of specialization" (NLN, 2010, p. 40). A foundation of core courses prepares students with a theoretical base prior to study in their specific degree program. Content and concepts such as leadership and organizational skills, quality improvement, patient safety, health policy, global perspectives, communication, advocacy, interprofessional practice, and innovative technologies expand students' knowledge base and enrich their skills.

Purpose of the Graduate Programs in Nursing

The purpose of the master's in nursing programs is to prepare registered nurses for successful careers in a variety of academic and service settings as leaders and administrators in health care systems, nursing informatics specialists, and nurse educators. The programs educate students for advanced professional roles by creating an academic environment that fosters scholarship, critical thinking, and creativity. Using an instructional model through online courses and practice experiences and a rigorous, challenging curriculum, the programs provide a flexible means for registered nurses, including those from diverse and underserved populations, to obtain a master's degree. The programs emphasize pursuit of lifelong learning and professional development and serve as a strong foundation for doctoral study.

Distance education is as challenging as face-to-face instruction, if not more so. The nursing component/major of the degree programs requires outstanding critical thinking skills and nursing judgment, along with a commitment to academic rigor.

Program Requirements

Students are required to maintain an active, unencumbered RN license. The University utilizes the Nursys e-Notify service as our database management system. Students must provide the University with the following information for submission to Nursys e-Notify:

- RN license number
- State of licensure
- Last four digits of your SSN
- Year of birth

Students whose license becomes inactive or encumbered during the program will not be permitted to register for a nursing course until the license is reactivated and unencumbered.

Practice Experience

The faculty define practice experiences as opportunities for students to provide nursing care in a variety of practice learning environments that support end of program student learning outcomes and adult learning needs. Practice experiences are interactive, individualized, experiential learning experiences that provide and/or influence health care.

The faculty believe that practice experiences for master's-level nursing students provide opportunities to: act as change agents to improve health care outcomes; create, collaborate, and lead interprofessional teams; develop and test innovative solutions to clinical problems; translate evidence into nursing practice; design evidenced-based teaching learning, experiences; and appreciate the need for lifelong learning. The practice experiences in the three MS nursing programs (MS in Nursing Informatics, MS in Nursing Leadership and Administration of Health Care Systems, and MS in Nursing Education) are designed to assist the student in developing expertise in their chosen specialty.

During the practice experience, students work with a mentor in the MS Capstone course in each degree program (Nursing Leadership and Administration of Health Care Systems, Nursing Education, and Nursing Informatics). Additionally, students in the MS in Nursing Education program complete practice experience hours in Virtual Clinical Simulations in **NUR 506 Advanced Pharmacology** and **NUR 507 Advanced Physical Assessment.**

The course instructor provides regular feedback throughout the practice experience. Successful completion of the practice experience is required to pass the nursing courses.

The agency where students complete their Capstone practice experience may require facility-specific documentation and/or an affiliation agreement. Students must comply with all agency requirements and are responsible for any costs associated with additional documentation and/or an affiliation agreement.

Policies Specific to the Master of Science in Nursing

The Excelsior University student policy pages are your resource for understanding the academic and administrative policies that are important to your academic success. It includes a wide range of information from important federal policies, including your right to privacy, to grading policies and policies and procedures concerning refunds, withdrawals, and other administrative issues. It is your responsibility to be familiar with these policies.

Policies and procedures that apply specifically to the master's programs in nursing are listed on the following pages. File your Handbook with your other important academic papers and this program catalog for easy reference.

Technical Standards for MS Programs

Technical standards are the required and essential abilities that an individual in the MS programs must effectively demonstrate in selected courses as an Excelsior University nursing degree student.

The components of the MS programs test a student's application of the nursing process and technical components for nursing practice. In addition, students must possess sufficient intellectual abilities and emotional health required for safe and effective practice. Therefore, the nursing student must possess sufficient skills for the following:

- Perform a physical examination on another person, including the skills of: observation/inspection, palpation, auscultation, and percussion.
- See, hear, smell, touch, and detect subtle changes in color.
- Perform parts of a physical examination in an online simulation experience, including sufficient hearing, and vision and manual dexterity for an online experience.
- Navigate in a community setting. The practice experience requires the student to travel within the community, and interact with clients and staff in a community agency. Must be able to provide own means of transportation, if needed.

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- Communicate (verbally and in writing) with English-speaking clients and/or family members/significant others as well as members of the health care team, including nurses, physicians, support staff, and faculty.
- Read and understand documents written in English.
- Solve problems involving measurement, calculation, reasoning, analysis, and synthesis.
- Demonstrate good judgment, use of intellectual abilities, and development of effective relationships with clients and other health care professionals.

Transfer Credit

Credits from external degree-level nursing courses are not applicable to the Master of Science in nursing degree programs.

Master of Science in Nursing Education

Overview

This program prepares students for nurse educator roles in both academic and service settings. Students will gain knowledge and skills in learning theories, teaching strategies, curriculum development, evaluation of learning outcomes, and using technology to support teaching. Online courses, practice experiences, and a robust curriculum prepare students for work in academic settings such as vocational, associate degree, and bachelor's degree nursing programs, and in non-academic settings that include staff development, school nursing, community and public health, nurse recruiter, and clinical settings. The dynamic and challenging curriculum provides a flexible means for registered nurses to earn a master's degree and prepare for roles as a nurse educator. This program requires outstanding critical thinking skills and nursing judgment as well as commitment to academic rigor.

Degree Summary

Major Core Requirements: 38 credits
These requirements must be completed at Excelsior University.

PHASE I	
COURSE NAME	Credits
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4

PHASE II	
COURSE NAME	Credits
NUR 505 Advanced Pathophysiology	3
NUR 506 Advanced Pharmacology	3
NUR 507 Advanced Physical Assessment	3
NUR 653 Designing a Learning Environment	3
NUR 661 Program and Curriculum Development in Nursing Education	3
NUR 662 Assessment and Evaluation in Nursing Education	3

continued on next page

Major Core Requirements: 38 credits (continued from previous page) These requirements must be completed at Excelsior University.	
PHASE III	
COURSE NAME	Credits
NUR 676 The Nursing Education Capstone	6

A minimum grade of C or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Nursing Education program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance inter-professional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the inter-professional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

Master of Science in Nursing Informatics

Overview

If you are a registered nurse who wants to improve the health of people and communities and improve patient safety by using information technology, computer science, and nursing science, the fully online Master of Science in Nursing Informatics will equip you with the knowledge and skills you need to make an impact in this area. Online courses, practical experiences, and a robust curriculum prepare you to know how to use data and information to respond to health care problems, improve client care and organizational operations, and make and communicate information-based decisions in a variety of health organizations. The dynamic and challenging curriculum provides a flexible means for registered nurses to earn a master's degree and preparation for roles as a nurse informaticist. This program requires outstanding critical thinking skills and nursing judgment as well as commitment to academic rigor.

Degree Summary

Major Core Requirements: 36 credits
These requirements must be completed at Excelsior University.

PHASE I	
COURSE NAME	Credits
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4

PHASE II	
COURSE NAME	Credits
NUR 515 Management Information for Decision Support	3
NUR 521 Data, Information and Knowledge	3
PBH 604 Epidemiology	3
NUR 625 Management of Fiscal and Operational Systems	3
NUR 651 Systems Development in Healthcare	4

Major Core Requirements: 36 credits These requirements must be completed at Excelsior University.	
PHASE III	
COURSE NAME	Credits
NUR 686 The Nursing Informatics Capstone	6

A minimum grade of C or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Nursing Informatics program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance interprofessional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the interprofessional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

Master of Science in Nursing Leadership and Administration of Health Care Systems

Overview

The evolving health care system calls for nurse leaders who can manage clinical experiences, fiscal challenges, organizational systems, and human resources. Expert communication skills are needed to integrate these diverse and often competing elements into a strategic plan that ensures the health of the population. This fully online Master of Science in Nursing Leadership and Administration of Health Care Systems program empowers you with the skills and knowledge you need to play a vital role in health care systems, have a seat at the executive table, and have an influential voice when essential decisions are made about health care. Online courses and an individualized practice experience, in which you assume a leadership role under the guidance of an experienced mentor, prepare you for leadership roles in a variety of settings. Nurse leaders make an impact in acute health care facilities, community health centers, academic institutions, information technology organizations, and pharmaceutical industries, among other places. The dynamic and challenging curriculum provides a flexible means for registered nurses to earn a master's degree and preparation for advanced professional roles as a nurse leader. The program requires outstanding critical thinking skills and nursing judgment as well as commitment to academic rigor.

Degree Summary

Major Core Requirements: 38 credits
These requirements must be completed at Excelsior University.

PHASE I	
COURSE NAME	Credits
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4

PHASE II	
COURSE NAME	Credits
NUR 515 Management Information for Decision Support	3
NUR 521 Data, Information and Knowledge	3
PBH 604 Epidemiology	3

Major Core Requirements: 38 credits These requirements must be completed at Excelsior University.	
NUR 615 Management of Clinical Systems	3
NUR 625 Management of Fiscal and Operational Systems	3
NUR 635 Leadership in Organizational Systems	3
PHASE III	
COURSE NAME	Credits
NUR 646 The Nursing Leadership and Administration Capstone	6

A minimum grade of C or higher is required for all Major Core requirements. Excelsior requires an overall 3.0 GPA for completion of graduate degrees.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University Master of Science in Nursing Leadership and Administration of Health Care Systems program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance interprofessional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the interprofessional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

RN to Master of Science Nursing Programs

Program Description

The RN to Master of Science (RN to MS) nursing programs are designed to allow registered nurses to earn a Bachelor of Science in nursing, as well as a Master of Science in Nursing Leadership and Administration of Health Care Systems, Master of Science in Nursing Education or a Master of Science in Nursing Informatics. With this option, students take graduate-level courses that replace some of the undergraduate requirements. The charts on the preceding pages offer a visual representation of the requirements for the three degrees of the RN to MS in nursing programs.

Policies Specific to the RN to MS in Nursing Programs

The Excelsior University student policy pages are your resource for understanding the academic and administrative policies that are important to your academic success. It includes a wide range of information from important federal policies, including your right to privacy, to grading policies and policies and procedures concerning refunds, withdrawals, and other administrative issues. It is your responsibility to be familiar with these policies.

Additional policies and procedures that apply specifically to the RN to MS in nursing programs are listed on the following pages. All policies can be found in their entirety within the student policy pages of the Excelsior University website.

Program Requirements

Students are required to maintain an active, unencumbered RN license. The University utilizes the Nursys e-Notify service as our database management system. Students must provide the University with the following information for submission to Nursys e-Notify:

- RN license number
- State of licensure
- Last four digits of your SSN
- Year of birth

Students whose license becomes inactive or encumbered during the program will not be permitted to register for a nursing course until the license is reactivated and unencumbered.

Technical Standards for RN-MS Programs

Technical standards are the required and essential abilities that an individual in the RN to MS programs must effectively demonstrate in selected courses as an Excelsior University nursing degree student.

The components of the RN to MS programs test a student's application of the nursing process and technical components for nursing practice. In addition, students must possess sufficient intellectual abilities and emotional health required for safe and effective practice. Therefore, the nursing student must possess sufficient skills for the following:

- Perform a physical examination on another person, including the skills of: observation/inspection, palpation, auscultation, and percussion.
- See, hear, smell, touch, and detect subtle changes in color.
- Perform parts of a physical examination in an online simulation experience, including sufficient hearing, and vision and manual dexterity for an online experience.
- Navigate in a community setting. The practice experience requires the student to travel within the community, and interact with clients and staff in a community agency. Must be able to provide own means of transportation, if needed.
- Communicate (verbally and in writing) with English-speaking clients and/or family members/significant others as well as members of the health care team, including nurses, physicians, support staff, and faculty.
- Read and understand documents written in English.
- Solve problems involving measurement, calculation, reasoning, analysis, and synthesis.
- Demonstrate good judgment, use of intellectual abilities, and development of effective relationships with clients and other health care professionals.

Completion of the Dual Degree Programs

The RN to MS dual degree programs allow students to earn both the BS in nursing and the MS in nursing more efficiently than completing the two programs separately.

The BS in nursing degree will be conferred upon completion of all general education and bachelor's component courses, including the undergraduate-level capstone. Students will then be able to continue seamlessly into the remaining graduate-level courses.

Practice Experience

Each component of the dual degree requires students engage in practice experiences. The focus of these practice experiences will change as students progress through the RN–MS program. At the baccalaureate level, the focus of practice experiences shift away from individual patient care to community as client, population based health, and the role of the RN in influencing health care delivery. They differ from the "clinical" experiences of pre-licensure nursing programs. Practice experiences for master's level nursing students provide opportunities to act as change agents to improve health care outcomes; create, collaborate, and lead interprofessional teams; develop and test innovative solutions to clinical problems; translate evidence into nursing practice; design evidence based teaching learning, experiences; and appreciate the need for lifelong learning. The practice experiences in the three MS nursing programs (MS in Informatics, MS in Nursing Leadership and Administration of Health Care Systems, and MS in Nursing Education) are designed to assist the student in developing expertise in their chosen specialty. The faculty define practice experiences as opportunities for

students to provide nursing care in a variety of practice learning environments that support end of program student learning outcomes, program outcomes, and adult learning needs. Practice experiences are interactive, individualized, experiential learning experiences that provide and/or influence health care.

There are various practice experience hours dispersed over four courses in the RN to BS Nursing Program portion of the program. Examples of practice experiences include: virtual clinical simulation in physical assessment, educating staff on new evidence based procedures, participating in administrative decisions about health care practices in an interprofessional team, and advocating for vulnerable populations by writing a letter to a legislator. There are practice experience hours working with a mentor in the MS Capstone course in each degree program (Nursing Leadership and Administration of Health Care Systems, Nursing Education, and Nursing Informatics). The agency where students complete their capstone practice experience may require facility specific documentation and/or an affiliation agreement. Students must comply with all agency requirements and are responsible for any costs associated with additional documentation and/or an affiliation agreement.

Additionally, students in the MS in Nursing Education program complete practice experience hours in Virtual Clinical Simulations in **NUR 506 Advanced Pharmacology** and **NUR 507 Advanced Physical Assessment**.

RN to Master of Science in Nursing Education

Overview

The purpose of this nursing program is to build upon prior knowledge with new learning. Using both a teaching and outcomes assessment model, this fully online dual degree program provides a flexible means for registered nurses to earn a Bachelor of Science in Nursing and a Master of Science in Nursing more efficiently than completing the programs separately.

The Nursing Education specialty focuses on the knowledge and skills required to implement the role of nurse educator in an academic or service setting. The 6-credit Capstone course includes an educational project, an online course, and a project presentation.

Degree Summary

TOTAL PROGRAM HOURS: 144

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the degree requirements.	3
COMM 125 Public Speaking	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
SOC 101 Introduction to Sociology This topic is required to meet the degree requirements.	3
PSY 360 Social Psychology	3
MAT 114 Intermediate Algebra This topic is required to meet the degree requirements.	3
MAT 201 Statistics This topic is required to meet the degree requirements.	3
NS 110 Science in Today's World	3

A minimum grade of C or higher is required for all General Education requirements.

Prerequisites to the Major Core Requirements: 42 credits	
COURSE NAME	Credits
30 semester hours of nursing credit granted for prior learning validated by nursing education and successful completion of the NCLEX-RN.	30
PSY 235 Lifespan Developmental Psychology This topic is required to meet the degree requirements.	3
BIO 115 Anatomy and Physiology I (Non Lab) This topic is required to meet the degree requirements.	3
BIO 116 Anatomy and Physiology II (Non Lab) This topic is required to meet the degree requirements.	3
BIO 212 Microbiology This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all prerequisites to the Major Core requirements.

Major Core Requirements

These requirements must be completed at Excelsior University.

PHASE I: BACHELOR'S MAJOR CORE REQUIREMENTS: 29 CREDITS

COURSE NAME	Credits
NUR 356 Leadership and Management in Nursing	4
NUR 448 Community Health Nursing: Caring for the Public's Health	4
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 507 Advanced Physical Assessment	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4
NUR 462 Nursing Capstone	4

A minimum grade of C or higher is required for all Major Core requirements.

PHASE II: MASTER'S MAJOR CORE REQUIREMENTS: 16 CREDITS

COURSE NAME	Credits
NUR 505 Advanced Pathophysiology	3
NUR 506 Advanced Pharmacology	3
PBH 604 Epidemiology	3
NUR 653 Designing a Learning Environment	3
NUR 661 Program and Curriculum Development in Nursing Education	3
NUR 662 Assessment and Evaluation in Nursing Education	3

A minimum grade of C or higher is required for all Major Core requirements.

PHASE III: MASTER'S MAJOR CORE REQUIREMENTS: 6 CREDITS

COURSE NAME	Credits
NUR 676 The Nursing Education Capstone	6

A minimum grade of C or higher is required for all Major Core requirements.

ARTS AND SCIENCES ELECTIVES REQUIREMENTS: 12 CREDITS

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University RN to Master of Science in Nursing Education program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance interprofessional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the interprofessional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

RN to Master of Science in Nursing Informatics

Overview

The purpose of this nursing program is to build upon prior knowledge with new learning. Using both a teaching and outcomes assessment model, this fully online dual degree program provides a flexible means for registered nurses to earn a Bachelor of Science in Nursing and a Master of Science in Nursing more efficiently than completing the programs separately.

The Nursing Informatics specialty focuses on the knowledge and skills required to implement the role of nurse informaticist in a variety of health care settings. The 6-credit Nursing Informatics Capstone has three components: an informatics project management experience, an online course, and a project presentation.

Degree Summary

TOTAL PROGRAM HOURS: 142

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the degree requirements.	3
COMM 125 Public Speaking	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
SOC 101 Introduction to Sociology This topic is required to meet the degree requirements.	3
PSY 360 Social Psychology	3
MAT 114 Intermediate Algebra This topic is required to meet the degree requirements.	3
MAT 201 Statistics This topic is required to meet the degree requirements.	3
NS 110 Science in Today's World	3

A minimum grade of C or higher is required for all General Education requirements.

Prerequisites to the Major Core Requirements: 42 credits	
COURSE NAME	Credits
30 semester hours of nursing credit granted for prior learning validated by nursing education and successful completion of the NCLEX-RN.	30
PSY 235 Lifespan Developmental Psychology This topic is required to meet the degree requirements.	3
BIO 115 Anatomy and Physiology I (Non Lab) This topic is required to meet the degree requirements.	3
BIO 116 Anatomy and Physiology II (Non Lab) This topic is required to meet the degree requirements.	3
BIO 212 Microbiology This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all prerequisites to the Major Core requirements.

Major Core Requirements

These requirements must be completed at Excelsior University.

PHASE I: BACHELOR'S MAJOR CORE REQUIREMENTS: 29 CREDITS

COURSE NAME	Credits
NUR 356 Leadership and Management in Nursing	4
NUR 448 Community Health Nursing: Caring for the Public's Health	4
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 507 Advanced Physical Assessment	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4
NUR 462 Nursing Capstone	4

A minimum grade of C or higher is required for all Major Core requirements.

PHASE II: MASTER'S MAJOR CORE REQUIREMENTS: 16 CREDITS

COURSE NAME	Credits
NUR 625 Management of Fiscal and Operational Systems	3
PBH 604 Epidemiology	3
NUR 521 Data, Information and Knowledge	3
NUR 515 Management Information for Decision Support	3
NUR 651 Systems Development in Healthcare	4

A minimum grade of C or higher is required for all Major Core requirements.

PHASE III: MASTER'S MAJOR CORE REQUIREMENTS: 6 CREDITS

COURSE NAME	Credits
NUR 686 The Nursing Informatics Capstone	6

A minimum grade of C or higher is required for all Major Core requirements.

ARTS AND SCIENCES ELECTIVES REQUIREMENTS: 12 CREDITS

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University RN to Master of Science in Nursing Informatics program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance interprofessional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the interprofessional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

RN to Master of Science in Nursing Leadership and Administration of Health Care Systems

Overview

The purpose of this nursing program is to build upon prior knowledge with new learning. Using both a teaching and outcomes assessment model, this fully online dual degree program provides a flexible means for registered nurses to earn a Bachelor of Science in Nursing and a Master of Science in Nursing more efficiently than completing the programs separately.

The Nursing Leadership and Administration of Health Care Systems specialty focuses specifically on the knowledge and skills required to implement a leadership role in clinical systems. The 6-credit Capstone course has three components: an administrative project, an online course, and a project presentation.

Degree Summary

TOTAL PROGRAM HOURS: 144

Arts and Sciences Requirements: 60 credits

The minimum number of credits needed in Liberal Arts and Sciences for the degree.
Refer to Graduation Requirements on page 25 for more information.

Upper-Level Requirements: 30 credits

The minimum number of credits needed at the upper level for the degree.
Refer to Graduation Requirements on page 25 for more information.

University Requirements: 4 credits

COURSE NAME	Credits
INL 102 Information Literacy This requirement must be completed at Excelsior University.	1
IND 101 Cornerstone A: Foundations This requirement must be completed at Excelsior University.	3

General Education Requirements: 33 credits	
COURSE NAME	Credits
ENG 101A Advanced Composition	3
ENG 102A Advanced Composition II	3
IND 203 Introduction to Professional Ethics This topic is required to meet the degree requirements.	3
COMM 125 Public Speaking	3
COMM 210 Interpersonal Communication	3
PSY 101 Introduction to Psychology I	3
SOC 101 Introduction to Sociology This topic is required to meet the degree requirements.	3
PSY 360 Social Psychology	3
MAT 114 Intermediate Algebra This topic is required to meet the degree requirements.	3
MAT 201 Statistics This topic is required to meet the degree requirements.	3
NS 110 Science in Today's World	3

A minimum grade of C or higher is required for all General Education requirements.

Prerequisites to the Major Core Requirements: 42 credits	
COURSE NAME	Credits
30 semester hours of nursing credit granted for prior learning validated by nursing education and successful completion of the NCLEX-RN.	30
PSY 235 Lifespan Developmental Psychology This topic is required to meet the degree requirements.	3
BIO 115 Anatomy and Physiology I (Non Lab) This topic is required to meet the degree requirements.	3
BIO 116 Anatomy and Physiology II (Non Lab) This topic is required to meet the degree requirements.	3
BIO 212 Microbiology This topic is required to meet the specified requirement.	3

A minimum grade of C or higher is required for all prerequisites to the Major Core requirements.

Major Core Requirements

These requirements must be completed at Excelsior University.

PHASE I: BACHELOR'S MAJOR CORE REQUIREMENTS: 29 CREDITS

COURSE NAME	Credits
NUR 356 Leadership and Management in Nursing	4
NUR 448 Community Health Nursing: Caring for the Public's Health	4
NUR 502 Theoretical Foundations of Nursing Practice	3
NUR 503 Transformational Nursing: Innovation, Inquiry and Scholarship	3
NUR 507 Advanced Physical Assessment	3
NUR 508 Research and Evidence-Based Practice	4
NUR 533 Policy, Ethics and Population Health	4
NUR 462 Nursing Capstone	4

A minimum grade of C or higher is required for all Major Core requirements.

PHASE II: MASTER'S MAJOR CORE REQUIREMENTS: 18 CREDITS

COURSE NAME	Credits
NUR 521 Data, Information and Knowledge	3
PBH 604 Epidemiology	3
NUR 515 Management Information for Decision Support	3
NUR 615 Management of Clinical Systems	3
NUR 625 Management of Fiscal and Operational Systems	3
NUR 635 Leadership in Organizational Systems	3

A minimum grade of C or higher is required for all Major Core requirements.

PHASE III: MASTER'S MAJOR CORE REQUIREMENTS: 6 CREDITS

COURSE NAME	Credits
NUR 646 The Nursing Leadership and Administration Capstone	6

A minimum grade of C or higher is required for all Major Core requirements.

ARTS AND SCIENCES ELECTIVES REQUIREMENTS: 12 CREDITS

Additional credits needed in liberal arts and sciences to fulfill the program requirements.

End-of-Program Student Learning Outcomes

Upon successful completion of the Excelsior University RN to Master of Science in Nursing Leadership and Administration of Health Care Systems program, students will be able to:

1. Function as a leader and change agent to promote holistic patient-centered care and population health.
2. Translate evidence to develop health care practices in a culturally and ethnically diverse global society.
3. Synthesize theoretical and empirical knowledge from nursing and other disciplines that are essential for nursing judgment and practice.
4. Integrate specialty practice knowledge to enhance interprofessional collaboration, inform decisions, and improve outcomes.
5. Exemplify professional values and standards, best practices, and the commitment to lifelong learning in the role of the master's-prepared nurse.
6. Implement the role of master's-prepared nurse as part of the interprofessional team.
7. Integrate scholarship, a spirit of inquiry, and innovation to support nursing excellence.
8. Apply effective written communication methods to resolve complex problems and organizational issues.

Undergraduate Courses

ACC 211 Financial Accounting — 3 credits

Prerequisite: None

In this course, students will not only begin to understand what accounting means, but they will further examine how important accounting really is. Accounting knowledge can be applied to any industry, at any level of the organization. As the business world has come under tremendous scrutiny, all business professionals are expected to have a general knowledge of accounting and are thus held much more accountable for their financial practices. Accountants are responsible for providing data that is used to determine the present and future economic stability of an organization.

This course presents an interesting opportunity for working professionals to examine the fundamentals of basic accounting concepts, assumptions, and principles. The topics chosen in this course will benefit any student who is responsible for managing budgets, reading financial statements, or making business decisions.

ACC 212 Managerial Accounting — 3 credits

Suggested Prerequisite: ACC 211 Financial Accounting

This course is intended to help students develop an understanding of the process of identifying, measuring, analyzing, interpreting, and communicating information in pursuit of an organization's goals. By the end of the course, students should be familiar with technical skills for solving problems such as the fundamentals of basic unit costs, cost flow management systems and processes, budgeting and performance measurement, and cost analysis and pricing decisions. As a manager, students should be able to identify relevant information, the appropriate methods for analyzing information, and working together with a team of addressing global and ethical issues. Students will be able to think on their feet and address real-world business issues.

ACC 314 Intermediate Accounting I — 3 credits

Prerequisite: ACC 211 Financial Accounting or ACC 212 Managerial Accounting

This course expands on topics covered in previous accounting courses to provide an in-depth study and review of accounting principles, concepts and theory. Concepts addressed in this course focus on the conceptual framework, generally accepted accounting principles, preparation of financial statements, the time value of money, cash and receivables, accounting for inventory and inventory valuation.

ACC 315 Intermediate Accounting II — 3 credits

Prerequisite: ACC 314 Intermediate Accounting I

This course builds on accounting topics presented in Intermediate Accounting I to prepare students for a career in the accounting field. Topics in this course will address the proper accounting procedures for property, plant and equipment, investments, liabilities and contingencies, bonds and long-term notes, and leases. Upon completion of this course, students will have a substantial knowledge base in accounting methods, according to Generally-Accepted Accounting Principles (GAAP).

ACC 360 Cost Accounting — 3 credits

Prerequisite: ACC 212 Managerial Accounting

A knowledge of the costs of a business can mean the difference between the long-term survival of the organization or business failure. An ability to understand and access costs is a vital prerequisite to long term growth and profitability. In this course, you will develop an understanding of cost behavior, systems, techniques, planning and control, relevant cost information for short-term decision-making and accounting data in long-term capital budgeting decisions.

ACC 400 Auditing — 3 credits

Prerequisites: ACC 211 Financial Accounting and ACC 212 Managerial Accounting

This course is intended to help you understand the theory of auditing, including the educational and ethical qualifications for auditors, as well as the role of the auditor in the American economy. By the end of the course, you should be familiar with the professional standards, professional ethics, and the legal liability of auditors. As a manager, you should be able to effectively plan and design an audit program, gather and summarize evidence, and evaluate internal controls.

ACC 415 Advanced Financial Management — 3 credits

Prerequisite: BUS 350 Principles of Finance or equivalent

The financial well-being of individuals and families requires managers to weigh risk versus return, in making investment decisions for corporations. Financial skills are also applied in your personal life, as you accept a loan, save for retirement, or apply for a mortgage. This course is designed to strengthen your capacity to make complex financial decisions—to evaluate assets, investments, financing options, instruments, and opportunities.

ACC 417 Individual and Corporate Taxation — 3 credits

Prerequisite: ACC 211 Financial Accounting, or equivalent

This course provides an understanding of the principles of federal income tax and its applications. It will identify and analyze federal tax issues to support the design of effective tax plans used to ensure tax compliance and improve financial decision-making. Upon completion of the course, students will be able to recognize and evaluate fundamental tax issues that affect both individuals and corporations.

ART 102 History Of Western Art Since The 15th Century — 3 credits

Prerequisite: None

This course will empower students to look at and understand Western art from the time of the Renaissance to the early 20th century, covering painting, sculpture, and architecture. It focuses on the power of perception and visual storytelling so that students become engaged with specific art examples from each period and culture. Students will analyze famous works by Michelangelo, Caravaggio, Vincent Van Gogh, and many more brilliant artists. By developing a sophisticated eye,

students will learn how artworks reflect their cultural origins and their individual creators, who give shape and meaning to their art. By the end of the course, students will be surprised at their recognition and knowledge of art that they see operating in American culture now.

All materials are open educational resources, meaning they are all available online with no expense to the student.

BIO 110 Biology (Non-Lab) — 3 credits

Prerequisite: None

This is a course designed for students who need to complete the General Education requirement for math and science as well as for those considering majoring in the natural sciences. The course covers the major areas of study and aspects of life on our planet explored by biologists. The course moves from the cellular and biochemical level through all classifications of living organisms to the examination of ecology and the biosphere. Students will also spend time examining the process of evolution for both populations and species. There is a final project that the students will work on throughout their time in the course. This final project is a presentation that will utilize both audio and video recordings. Several discussions in the course will require audio recordings to be submitted. Students are expected to be able to access the appropriate technologies to complete these assignments. Freely available technology options will be provided in the course.

Students needing the laboratory experience concurrently should register independently for BIO 111 Biology Laboratory (1 credit)

BIO 111 Biology Laboratory — 1 credit

Prerequisite: None

This one-credit laboratory-based course will engage you in several virtual laboratory activities using Labster, a virtual laboratory program, and additional activities. As you complete each laboratory exercise, you will answer questions to demonstrate your understanding of the material. Upon completion of these virtual labs, you will learn about laboratory safety, scientific method, energy utilization, cellular reproduction, genetics, evolution, and ecology.

BIO 115 Anatomy and Physiology I (Non Lab) — 3 credits

Prerequisite: None

This course focuses on the structure and function of the human body. Topics and body systems that will be studied include: the chemistry of life, histology and the integumentary system, skeletal and articulation system, muscular system, nervous system, sensory system and the endocrine system.

BIO 115L Anatomy and Physiology I LAB — 1 credit

Prerequisite: None

This is a laboratory course that utilizes simulations and hands-on experiments to study body systems that include: cells, blood, integumentary system, muscular system, nervous system, skeletal system and the endocrine system. Students use the scientific method in an experimental environment, learn and use safe laboratory practices, perform dissections, perform experiments, gather and analyze data, and present data and conclusions in scientific laboratory reports.

BIO 116 Anatomy and Physiology II (Non Lab) — 3 credits

Prerequisite: None

This course focuses on the structure and function of the human body. Topics and body systems that will be studied include: blood, the cardiovascular system, lymphatic and immune system, respiratory system, digestive system, nutrition and metabolism, urinary system and fluid balance, and reproductive systems.

BIO 116L Anatomy and Physiology II Lab — 1 credit

Prerequisite: None

This is a laboratory course that utilizes simulations and hands-on experiments to study body systems that include: temperature regulation and metabolism, fluid and electrolyte balance, digestive system, respiratory system, cardiovascular system, urinary system, the reproductive system, and human development and genetics. Students use the scientific method in an experimental environment, learn and use safe laboratory practices, perform dissections, perform experiments, gather and analyze data, and present data and conclusions in scientific laboratory reports.

BIO 212 Microbiology — 3 credits

Prerequisite: None

In this comprehensive introductory course in microbiology, students are introduced to cellular microbes, such as bacteria, protists, fungi, and helminthes, and non-cellular microbes, such as viroids, viruses, and prions and how they are classified. In addition, students explore the impact of these microbes on the environment, human health, and society. Introduction to Microbiology covers the biological and biochemical foundations and scientific methods necessary to understand microbial growth and metabolism and provides a historical perspective by reviewing the major scientific contributions that led to modern-day microbiology.

BIO 261 Introduction to Human Genetics

Prerequisite: None

This course provides an overview of the field of Genetics from its classical beginning, Mendelian genetics; through the chromosomal theory of inheritance; the development of molecular genetics; and in to modern techniques of genetic engineering. Perspectives on and applications of human genetics in the

healthcare field will be included with topics such as genetic counseling and bio-social aspects of various genetic based diseases, consideration of how epigenetics influence disease outcomes, as well as how modern & emerging genetic techniques can affect society. The basic concepts of the cell cycle will be reviewed as a foundation. Discussion of political and sociological implications of the ever-expanding understanding of genetics and its role in emerging biotechnology will complement the exploration in this field.

BIO 300 Advanced Investigations in Biology — 3 credits

Suggested Prerequisites: BIO 110 Biology and BIO 111 Biology Laboratory or equivalent

This course is a wide-ranging examination of advanced concepts, topics, and research methods in the biological sciences. Through virtual laboratory experiments, you explore topics including epidemiology, cardiac physiology, natural selection and evolution, and population genetics while you strengthen your analytical and writing skills with laboratory reports. It is strongly recommended that students have successfully completed at least an introductory course in biology prior to registering for this course.

BIO 320 Evolutionary Biology — 3 credits

Suggested Prerequisite: BIO 110 Biology (non-lab)

This is a course designed for students in the Natural Science major and those who are interested in the sciences with a strong background in biology. There is a laboratory activity integrated into the course and it will be counted as an upper level lab experience. This course explores the history of the Theory of Evolution from the work of Charles Darwin to modern day evolutionary studies using the latest technologies such as gene mapping, proteomics, epigenetics, and DNA analysis. Students will explore examples of evolution for a variety of species and follow the evolutionary pathway for one particular species as a final project. This course is reading and writing intense but has all the reading materials available within the modules and the EC Library. No textbook purchase is required for this course. This course requires a video presentation as well as a final paper.

BIO 340 Biodiversity — 3 credits

Suggested Prerequisite: BIO 110 Biology or equivalent

Scientists have stated that we are experiencing the sixth mass extinction of biological diversity since the Earth formed and that we may well be in a new geological age, the Anthropocene Epoch. Through readings and numerous activities, this course examines the rise and fall of biological diversity over time through the study of ecology, evolution, and conservation biology. Topics include the meaning and value of biodiversity, major threats to species and ecosystems, and efforts to conserve, manage, and sustain biological diversity.

BNS 101 Introduction to National Security — 3 credits

Prerequisite: None

This interdisciplinary class introduces the theory and practice of national security policymaking in the United States. It addresses many facets of national security, including the evolution of U.S. national interests and national security practices over time, the agencies and individuals that carry out key national security roles, and debates about the place of the United States in the world today. It also examines specific facets of U.S. national security strategy, including alliances, wars, diplomacy, economics, and soft power (culture, ideas, and values). The class combines theoretical approaches with hands-on opportunities to analyze contemporary national security threats and challenges.

BNS 301 National Security Ethics and Diversity — 3 credits

Prerequisite: None

Have you ever wondered if a decision you made or an action you took was "right" - for yourself and for others; for the many, even if not for some few? Have you ever thought deeply upon the classic question–do the Ends justify the Means? In this course you will engage these and other questions, while also focusing on the practical study of ethics in the national security arena. You will examine ethical subjects and dilemmas facing individuals, institutions, societies and governments, both at home and abroad. You will examine ethical concepts and principles to find meaning in specific behaviors, and theory will be related to real-world application. You will evaluate how ethical principles relate to diversity considerations and practices in the national security arena. The ethical and diversity dimensions of public service and national security are explored through a focus on officials working in the broad range of occupations in national security.

BNS 303 Comparative National Security Analysis — 3 credits

Prerequisite: None

Why do some countries find security without large militaries, while others seem compelled to build and use them? Why do countries around the world differ so much in how they make and execute national security policy? This course focuses on the complex process tying national interests to security policies of nation-states in the conflicting realm of international relations. You will review aspects of national culture, resource economics, and practical policy analysis, for example, to better understand how identity, power, and national security are constructed in countries around the world. You will become adept at assessing underlying national power dimensions, which drive nation-states in diplomacy and war, among other behaviors. You will evaluate another nation-state's national security in depth while also exploring several of the dimensions of national power and identity in great detail. The course serves national security professionals by deepening the understanding of how national security varies so widely and how difficult it is to achieve stability among the nation-states of the world.

BNS 305 Cybersecurity in National Security — 3 credits

Prerequisite: None

This course focuses on the emerging security issues that arise from an ever increasing presence of computers and computer enabled devices in the defense, intelligence, and economic fabric of modern life. This course examines the definitions of cybersecurity and cyber risk in a national security context in order to inform future leaders and practitioners of the opportunities and challenges of cyberspace. This course concentrates on the policy dimensions of cybersecurity rather than the technical aspects of network defense and attack. Issues of cybercrime, cyber espionage, cyber war, and cyber diplomacy will be considered. Future leaders in national security must understand the possible approaches to cybersecurity and the impacts cyber policy can and will have on U.S. National Security as well as global security.

BNS 307 Intelligence in National Security — 3 credits

Prerequisite: None

This course focuses on the United States Intelligence Community and the processes to collect, analyze, and disseminate intelligence to national security policymakers. Students examine what intelligence is, the development of the Intelligence Community agencies, and the role each agency contributes to national security. Application of critical thinking is used to determine the methodology of conducing intelligence in a democracy in order to define what the Intelligence Community can, or cannot do. This course will benefit students interested in national security, military studies, international relations, and political science.

BNS 498 National Security Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The National Security capstone seminar course is the culmination of your undergraduate education. Upon completion of this course, you will have earned a bachelor's degree in National Security, a valuable degree in your ongoing professional development and continued service within the national security community. Yet, it is murkier now more than ever as to what American "nation" is to be secure against which threats, and through which means? Your previous coursework illuminated the complex and interdisciplinary field of national security affairs, and some of the many security challenges facing the US at home and abroad. You have reviewed how nation-states around the world differ in these grand strategic formulation dilemmas, and, in this course, you will dive deeper still into the national security challenges confronting the US (and its key allies). You will examine several of these enduring and emerging threats and opportunities, as well as the particular challenges a democracy confronts in pursuing a successful grand strategy.

BUS 222 Business Communication — 3 credits

Prerequisite: None

This course will provide students with knowledge and skills to effectively communicate in global business environments. Additionally, students will develop and evaluate both written and oral business communications. While learning to identify cultural aspects of verbal and nonverbal behavior of persons from different cultures and themselves, students come to recognize cultural differences that can cause communication challenges in management situations.

BUS 225 Consumer Behaviors — 3 credits

Prerequisite: None

In this course, students will explore the principles of consumer behavior by reviewing topics about consumer motivation, perception, learning, attitude, and information processing. Additionally, students will discover the impacts of life-style, demographics, social class/culture, groups, leaders, family, and diverse/global environments on consumer behavior. Students will examine consumer behavior from a marketing strategy perspective to successfully develop products and services that will fulfill the wants and needs of individuals in the marketplace. Students will look at the factors influencing acquisition and consumption of products and services.

BUS 230 Business Law — 3 credits

Prerequisite: None

This course provides an analysis of key legal issues affecting businesses. There is an emphasis on the development of legal strategies to support the venture over its expected life cycle. This course also focuses on the legal environment of the United States. Students examine a series of real-world scenarios and apply the legal tools developed during the course to those cases.

BUS 231 Business Data Literacy — 3 credits

Prerequisites: None

This course develops data literacy and statistical thinking and essential skills for business process improvement. Topics covered include descriptive statistics and data visualization, distributions, sampling, Central Limit Theorem, estimation using confidence intervals, statistical inference, and single and multiple regression analysis.

This course duplicates: BUS 233 Business Statistics, MAT 201 Statistics, and MAT 215 Statistics for Health Care Professionals. Credit in only one of these courses will be applied toward graduation.

BUS 235 Financial Markets and Institutions — 3 credits

Prerequisite: None

This course studies the fundamental principles which govern global financial markets and institutions. Some topics include: characteristics of financial instruments and establishments, the Federal Reserve, monetary policy, the banking industry, and capital markets.

BUS 299 Business and Management Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

An online portfolio development experience that requires students to reflect on their past academic and professional experiences and use the information gained from this reflective exercise to develop learning statements related to the Associate of Applied Science in Administration/Management Studies degree outcomes. The learning statements must be supported by documented evidence that demonstrates that the outcomes have been met. Students learn how to develop an online portfolio during the first module of the course and then work under the guidance of a faculty mentor during the remainder of the semester to compose learning statements, compile appropriate evidence, and create the Integrated Business and Management Assessment report.

BUS 300 Introduction to Entrepreneurship — 3 credits

Prerequisite: None

In this introductory course, you will gain insight into what entrepreneurship is as well as the varying types of entrepreneurs that exist. Part of the focus for this course will be assessing the environment for entrepreneurship so that you can better prepare yourself for your venture. This course will also help you determine the entrepreneurial route you envision for yourself. This course concludes with an evaluation of the various types of business models available for business persons.

BUS 310 Entrepreneurial Marketing — 3 credits

Prerequisite: BUS 300 Introduction to Entrepreneurship

Entrepreneurs face unique challenges in promoting a new business or in competing in extremely challenging and uncertain circumstances. Business marketing, whether an established business or a entrepreneurial start-up, encompasses much more than just advertising. It involves research on the industry, marketing, and market, which are used to define a target market and market segmentations. It also involves developing a marketing budget, researching media platforms, and determining promotional material costs. Distribution channels are a vital part of marketing as well. Finally, the marketing strategy describes business marketing goals and objectives in a unified plan. Each of these essential components will be examined within this course. Students will actively research and apply each component to their own business ventures, which will culminate in the development of a marketing plan.

BUS 311 Organizational Behavior — 3 credits

Prerequisite: ENG 101 College Composition or ENG 101A Advanced Composition

This course focuses on the crucial behaviors of organizations at the individual, group/team, and organizational level. It examines how external and internal forces influence behaviors such as leadership, communication, management, employee motivation, engagement, and valuing diversity. The focus on domestic and global organizations includes private, public, and military organizations and the impact of organizational behavior on the effectiveness of the organization.

BUS 312 Managing Human Resources — 3 credits

Prerequisite: None

Human resources has evolved over the years. However, some of the basic tenets of understanding still remain and are necessary for both employers and employees. In this course, students will uncover topics including the role and context of human resource management, fair employment practices, human resource planning, human resource staffing, performance management, employee development, employee compensation, and labor relations.

BUS 313 International HR — 3 credits

Prerequisite: None

This course provides an in-depth study for the human resources practitioner and international line manager to the legal, practical, and successful human resources strategies used by international companies in today s global economy. Students will examine best practices in the global environment. Topics include: recruitment and staffing, compensation, benefits, labor laws, employment-related taxation, leadership, management, and supervisory practices among international corporations, immigration, permanent resident and temporary work visa status, and expatriate and repatriation policies and practices with respect to recruitment, training, performance management, and repatriation.

BUS 315 Labor Relations — 3 credits

Prerequisite: None

This course focuses on the study of the relationships between unions and employers, including various aspects of labor history, law, and collective bargaining. In addition, it will examine issues such as public sector unionism and unionism around the world. A core emphasis will be the changing nature of labor-management relations in the United States as a result of global competition and the internationalization of markets. Finally, the course touches on patterns of union resistance and preventive labor relations strategies.

BUS 323 Business Ethics — 3 credits

Prerequisite: None

Questions of ethics seem inextricably intertwined with business these days: Facebook and the Cambridge Analytica scandal, Wells Fargo, and Harvey Weinstein. The manager in today's workplace, whether they are in the private or public sector, needs to understand the ethical climate in which they are operating and navigate a path that allows them to acknowledge, understand, and act appropriately when faced with an ethical dilemma. This course will encourage you to prepare for the ethical challenges that you might face, through an exploration of ethical theory and the way in which personal values and ethical behaviors impact the culture of an organization. On completing this course, you will gain a greater understanding of how ethical principles relate to organizations within which they operate and how the perception of ethics can impact an organization in terms of reputation, functioning, and performance.

BUS 325 Women In Business — 3 credits

Prerequisite: None

Although women have made inroads as managers and leaders, they still continue to lag their male counterparts in reaching the executive suites and boardrooms of many major organizations around the globe. This study will examine a number of theories and findings looking at the roadblocks women continue to face in their quest for upward mobility, as well as offering insight into how women are gaining access to upper management. Topics covered will include:

1. The economic strength of women as a market,
2. An examination of the status of women in the United States compared with other countries,
3. Obstacles faced by women such as the glass ceiling, nonlinear career paths, and work/life/family balance,
4. The importance of attracting and retaining talented women, and
5. Leadership styles and traits of women.

BUS 341 Management Concepts and Applications — 3 credits

Prerequisite: None

A study of fundamental management theories, examining the manager's role in today's global business environment. Topics include the role of managers in the business environment, strategies for planning and decision making, organization and controls, leadership, motivation, staffing, and managing change.

BUS 343 International Marketing — 3 credits

Prerequisite: BUS 351 Marketing Concepts and Applications or equivalent

This course presents a systematic framework for understanding international marketing management and global business strategy. The course focuses on creating and executing global marketing strategies and polices by examining the cultural, political, legal, ethical, and economic issues relevant to the development of effective global marketing strategies and polices in the digital age.

BUS 350 Principles of Finance — 3 credits

Prerequisite: ACC 211 Financial Accounting and ACC 212 Managerial Accounting

An introduction to the discipline of finance, this course examines general principles of finance and corporate finance. Topics include financial objectives of the firm, the time value of money, risk and return, capital budgeting, the cost of capital, financial forecasting, and ratio analysis, working capital management, EVA and MVA concepts, and current and future trends in corporate finance.

BUS 351 Marketing Concepts and Application — 3 credits

Prerequisite: None

Successful businesses develop effective strategies to meet the needs of their customers. Marketing is about how businesses interact with consumers and the processes by which they anticipate, analyze, and meet their needs. It is both a philosophy of doing business and a management activity that puts the customer at the heart of everything that the organization does. Marketing ensures that the customer gets the right product, at the right time, and in the right place. Marketers both develop and apply a range of communications, creative, and technological techniques that allow them to work at both the tactical and strategic levels within organizations and across a range of global businesses and industries. In this course, we will look at some of the fundamental concepts of marketing and then explore how marketing managers can put them into practice in the real world.

BUS 352 Digital Marketing Fundamentals — 3 credits

Prerequisite: None

This course will focus on the fundamental concepts, tools, terminology, methods, and practices that relate to current trends in digital marketing by drawing from the very latest practitioner thinking. Students will explore and closely examine social media marketing as part of an overall content marketing strategy. An exploration of search engine optimization, Pay Per Click (PPC), and digital display advertising, will give the student an overview of current methods and practices and provide practical application of the skills learned. Email, mobile and new technologies will also be evaluated. The importance of good analytics will also be emphasized with a review of the current thinking and practices. The course will culminate in the integration of some of the previous learning in terms of the development of a buyer persona, which forms a key element of a digital marketing strategy.

BUS 375 Marketing Management — 3 credits

Prerequisite: None

This course provides students with the necessary tools and frameworks to better prepare them for making effective marketing decisions. Students will explore effective marketing strategies across global business organizations. They will investigate concepts, theories, and real-world applications to create and implement a marketing strategy for launching a product. This course focuses on both the strategic planning process and marketing's cross/inter-functional relationships. Students will discover market opportunities, forecasting, targeting, and brand positioning for new and mature markets. They will examine how to organize, plan, implement, and measure an effective marketing campaign.

BUS 380 Managing Diversity in the Workplace — 3 credits

Prerequisite: None

This course introduces students to the concept of diversity consciousness, a concept that goes beyond diversity training to develop an awareness and understanding of diversity in all its aspects. It examines the demographic variables that include race, ethnicity, culture, religion, age, physical and mental ability and gender and sexual orientation, as well as socio-economic class and family status. It emphasizes the skills needed in working with and supervising a diverse workforce and reviews the obligations and rights of both the employer and employee under the laws against discrimination enforced by Equal Employment Opportunity Commission in the USA.

BUS 381 Transportation, Warehousing, and Distribution — 3 credits

Prerequisite: None

This course provides a fundamental understanding of transportation, warehousing, and distribution operations within the logistics industry. The curriculum is built to enable students to competently utilize transportation and distribution models, including identification of end-to-end consumer requirements. Throughout its duration, this course will offer numerous examples of how to incorporate transportation, warehousing, and distribution strategies. Inventory control decisions; supply chain requirements; intermodal operations; and, distribution efficiencies are stressed within the curriculum and cases.

BUS 425 Operations Management — 3 credits

Prerequisite: None

This course provides an overview of the systematic planning, designing, operating, controlling, and improving processes that transform inputs into finished goods and services. It develops students' abilities to recognize, model, and solve problems inherent in production and service environments. Specific topics include product and process design, queuing, facility layout and location, linear programming, decision analysis, forecasting, and inventory models.

BUS 431 Business Data Analysis — 3 credits

Prerequisite: BUS 231 Business Data Literacy

The overarching goal of this course is to help managers make better decisions. Management guru, W. Edwards Deming, once said all "management is prediction of future results" (Wood & Wood, 2005). If we do not know how to estimate the impacts of decisions on future outcomes, we limit ourselves to guessing with our gut instead of applying a real analysis based on data science (Bonabeau, 2003). In this course, students will learn how to develop Excel statistical and decision models and create basic data visualizations, which will help students become data savvy and provide them with essential Excel skills, both of which are necessary to be competitive in a professional work environment.

It will include a review of important statistical methods; use of time series for forecasting; application of regression analysis; aspects of decision theory including model building, linear optimization,

simulation, optimization with and without risk and uncertainty; and methods to effectively communicate the results and rationales to management in tables and using graphs.

The course also includes use of Tableau to create more effective data visualizations and data stories. Students will install Tableau on their computer a 1-year free Tableau student license.

Microsoft Excel (Mac or PC) is required. Cloud-based versions of Excel are not recommended. The ability to install 3rd party Excel add-ins on your PC/Mac is required. All students should update to the most recent version of Excel.

BUS 435 International Business — 3 credits

Prerequisite: None

In this course, we'll examine and analyze global business in its historical, theoretical, environmental, and functional dimensions. Our focus will be on understanding the growing economic interdependence of nations and the impact of that interdependence on managerial and corporate policy decisions that transcend national boundaries.

This course will also provide an introduction to globalization and the cultural, economic, political, and legal environments of international business, including an overview of risks, challenges, and opportunities of competing in the global marketplace.

Your key challenge will be to develop and present a business plan to launch a product or service of your choice in a foreign market.

BUS 437 Securities Analysis — 3 credits

Suggested Prerequisite: BUS 350 Principles of Finance

The financial crisis of 2007 showed the importance of securities to our daily lives. This course focuses on the tools of fundamental analysis, the concept of risk and investment management. Students examine security valuation, risk measurement, portfolio diversification and portfolio performance measurement preparation of pro forma financial statements. The goal of the course is to provide students with a strong theoretical and applied understanding of the valuation of equity securities.

BUS 440 Business Supply Chain Management — 3 credits

Prerequisite: None

This course presents an examination of logistics and supply chain systems. The focus is on analyzing, designing, and implementing systems. Topics include supply chain management strategy, planning, and operations; the role of e-commerce; and financial factors that influence decisions. Discussion also covers the trade-offs between cost and service and between the purchase and supply of raw materials; the warehousing and control of inventory; industrial packaging; materials handling within warehouses; and the distribution of finished goods to customers required to minimize costs, maximize profits, or increase customer service levels.

BUS 442 Inventory Management — 3 credits

Prerequisite: None

This course provides a fundamental understanding of inventory management, control, and turnover as applicable to procurement and logistics operations. The curriculum is designed to enable students to competently utilize inventory management techniques, including costing (ordering, holding, and carrying); demand (both deterministic and probabilistic); inventory modeling; stocking, restocking, and outsourcing; and, the use of inventory management technology. Throughout its duration, this course will offer numerous examples of how to apply "fill rate concepts"; "material handling and storage methods"; "logistics storing and tracking procedures"; and, "order cycle time techniques". Inventory forecasting, supply & demand management, and inventory planning are stressed within the curriculum and cases.

BUS 443 Lean Logistics — 3 credits

Prerequisite: None

This course provides a fundamental understanding of lean applications toward inbound and outbound logistics networks, and the role of leadership to develop corporate logistics strategy. The curriculum is built to enable students to competently utilize professional lean logistics methods and techniques, including identification of areas of waste, ability to decrease inventory, and increase logistics throughput. This course will offer numerous examples of how to apply "lean logistics thinking"; "total logistics cost"; "logistics demand patterns"; and, "logistics planning-operational bridging techniques". Cross-functional logistics teamwork, logistics operational strategy, logistics functions, inventory reduction, and operational logistics networks are stressed within the curriculum and cases.

BUS 450 Operations Strategy — 3 credits

Prerequisite: BUS 425 Operations Management or equivalent

Production management is crucial for achieving efficiency in manufacturing and service industries in today's marketplace. Students will explore the connections between various business activities and processes which impact production. Some of these areas include the organization's ability to meet product specifications, adhere to contractual requirements, schedule deliverables, and effectively utilize available resources to attain profitability. Students will study the influences on production outcomes, with an emphasis on facilities layout, capacity management, process analysis, quantitative work measurement, and production control. The course will enhance students' understanding of production activities, processes, and systems by investigating business tools for effective production management.

BUS 452 Business Leadership — 3 credits

Prerequisite: None

This course will examine the differences and continuities between management and leadership, and also explore the current theories and styles in contemporary leadership thought, such as the more recent interest in servant leadership. Evaluating the skills and tools needed by the effective business leader, we will also assess leadership in context and examine the important role of strategic leadership in the management of change in a world that is increasingly volatile, uncertain, complex, and ambiguous.

BUS 453 Recruitment and Selection — 3 credits

Prerequisite: None

This course provides an in-depth study for the human resources practitioner to the legal, practical, and successful human resources strategies used by domestic and international companies in today s global economy. Students will examine best practices in recruitment and selection for organizations derived from legislation, management theory and practice and social science research. It covers the staffing activities practiced in all types of organizations. Particular emphasis will be placed upon cases analyses and business applications. This course also includes correct planning of job interviews and interview routine. Students will learn different types of job interviews and their proper use in practice, the use of assessment centers for selection of new employees, psychological testing as well as other methods of selecting new employees.

BUS 454 HR Analytics — 3 credits

Prerequisite: None

You will investigate the complex field of Human Resource (HR) analytics, including how decision making in organizations is facilitated or impeded by existing information architecture and processes, methods for improving an organization's analytical capabilities, and facilitating analytics technology implementations. A major focus of the course will be on the use of human resource information systems (HRIS) for collecting and analyzing human resource data. Students will learn how to apply analytical processes and technologies to enable strategic decision making by an organization's leaders. In addition, students will learn how to improve organizational effectiveness through the use of human resource technology. Both enablers and barriers to effective deployment of HR analytics technologies will be discussed, as well as issues related to data integrity and data governance. You will be challenged to apply an HR analytics framework to a robust healthcare organization case study, developing a combination of descriptive and predictive measures.

BUS 460 Market Research — 3 credits

Prerequisite: None

This course examines the systematic design, collection, analysis, and reporting of data relevant to the marketing function within the organization. It specifically addresses the growing role that technology plays in predicting consumer behavior, marketing trends, addressing marketing problems, and the development of new products and services.

BUS 490 Integrated Business and Management Assessment BPB — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This is a capstone course in the Bachelor of Professional Studies (BPS) in Business and Management. Students will analyze complex management situations to make strategic decisions related to process improvement.

BUS 499 Strategic Management Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This capstone course is a culminating course that allows students to integrate concepts, principles, and methods from all fields of business. Students will draw on their foundational core business knowledge and professional competencies to solve business problems typically found in the real-world. The competencies for this course were developed by faculty and industry experts and validated by industry advisors to ensure the goals of the course are aligned with job market requirements. The business simulation will incorporate the program knowledge and competencies acquired in accounting, finance, operations, information technology, marketing, management, diversity/inclusion, and business ethics, Additionally, the simulation and class readings and resources are designed to foster students' strategic thinking and strategic management decisions. In so doing, additional discussion and writing assignments will highlight business writing, critical thinking, adaptive performance, and business communication. Throughout this class, students will be expected to integrate their learning across the business curriculum, evaluate their individual strengths and weaknesses, and develop an action plan to ensure their life-long learning and adaptability in the business environment.

CHE 101 General Chemistry I — 3 credits

Prerequisite: MAT 114 Intermediate Algebra or MAT 116 Precalculus Algebra or MAT 120 Precalculus

General Chemistry examines topics including chemical nomenclature, measurement, states of matter, the atom, chemical bonding, solutions, stoichiometry, and thermochemistry, and how these apply in the world around us. The purpose of this course is to introduce you to the world of chemistry which covers such topics as the structure of the atom and the basic physical laws that govern matter. You will learn about the processes chemists and scientists use to determine the composition and nature of matter.

CHE 101L General Chemistry Laboratory I — 1 credit

Prerequisites: CHE 101 General Chemistry I may be taken concurrently with CHE 101

The purpose of this course is to learn how to apply the scientific method to the study of various chemistry topics and to gain experience using a formal scientific experimental process with analysis and calculations to mirror the research and experimentation used in the field of chemistry.

CJ 101 Introduction to Criminal Justice — 3 credits

Prerequisite: None

This course is an introductory examination of the American criminal justice system with an understanding of its social and institutional context, unique structure, and functioning. The course provides an overview of the foundations and components of the criminal justice system, including (substantive and procedural) criminal law, police, courts, and corrections. Emphasis will be placed on the criminal justice process itself and how the various institutions of criminal justice interact. Key issues will be addressed such as individual rights versus public order, defining and measuring crime, knowledge of criminal law, and the challenges, issues, and limitations facing the police, the courts, and the rehabilitation system—within the context of our U.S. Constitution. Different aspects and stages of this process will also be explored.

CJ 110 Introduction to Law Enforcement — 3 credits

Prerequisite: None

This course examines the history, evolution, roles, legal foundations, and challenges faced by contemporary law enforcement. The structure of law enforcement agencies, personnel, and administration will be discussed. Emphasis will be placed on the functions, responsibilities, and public accountability of law enforcement within American society, as well as career opportunities and alternatives in the field of law enforcement.

CJ 120 Introduction to Corrections — 3 credits

Prerequisite: None

This course covers the history, organization, and functions of corrections within the criminal justice system, and emphasizes the evolution of corrections for the rehabilitation of offenders. Topics covered include the various forms of corrections, alternatives to incarceration, types of inmates and their issues, and the future of correctional systems in American society.

CJ 228 Multicultural Issues in Criminal Justice

Prerequisite: None

This course focuses on issues relating to the challenges presented to law enforcement officers and agencies by increasingly diverse communities and work forces. It places these complex dynamics in social and historical context and points to skills and strategies for police officers and agencies to better understand and communicate with those who are different because of gender, sexual orientation, race, ethnicity, religion, or culture. Ultimately it is the goal of this course to present a clear understanding of the highly globalized, multicultural country we live in as well as ways to make law enforcement more cohesive among the many cultures they will encounter.

CJ 256 Criminal Justice Administration — 3 credits

Suggested Prerequisite: CJ 101 Intro to Criminal Justice or equivalent

This course provides a comprehensive discussion of criminal justice administration through the integration of relevant theories, research findings, and the application of best practices within criminal justice organizations. Included in this course are the basic concepts of an organization, management, and the criminal justice system's environment; issues regarding communication, motivation, leadership and job design. Additionally, the areas of group behavior and processes within criminal justice organizations regarding occupational socialization, power and political behavior, organizational conflict and effectiveness, decision-making, and change and innovation will be covered.

CJ 265 Criminal Procedure and Evidence — 3 credits

Prerequisite: None

This course provides a comprehensive review and in-depth analysis of the rules of evidence and criminal procedural law in the United States. Students will analyze case law which interprets the constitutional guarantees afforded by the 4th, 5th, 6th, 8th and 14th Amendments, and the admissibility of evidence in court proceedings. Particular emphasis is placed upon arrest, search and seizure, confessions and admissions, the privilege against self-incrimination, the right to counsel, the exclusionary rule and its exceptions, burden of proof, and procedural due process.

CJ 298 Criminal Justice Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The capstone course is intended as the last course for students in the criminal justice major. Students must have completed INL, WER and their required criminal justice coursework prior to taking this course. Also, a student must be within 9 credits of degree completion and obtain academic advisor approval to register.

The capstone course is designed to allow learners the opportunity to coalesce what they have learned about criminal justice throughout the program. Learners will analyze various aspects of the criminal justice system and apply their knowledge to discuss, generate, and propose solutions regarding technical, legal, ethical and demographic issues that may arise in this field.

CJ 301 Juvenile Delinquency and Justice — 3 credits

Prerequisite: None

This course explores the judicial processes employed in handling minor criminal offenders; those generally under the age of 18 years. These include arrest, legal guardian responsibilities, sealed court records, case adjudication, sentencing and juvenile corrections. Also covered are the biological, psychological, and sociocultural aspects of delinquency and its causes, potential deterrence and rehabilitation modalities.

CJ 315 Gangs in America — 3 credits

Suggested Prerequisite: None

Gangs continue to scourge the American criminal justice system. Since the 1990s street gangs have multiplied in number and are no longer simply an inner-city problem. The nationwide effort to manage this enigma is far reaching beyond just criminal justice professionals. The problem is a complex one that is far reaching into the homes of every citizen in every community. This course is designed to assist students in developing an understanding of what a street gang is, provide an overview of the historical and contemporary street gang, and examine efficacy of some past and current methods used to address their influence. Particular attention will be devoted to gang types, diversity, theoretical explanations as well as an analyze the responses, intervention and prevention strategies, and public policy issues.

The content in this course is mature and may be disturbing. It should be given serious consideration and treated with due diligence.

CJ 324 Criminology 3 credits

Prerequisite: None

This course provides an in-depth study of the nature and causes of crime and criminal behavior. Using a multidisciplinary approach, the course focuses on criminal topologies and criminological theories. Topics range from crime causation to the extent of crime, victimization, and social and psychological theories. Learners will address various types of criminality such as violence, property crimes, and public offenses, as well as the application of these theories to criminal justice policies and procedures.

CJ 330 Judicial Process 3 credits

Prerequisite: None

This course explores the structure of the United States' court system, how it operates and what it does; in essence, the functions and processes of the American judicial system. Civil and criminal trial courts and appellate courts and processes will be discussed, as will alternative dispute resolution mechanisms. We will also look at why courts function in certain ways, looking at the how the various actors influence the courts, particularly those involved in the judicial selection process and the judges themselves. Finally, we will engage in an evaluation of judicial process and the court system in the U.S.: its positives and negatives; comparison with court systems in other countries; and proposals for change.

CJ 365 Police and the Community 3 credits

Prerequisite: None

This course offers an in-depth examination and analysis of the relationship and interactions between American law enforcement and the communities they serve. Many aspects of policing are explored at intermediate and advanced levels, to include patrol, community policing, diversity issues, and other current issues and controversies in municipal policing.

CJ 380 Ethics in Criminal Justice

Prerequisite: None

Examines ethical issues specifically related to the criminal justice profession. Issues include professional communications including government regulation and policy, free speech, client/victim/investigative privacy, accuracy in media and the impact of science and technology on communications.

CJ 432 Drugs and Crime 3 credits

Prerequisite: None

This course analyzes the historical, political, economic, social, psychological, and cultural factors that influence the use of illicit, misused, or abused substances. The coursework will include a study of the influence these factors have on the social and legal responses to drug use, including legislation, law enforcement, drug courts, and associated policies and procedures.

CJ 498 Criminal Justice Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Criminal Justice Capstone is the final course where students will demonstrate their ability to synthesize and apply all they have learned in the criminal justice program. Students will assess the interactions of police, courts, and corrections through the lens of a wrongful conviction case. Students will utilize criminological theories and legal standards to evaluate the outcomes of the case and will analyze the impact on all aspects of the criminal justice system. Students will create policy solutions to support diversity and equity and meaningful criminal justice reform.

COMM 125 Public Speaking — 3 credits

Prerequisite: None

This course helps students to develop their skill as public speakers and oral communicators. Designed to provide students with a supportive environment where they can overcome the anxiety they may feel about public speaking, the class emphasizes techniques and practices for effective speech construction and delivery. Students will also develop critical thinking and listening skills. Students taking this course will need access to recording equipment for the purpose of creating podcasts, voiced-over PowerPoint presentations and videotaped speeches.

COMM 210 Interpersonal Communication — 3 credits

Prerequisite: None

This course introduces students to the skills and theories of interpersonal communication, which are essential for building and maintaining successful personal and professional relationships. Students will evaluate the complicated interactions of psychological, social and cultural forces involved in interpersonal exchanges, while learning about personality traits, the perception of self and others, listening, managing conflict, and verbal and non-verbal communication.

COMM 423 Leadership and Team Building — 3 credits

Prerequisite: None

This course examines leadership and team building from the standpoint of communication theory. Students will learn about leadership theory and practice successful leadership models. Another major focus of the class is teamwork. Teamwork depends on different, complementary points of view to seize hidden opportunities, overcome difficult obstacles, and achieve challenging objectives to reach a common goal.

CS 311 Software Design and Architecture — 3 credits

Prerequisite: IT 211 Fundamentals of Programming

This course explores the fundamental principles and contemporary practices shaping the architectural landscape of software development, emphasizing the integration of cybersecurity practices and the societal impact of design choices. By surveying an array of architectural structures and styles, and design patterns to gain insights into their applications, students learn techniques for crafting software systems that are modular, maintainable, and scalable, strengthened by cybersecurity practices. This course teaches students to analyze the societal implications of design decisions, fostering an understanding of the ethical dimensions and responsibilities associated with software architecture.

CS 313 Software Requirements Engineering and Management — 3 credits

Prerequisite: IT 211 Fundamentals of Programming

This course focuses on the user-centered design process including gathering, analyzing, and documenting software requirements with a strong emphasis on communication skills, change documentation, and project usability. The curriculum explores modeling requirements using industry-standard tools such as UML, ensuring students acquire proficiency to communicate complex software specifications to diverse stakeholder groups. The course places significant emphasis on managing changing requirements throughout the software development process, equipping students with the skills to document alterations. Students master communications techniques for skillfully eliciting requirements from stakeholders, as well as refine their technical acumen and cultivate essential skills in effective communication, change documentation, and optimizing project usability for successful software development outcomes.

CS 315 Self-Reliant Language Learning — 3 credits

Prerequisite: IT 211 Fundamentals of Programming and IT 313 Intermediate Programming

This course explores the fundamental concepts and paradigms that underlie programming languages. The course models the process of language learning through the acquisition of C+. Next, students demonstrate their language learning skills by autonomously selecting a new language to learn, articulating the industry value in learning it, and creating a product that effectively demonstrates their successful acquisition of the chosen language. Students gain the approaches and skills necessary to learn new languages independently and leverage tools such as artificial intelligence to support the process.

CS 330 Data Structures, Algorithms, and Their Societal Impact — 3 credits

Prerequisite: MAT 205 Discrete Structures

This course investigates the fundamental principles of organizing and processing data, expanding beyond the traditional boundaries to incorporate cutting-edge applications in artificial intelligence (AI), social impact, and ethics. The curriculum covers a range of essential data structures, including

arrays, linked lists, trees, and graphs, providing students with a solid foundation for data organization and manipulation. This course studies advanced algorithm design, emphasizing the strategic analysis of algorithmic complexity. Students gain proficiency in crafting efficient algorithms tailored for real-world problem-solving scenarios, emphasizing the responsibility of technologists in shaping a socially responsible and inclusive technological landscape.

CS 331 Foundations of Data Science — 3 credits

Prerequisite: CS 330 Data Structures, Algorithms, and Their Societal Impact

This course focuses on the user-centered design process including gathering, analyzing, and documenting software requirements with a strong emphasis on communication skills, change documentation, and project usability. Students will master communications techniques for skillfully eliciting requirements from stakeholders. The curriculum explores modeling requirements using industry-standard tools such as UML, ensuring students acquire proficiency to communicate complex software specifications to diverse stakeholder groups. The course places significant emphasis on managing changing requirements throughout the software development process, equipping students with the skills to document alterations. Students refine their technical acumen and cultivate essential skills in effective communication, change documentation, and optimizing project usability for successful software development outcomes.

CS 333 Statistical Methods for Data Science — 3 credits

Prerequisite: MAT 201 Statistics

This course offers a comprehensive exploration of statistical concepts and techniques crucial for mastering the intricacies of data science. Key topics include hypothesis testing, probability distributions, regression analysis, and advanced statistical modeling. Emphasizing the practical integration of statistical theory with data science applications, this course equips students with the skills to analyze complex real-world datasets, draw meaningful insights, and make informed decisions within the field of data science, and formulate well-structured questions conducive to effective statistical analysis using tools such as SPSS.

CS 350 Network and Cloud Security: Principles and Practices — 3 credits

Prerequisites: IT 250 Business Data Communications and IT 380 Overview of Computer Security.

This course provides a study of security techniques for computer networks, with a specific emphasis on cloud environments. Topics include foundational network security principles, access controls, encryption, identity management, and strategies for cyber-attack prevention, all within the framework of established security policies. The course combines theoretical knowledge and hands-on exercises, preparing students to secure traditional networks, cloud infrastructures and hybrid deployments effectively. Upon completion, students possess skills aligned with industry standards, enabling them to develop and implement security policies that address the complexities of networking and cloud security.

CS 351 Cloud Computing Foundations 3 credits

Prerequisite: IT 250 Business Data Communication

This course introduces the foundational principles of cloud computing. Students will explore diverse cloud deployment models, investigate the complexities of virtualization, and develop a nuanced comprehension of cloud service models such as Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). The course considers the impact of large data centers on society and the environment. This course provides students with practical experience configuring popular cloud platforms. By engaging in real-world scenarios, students will develop the skills needed to navigate and harness the capabilities of cloud computing environments effectively. Students will examine the unique challenges and security concerns related to securing data, applications, and infrastructure in a cloud environment. Upon completion of the course, students are equipped to leverage cloud computing technologies, implement secure cloud solutions, and contribute to the evolving landscape of networking and cloud computing.

CS 353 Network Design and Management: Integrating Cloud Technologies 3 credits

Prerequisite: CS 350 Network and Cloud Security: Principles and Practices

This course explores the fundamental principles of network and cloud computing, emphasizing the considerations that architects and engineers must bear in mind throughout the lifecycle of cloud deployments and networks. It provides an understanding of essential topics in cloud computing, focusing on planning, design, and implementation. Students will acquire proficiency in network management tools and applications and gain insights into interoperability, cloud computing, and virtualization from a computer science perspective. The course focuses on the role of cloud computing in network system design and examines the broader impact of design choices on the efficiency, security, and scalability of network infrastructures. Within the course, students analyze the intersection of traditional network design principles with emerging technologies such as cloud computing and software defined networking, gaining insights into how design choices can shape the security and performance of hybrid network systems in the dynamic context of evolving technological landscapes.

CS 371 Machine Learning Foundations: Responsible AI Development 3 credits

Prerequisite: CS 315 Self-Reliant Language Learning

This course examines machine learning, emphasizing supervised, unsupervised, and reinforcement learning algorithms. Students will gain proficiency in implementing and interpreting these algorithms. This course introduces fundamental concepts in ethical AI, transparency, bias mitigation, security, accountability, and social impact. Students engage in discussions on accessibility and inclusivity in AI development, establishing a practical and ethical foundation for responsible AI development.

CS 373 Natural Language Processing (NLP) and Emerging Applications 3 credits

Prerequisites: CS 315 Self-Reliant Language Learning, and PSY 340 Psychology of Learning

This course immerses students in advanced Natural Language Processing (NLP) techniques, specializing in tasks such as sentiment analysis, language translation, and information extraction. Going beyond fundamental concepts, students explore the forefront of NLP applications, including innovative uses in technologies like chatbots and virtual assistants. Students uncover the seamless integration of NLP with cutting-edge advancements, empowering them to excel in the dynamic landscape of language-based technologies. Students attain mastery in the intricate nuances of NLP, refining their expertise in this transformative field.

CS 401 Theory of Computation and Computational Ethics 3 credits

Prerequisite: CS 330 Data Structures, Algorithms, and their Societal Impact

This course explores the capabilities and limitations of computing devices. With a focus on ethical considerations and societal implications, the course scrutinizes theoretical foundations of computational theory, spanning from finite automata to Turing machines. Students will navigate the intricate landscape of computational models, critically assessing the models' ethical implications and practical constraints across computing scenarios. By intertwining theoretical depth with real-world relevance, students gain an understanding of the intricate relationship between formal models of computation and their broader implications on ethics and society.

CS 405 Human-Computer Interaction (HCI): AI Integration and Social Impact 3 credits

Prerequisites: CS 330 Data Structures, Algorithms, and their Societal Impact, and CS 315 Self-Reliant Language Learning

This course in Human-Computer Interaction (HCI) focuses on the integration of Artificial Intelligence (AI), social impact, and ethical considerations. It extends beyond traditional HCI boundaries, recognizing that while humans shape computers, technology, in turn, shapes humans and society. Students examine AI integration within HCI, societal impacts, and ethical dimensions, gaining a comprehensive understanding of these dynamic relationships. They explore the intersection where intelligent systems and human users meet, emphasizing the reciprocal impact between technology and humanity. The course immerses students in the fundamental principles, methodologies, and design considerations at the convergence of HCI and AI, while navigating the ethical dimensions of technological innovation. By the end of the course, students are able to define HCI principles, analyze AI applications within HCI, and evaluate the social and ethical implications of technology.

CS 411 Software Project Management — 3 credits

Prerequisites: IT 390 Project Management, and CS 313 Software Requirements Engineering and Management.

This course examines methodologies, tools, and processes essential for orchestrating successful software design and adoption projects, emphasizing ethical guidelines and policies. Through applied case study techniques, students will enhance their software development planning and management skills. The course addresses essential aspects of project management, encompassing tasks such as defining project scope, scheduling, cost estimation, quality assurance, risk management, communication strategies, procurement oversight, securing stakeholder buy-in, conducting post-project assessments, and conscientiously evaluating the social impact of software projects. Upon completion, students are equipped to confidently lead and contribute to successful software projects, demonstrating an acute awareness of the broader societal implications of their projects, and guided by ethical considerations and policies.

CS 415 Software Testing and Quality Assurance — 3 credits

Prerequisites: CS 313 Requirements Engineering and Communication for Software Development, and CS 315 Self-Reliant Language Learning

This course examined advanced techniques for rigorously testing software functionality, reliability, and performance. Students will explore a diverse array of testing techniques, automated testing tools, and strategies for identifying and addressing bugs effectively. Through the integration of concepts of software penetration testing, students will gain proficiency in identifying and addressing vulnerabilities. Additionally, the inclusion of bug bounty strategies empowers students to adopt proactive approaches in uncovering and mitigating potential issues. Students master the foundations of software testing and understand emerging trends in software development through hands-on application and real-world scenarios.

CS 417 Software Engineering and Practice — 3 credits

Prerequisite: CS 313 Requirements Engineering and Communication for Software Development

Software Engineering and Practice immerses students in the methodologies and best practices essential for effective software development. Encompassing the entire software lifecycle, the course covers requirements analysis, design principles, testing methodologies, and quality assurance. With a focus on cultivating leadership skills in managing the software lifecycle process, students engage in hands-on projects, applying software engineering concepts to real-world scenarios. This experience fosters students' understanding of industry-standard software engineering practices while simultaneously developing effective project leadership capabilities.

CS 419 Software Maintenance and Evolution — 3 credits

Prerequisite: CS 313 Requirements Engineering and Communication for Software Development

This course explores maintaining and versioning software systems throughout their lifecycle, acknowledging the business reality where optimal outcomes are not always guaranteed. Incorporating a forward-looking approach, students assess the implications on business resources and continuity, as well as learn how to adapt when ideal circumstances are not present. Beyond foundational principles, students will learn advanced techniques for code refactoring, version control, software documentation, and the adept management of software upgrades and updates. Students will anticipate, communicate, and adapt to emerging trends that may influence the maintenance and evolution of software systems. By bridging the gap between traditional practices and future technologies, students are prepared to navigate the dynamic landscape of software development, change, and contribute to the longevity and security of software systems.

CS 435 Ethical Data Wrangling and Preprocessing — 3 credits

Prerequisite: CS 331 Foundations of Data Science

This course immerses students in the ethical preparation and refinement of raw data for analysis, addressing both personal and social bias considerations. Students explore techniques for data transformation, handling missing values, and effectively managing outliers. Emphasizing best practices, the course ensures data quality and integrity while underscoring the ethics of responsible and conscientious data handling. Students acquire essential technical skills and develop a deep understanding of the ethical dimensions of data science, preparing them to navigate the evolving landscape of responsible data analysis.

CS 437 Predictive Analytics and Time Series Forecasting — 3 credits

Prerequisite: CS 331 Foundations of Data Science

This course combines the power of predictive analytics with specialized techniques designed for analyzing time-dependent data. Students learn to uncover patterns, trends, and variations within time series datasets, equipping them with the skills to make accurate forecasts. The course offers hands-on experience in applying an array of statistical and machine learning models to predict future outcomes for real-world case studies. The course integrates a forward-looking perspective on the future of Predictive Analytics, and the evolving landscape of artificial intelligence (AI) in the field. Through a blend of theoretical insights and practical applications, students navigate the intersection of traditional predictive analytics and the transformative impact of AI on forecasting methodologies.

CS 439 Big Data Analytics — 3 credits

Prerequisite: CS 331 Foundations of Data Science

This course explores advanced tools and techniques tailored for large-scale data processing and analysis, surpassing traditional analytics approaches. Students learn to manipulate vast and complex datasets prevalent in dynamic industries such as social media, e-commerce, and healthcare. They will also navigate distributed computing frameworks like Hadoop and Spark and gain proficiency in harnessing the power of visualization to extract meaningful insights from big data. The course empowers students

to process, analyze, and visualize massive datasets, equipping them with a holistic understanding of big data analytics. Students engage in the hands-on exploration of innovative solutions for extracting knowledge from the ever-expanding world of big data, ensuring they are well-prepared to meet the challenges of industries driven by data at scale.

CS 453 Cloud Networking and Storage Strategies — 3 credits

Prerequisite: CS 350 Network and Cloud Security: Principles and Practices

This course explores networking concepts and storage solutions tailored for cloud environments, focusing on the interdependencies of nation-states and multinational cloud infrastructures. Students examine the intricacies of virtual networks, load balancing, content delivery networks (CDNs), and advanced cloud storage technologies. Emphasizing the optimization of network performance and the effective management of cloud-based storage resources, the course equips students with practical skills for designing, implementing, and maintaining robust cloud networking and storage infrastructures. It addresses the challenges and opportunities of working in a global system, preparing students to navigate the complexities of cloud networking and storage on a global scale while considering the impact of varying laws and policies on nation-states and multinational cloud interdependencies.

CS 455 Virtualization and Containerization — 3 credits

Prerequisite: CS 350 Network and Cloud Security: Principles and Practices

This course explores virtualization technologies and containerization platforms. Throughout the course, students will explore fundamental concepts such as hypervisors, virtual machines, and container orchestration tools like Docker and Kubernetes. An emphasis is placed on gaining practical skills, through hands-on exercises to manage virtualized and containerized environments effectively. This course explores security considerations and best practices for safeguarding data and applications in these dynamic environments. Students evaluate how emerging trends and innovations in virtualized and containerized environments contribute to societal transformations, addressing ethical considerations and implications, ensuring they are well-prepared to navigate the evolving landscape of these technologies.

CS 475 Ethics, Society, and Law in Artificial Intelligence — 3 credits

Prerequisite: CS 371 Machine Learning Foundations: Responsible AI Development

Students explore the ethical considerations and societal impacts inherent in artificial intelligence (AI) technologies. Beyond the technical aspects, students critically examine the broader implications of AI on individuals and communities. Students engage in topics such as bias and fairness in AI algorithms, transparency, accountability, and the responsible development and deployment of AI systems. Emphasis is placed on understanding the evolving national and global legal landscape of AI technology policy. Additionally, students explore the unintended consequences of AI and why it is necessary to integrate diversity, equity, and inclusion principles into ethical frameworks. By examining the intersection of ethics, technology, and the law, students develop a robust foundation for making informed decisions in the dynamic and evolving field of AI. As future leaders and creators of AI in the 21st century, students gain a unique perspective that shapes their ethical approach to AI development and its impact on society.

CS 477 Visionary Machines: Exploring Computer Vision Technologies 3 credits

Prerequisite: CS 371 Machine Learning Foundations: Responsible AI Development

This course immerses students in the field of computer vision, where machines learn to interpret real-world visual inputs. Covering foundational principles like image processing and advancing techniques such as feature extraction, object recognition, and image classification, students will build a practical skill set around computer vision. Students will gain expertise in tasks like object detection and image segmentation, applying and analyzing computer vision algorithms. The course addresses the crucial issue of bias in visual recognition. Students explore ethical considerations and societal impacts associated with computer vision applications, emphasizing the importance of implementing guard rails to navigate the responsible use of this technology, particularly in monitoring contexts.

CS 479 Responsible AI: Neural Networks and Deep Learning 3 credits

Prerequisites: CS 371 Machine Learning Foundations: Responsible AI Development, and PSY 340 Psychology of Learning

This course examines the theory and application of artificial neural networks, with a focus on deep learning architectures. Students explore fundamental concepts such as backpropagation, activation functions, convolutional neural networks (CNNs), and recurrent neural networks (RNNs). Emphasizing ethical considerations and responsible AI practices, the course guides students in understanding the personal and societal impact of neural networks and the importance of ethical decision-making in their application. Through hands-on experiences, students design and train neural networks for various tasks, gaining practical skills essential for navigating the complex landscape of deep learning.

CS 495 Computer Science Capstone 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Computer Science Capstone course offers students a unique opportunity to synthesize and apply the skills, knowledge, and abilities acquired throughout their academic journey in computer science. Engaging in a substantial project, students tackle real-world challenges within their specific area of concentration. By leveraging team feedback groups, students refine their problem-solving and critical thinking skills, master time management techniques, make ethical decisions, implement secure computer science practices, and demonstrate technical expertise to elevate the quality of their individual projects.

CYS 220 Cloud Computing and Virtualization — 3 credits

Prerequisite: None

This course explores the key aspects of cloud technology, focusing on the responsibilities of various parties, governance complexities, delivery issues, cybersecurity, and uptime performance. It covers assessing risks associated with utilizing cloud technologies and applying the CIA Triad. Through lab exercises, students gain hands-on experience with cloud technology, simulating real-world business scenarios. This course also begins to prepare students for the CompTIA Cloud Essentials certification.

CYS 245 Introduction to Cybersecurity — 1 credit

Prerequisite: None

The course provides students with an introduction to the basic and fundamental concepts of cybersecurity from both a technical and managerial perspective. Students will gain insight on common cyber attacks and the techniques for identifying, detecting and defending against cyber security threats. The course will cover the basics of physical, network and web security as well as standards and laws in cybersecurity. The knowledge gained in this course will provide students with a concrete foundation to further master the concepts of cybersecurity.

CYS 260 Governance Legal and Compliance — 3 credits

Prerequisite: None

This course introduces students to the challenges of governance, ethics, legal, and regulatory compliance from the perspective of information security professionals. It covers compliance requirements related to major mandates and laws, including Sarbanes-Oxley, HIPAA, Privacy Act, Gramm-Leach-Bliley Act, Foreign Corrupt Practices Act, and Payment Card Industry Data Security Standards (PCI DSS). Additionally, the course explores the complexities of maintaining compliance and ethical standards in information security. Students learn to navigate these regulations and ethical considerations to ensure effective and responsible information security practices.

CYS 345 Cybersecurity Defense in Depth — 3 credits

Prerequisite: None

This course explores cybersecurity risks and defenses, with an emphasis on major threats to governments and businesses. It begins with a historical overview of cybersecurity, using past lessons to address modern risks and defenses, and forecasts future concerns and necessary protections. Students will engage with real-world scenarios that highlight IT security threats and strategies from both business and government perspectives. The course equips students with the knowledge, skills, and techniques to identify and tackle contemporary cybersecurity threats, and it prepares them for the TestOut Security Pro and CompTIA Security+ certification programs.

CYS 350 Cybersecurity Defense in Depth for the Nuclear Industry — 3 credits

Prerequisite: None

This course focuses on cybersecurity risks and defenses, particularly focused on significant threats to the nuclear industry infrastructure. Starting with a historical overview of cybersecurity, it applies past lessons to current and future threats, equipping students to anticipate and mitigate emerging concerns. The course also examines the evolution of IT security threats and provides insights into specific cybersecurity defenses for the nuclear industry through real-world scenarios that illustrate actual threats and defensive strategies. Students gain the knowledge, skills, and techniques necessary to identify and counteract cybersecurity threats prevalent in the nuclear industry today.

CYS 400 Reverse Engineering — 3 credits

Prerequisites: IT 321 Computer Systems Architecture; and IT 360 Operating Systems

This course covers the fundamentals of reverse engineering in cybersecurity, penetration testing, and malware analysis, highlighting its importance in attack strategies and countermeasures. It also addresses intellectual property protections, such as digital rights management, and examines communication protocols using both static and dynamic techniques. Students learn to use a variety of penetration testing tools to detect network vulnerabilities and reverse engineering tools for malware analysis and code decompilation.

CYS 401 Organizational Information Security — 3 credits

Prerequisite: IT 380 Overview of Computer Security

This course prepares students to recognize information security threats and develop, plan, and communicate policies and practices to mitigate these risks. It covers responding to Security Information and Event Management (SIEM) incidents from a management perspective and addresses the complexities of communicating information security threats to senior management. Additionally, the course explores the essentials of staffing, training, and leading IT staff to protect network infrastructures and safeguard IT assets. By participating in this course, students gain the skills necessary to effectively manage information security within an organization.

CYS 403 Network and Application Security — 3 credits

Prerequisites: IT 250 Business Data Communications; and IT 380 Overview of Computer Security

This course explores the core concepts and models of network and application security, including security models and threats, access control, secure routing and switching, and cryptography for secure communication. Students learn strategies to effectively mitigate security threats. Aligned with industry standards, the course also prepares students for the TestOut Routing and Switching Pro and Cisco CCNA certification programs.

CYS 426 Cyber Attacks and Defenses — 3 credits

Prerequisite: IT 380 Overview of Computer Security

This course introduces students to cybersecurity threats and vulnerabilities, with a focus on software and systems, compliance and assessment, security operations, monitoring, and incident response. It also covers penetration testing, or ethical hacking, as a proactive measure to enhance the security posture of systems and networks. Students learn to assess target systems and networks for vulnerabilities, detect security threats, and recommend and implement defensive, corrective, and preventative measures based on the results of penetration tests.

CYS 450 Security Focused Risk Management — 3 credits

Prerequisite: None

This course provides students with insights, guidance, and best practices in security-focused risk management. Topics include the fundamental principles of security-focused risk management, using a disciplined and standardized approach encompassing risk identification, risk assessment, risk prioritization, and risk prevention or mitigation. By participating in this course, students learn to identify various classes of vulnerabilities, threats, attack vectors, consequences, and mitigation strategies, gaining the knowledge and skills necessary to effectively manage security risks in diverse contexts.

CYS 455 Business Continuity — 3 credits

Prerequisites: IT 380 Overview of Computer Security, and IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course provides comprehensive coverage of security topics within the business environment. It explores methods for physical security, as well as measures involving hardware, software, secure and unsecure protocols, authentication, and processes to prevent unauthorized access. The course emphasizes developing a business continuity plan and a disaster recovery plan, offering crucial strategies to mitigate the impacts of security breaches or disasters. Students learn to identify and assess business continuity and disaster recovery needs, conduct business impact analyses, secure mission-critical resources, and design effective recovery plans.

CYS 456 Securing Mobile and Cloud Computing Environments — 3 credits

Prerequisite: IT 250 Business Data Communications

This course provides a foundation in cloud computing security, introducing students to common terminology, cloud services, security concerns, and solutions for vulnerabilities associated with cloud-based systems. It covers the objectives of the Certified Cloud Security Professional (CCSP) certification, ensuring students acquire the necessary knowledge, skills, and abilities in cloud security design and implementation. By the end of the course, students can apply security principles effectively within a cloud computing environment and demonstrate competence in cloud security architecture, operations, and service deployments.

CYS 465 Cybersecurity Investigation and Case Studies for the Nuclear Industry — 3 credits

Prerequisites: IT 380 Overview of Computer Security, and CYS 350 Cybersecurity Defense in Depth for the Nuclear Industry

This course provides a comprehensive analysis of methods, tools, and best practices for responding to cybersecurity incidents and managing product vulnerabilities in the nuclear industry. Students learn how to form and operate a Computer Security Incident Response Team (CSIRT) and a Product Security Team (PST), emphasizing best practices in conducting cybersecurity investigations. Course content focuses on minimizing potential damage while ensuring proper handling of electronic data collection. Students learn to describe and enhance the incident response process, evaluate regulatory needs, analyze real-world incidents, and create effective incident response plans.

CYS 470 Secure Software Development — 3 credits

Prerequisites: IT 380 Overview of Computer Security, and IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course explores the common causes of software security vulnerabilities in applications and databases and examines lifecycle methodologies for secure software development. Key topics include tools and processes for secure software analysis and review, such as threat modeling, abuse cases, penetration testing, security testing, and static analysis tools. Students learn methods for identifying and preventing common software vulnerabilities, including input validation, buffer overflows, cross-site scripting, and SQL injections, as well as develop plans and procedures for implementing secure software development within an organization, gaining the knowledge and skills necessary to enhance software security practices.

CYS 475 Large Scale Cybercrime and Terrorism — 3 credits

Prerequisite: None

This course explores cyber crime and terrorism within a global context, focusing on large-scale incidents that impact international security. It emphasizes the evolution of cyber crime and terrorism, shaped by globalization and the increasing complexity of decentralized, nation-less terror networks. The curriculum examines how cyber crime and information technology have influenced and sustained these modern terror networks. Additionally, students review emerging trends and potential threats, such as Electromagnetic Pulse (EMP) attacks, and evaluate methods and limitations in confronting large-scale cyber crime and terrorism. This includes advanced data mining techniques employed by the Intelligence Community and the use of Fusion Centers. Students learn to identify and analyze changes in crime and terrorism, understand the role of information technology, and evaluate emerging threats and response methods.

CYS 496 Cybersecurity Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The cybersecurity capstone course explores computer security technologies and principles, emphasizing risk management, access control, authentication, software security, security assessment and testing, and the legal aspects of cybersecurity. Students engage in a final research project that immerses them in real-life cybersecurity scenarios, enhancing their understanding and application of the course material.

ECO 260 Introduction to Microeconomics — 3 credits

Prerequisite: None

Should a manufacturer produce automobiles or ventilators? Should a local government intervene when sugar cane farmers in an area burn stalks to expose cane and the smoke results in a costly rise in asthma treatment among children in a state-run Medicaid program? In this course you will sharpen your ability to understand choices you or others face in a range of personal, professional and public contexts as you are introduced to the framework economists use to compare alternatives faced by individuals, businesses and governments. Governments uniquely make rules. Governments also impose taxes offer incentives and make choices to redistribute wealth, protect, regulate hiring and conditions of work, internet service and air quality. It may surprise you to learn how microeconomic tools introduced in this course can be applied in such diverse contexts to measure and compare relative costs and benefits.

ECO 262 Introduction to Macroeconomics — 3 credits

Prerequisite: None

Do you hear a lot about interest rates? How about negative interest rates? Macroeconomists consider interest rates and other economic variables because interest rates affect activities like hiring and firing of workers (employment) across a whole economy and even worldwide. You might care about interest rates because these affect borrowing costs. Interest rates also affect home and rental pricing and changes in pay on a yearly basis. In this course you will learn how economists measure and forecast economic factors like those mentioned here to assist state, local and federal governments in maintaining services to citizens, price stability and the broadest level of employment possible. You will also learn how powerfully macroeconomic factors affect you directly.

EGR 210 Introduction to Engineering Analysis — 3 credits

Prerequisite: MAT 114 Intermediate Algebra; or MAT120 Precalculus; or MAT 220 Calculus I; or MAT 221 Calculus II

This course introduces the critical role of engineering analysis across various engineering disciplines. It emphasizes a systematic approach to engineering applications, teaching a general analysis procedure that forms the basis for effective engineering analyses. The curriculum also covers effective analysis and communication tools, such as graphs and statistical analyses. Throughout the course,

students employ algebraic (non-calculus-based) methods to analyze mechanics, electrical circuits, thermodynamics, fluid mechanics, and data analysis, including graphing and basic statistics. They develop foundational skills for thorough and accurate engineering analysis, learning methods and processes for utilizing engineering data. Students learn to evaluate engineering situations, define known and unknown variables, establish equation-based approaches, and apply units and unit conversions. This training ensures that students can communicate their findings clearly to both engineering and non-engineering audiences.

EGR 280 Introduction to 3-D Modeling — 3 credits

Prerequisite: None

This introductory engineering graphics course equips students with the skills to create properly dimensioned 2-D sketches and fully dimensioned 3-D parts. Through various projects, students practice creating 3-D models and focus on using and modifying 2-D sketch tools such as line, circle, arcs, rectangle, offset, fillet, chamfer, trim, mirror, move, rotate, copy, scale, stretch, and other commands. They also learn feature commands including extrude, extrude cut, loft, revolve, wrap, helix, swept boss/base (sweep), and hole wizard. Additionally, students build assemblies and produce detailed drawing documentation for manufacturers. The course covers designing mechanical components to master the basics of SOLIDWORKS software. Note, students registering for this course are assessed a course resource fee.

EGR 290 Advanced 3-D Modeling — 3 credits

Prerequisite: EGR 280 Introduction to 3-D Modeling

Building from the previous 3-D modeling course (EGR 280), this course covers the process of designing mechanical components (parts and assemblies) using SOLIDWORKS. This course begins with applications of equations and global variables and progresses towards enhancing students' ability to use SOLIDWORKS common tools and features such as multi-bodies, sheet metal, 3-D sketch, and weldments. Advanced projects challenge students and expand their skills to combine and apply mechanical design principles with computer design techniques and capabilities.

Students registering for this course will be assessed a course resource fee.

EGR 310 Engineering Ethics — 3 credits

Prerequisites: None

This course is designed to introduce undergraduate engineering students to the concepts, theory and practice of engineering ethics. It will allow students to explore the relationship between ethics and engineering and apply classical moral theory and decision making to engineering issues encountered

in academic and professional careers. A deep treatment of the ethical issues facing an engineer practicing in today s business and cultural environment. This course will present the engineering code of ethics and an engineer s responsibility to guard the public s health, welfare, and safety. In that context, competing ideologies will be identified that create conflicts in choice. Several case histories will be explored to identify conflicting ideologies. The goal is to help improve ethical reasoning and critical thinking skills through an examination of ethical theory, codes of ethics and contemporary ethical issues in engineering, technology and society.

ELEC 152 Circuit Theory I — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, and MAT 220 Calculus I

This course provides an introduction to the various principles of electrical circuit analysis. Topics include the study of voltage, current and resistance relationships, energy and power, analysis of circuits in different configurations, theorems for the analysis and simplification of circuits, capacitance, inductance, and transformers. This course contains a lab component.

ELEC 153 Circuit Theory II — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, and ELEC 152 Circuit Theory I

This course will introduce the principles and applications of alternating current circuits. Topics covered include RC and LC transient response, the sine wave, reactance, complex algebra and phasors, impedance, Kirchoff's Law and network theorems (Norton's, Thevenin's, and superposition) in AC circuits, power in AC circuits, series and parallel impedances, impedance networks, filters, and resonance. The topic of engineering and technology standards is also discussed. This course contains a lab component.

ELEC 160 Electronics I — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, and ELEC 153 Circuit Theory II

This course is an introduction to the study of semiconductor devices such as p-n junction diodes, bipolar junction transistors (BJT), field-effect transistors (FETs,) and metal-oxide-semiconductor field-effect transistors (MOSFETs), which enable students to perform analysis of direct current (DC) transistor biasing; small-signal and multi-stage amplifiers using BJTs, FETs, and MOSFETs; and frequency response of single and multi-stage transistor amplifiers. This course contains a lab zcomponent.

ELEC 161 Electronics II — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, and ELEC 160 Electronics

This course overviews the analysis and application of advanced electronic circuits. Topics include differential amplifiers, stage gain in decibels, input and output impedances, linear integrated circuit (IC)

operational amplifiers, frequency response, Bode plots, active filters, digital-to-analog and analog-to-digital circuits, oscillators, and high frequency amplifiers. The course emphasizes troubleshooting of test circuits and analysis based on computer simulation. This course contains a lab component.

ELEC 201 Digital Electronics — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory, ELEC 153 Circuit Theory II, ELEC1 60 Electronics I, and ELEC 161 Electronics II

This course will introduce the principles and applications of digital circuits. Topics include number systems, binary arithmetic, logic gates, Boolean algebra, logic families, combinational and synchronous logic circuit design, logic minimization techniques (Karnaugh maps, Quine-McCluskey algorithm), counters, shift registers, encoders and decoders, multiplexers and demultiplexers, and interfacing. This course contains a lab component.

ELEC 202 Microprocessors — 4 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, and ELEC 201 Digital Electronics; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course presents the principles and applications of microprocessors, including hardware and software, interfacing, assembly language programming, and microprocessor-based systems. It presents 8-, 16-, and 32-bit microprocessor technology and features. This course contains a lab component.

ELEC 210 Programmable Logic Controllers — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, LEC 161 Electronics II, ELEC 201 Digital Electronics, and ELEC 202 Microprocessors; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course introduces students to programmable logic controllers (PLCs) and their applications. Topics include PLC architecture, relay logic and ladder logic programming, PLC timers and counters, troubleshooting, process control and networking, and industrial applications. This course contains a lab component.

ELEC 306 Advanced Digital Design — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, ELEC 201 Digital Electronics, and ELEC 202 Microprocessors; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course presents systematic design methods for synthesizing sequential digital circuits using hardware description language (HDL), while details of its associated languages too are brought to

familiar ground. Specification, modeling, and design principles of sequential systems, as well as design implementation and testing using programmable logic devices and Computer Aided Design (CAD) tools are studied. The course includes laboratory experiments and a group project.

ELEC 307 Microcontrollers — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, ELEC 201 Digital Electronics, ELEC 202 Microprocessors, and ELEC 210 Programmable Logic Controllers; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course builds on the student's background from first courses in logic design and microprocessors. This course discusses the architecture used in the design of PIC microcontroller-based systems, followed by assembly language programming, interfacing, and communications. Interrupts, timers, data converters, and embedded systems design are also covered. The course includes laboratory experiments and a group project.

ELEC 321 Control Systems — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, ELEC 201 Digital Electronics, and ELEC 202 Microprocessors; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This is an introductory course on continuous linear control systems covering analysis, design, and practical applications. Modeling first and second-order dynamic physical systems with feedback control, transient response and steady-state analyses, Routh-Hurwitz stability criteria, roles of feedback in controlling steady-state errors, frequency response design methods (Bode, Nyquist), etc. are covered. The course emphasizes the application of established methodology with the aid of examples, calculators, and computer programs such as MATLAB.

ELEC 331 Digital and Analog Communications — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, and ELEC 201 Digital Electronics; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This is a technology focused course covering the principles and applications of analog and digital communication circuits. Analysis of amplitude, frequency, and phase modulation and demodulation, transmitters and receivers, digital communication techniques, coding and multiplexing, network communications and protocols, transmission lines and media, wave propagation and television, optical fibers, wired and wireless communications, communication test equipment and troubleshooting, and communication standards are covered. This course contains a lab component.

ELEC 345 Electric Machines — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, and ELEC 153 Circuit Theory II

This course covers the principles and applications of direct current (DC) motors and generators, ideal transformers and three-phase transformers, three-phase induction machines, equivalent circuit of the induction motor, synchronous generators and motors, and motor speed control.

ELEC 350 Power Electronics — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, and ELEC 201 Digital Electronics

In this course you will learn about various circuit techniques used in power electronics. Topics include: Characteristics of power transistors and diodes, switching-mode DC-DC converters, including buck and boost converters and regulation of DC-DC converters by PWM, rectification using diodes, power factor correction, switch-mode DC power supplies, DC-AC inverters, and applications of power electronics in motor drives, UPS, and power systems.

ELEC 360 Generation and Transmission of Electric Power — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, ELEC 201 Digital Electronics, and ELEC 202 Microprocessors; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course includes comparing the technologies of power generation from hydro, thermal, nuclear, and wind energy sources; introducing transmission line theory-based analysis of power distribution line and its equivalent circuits; applying components in power distribution systems including substations, protection, and low voltage distribution; and calculating the cost of electricity. The course also includes an introduction to direct current transmission and optimal power-flow analysis, as well as an assessment of solid-state controllers for power flow and harmonics. Finally, the course includes a software-based project wherein students have the opportunity to incorporate project management techniques. This course contains a lab component.

ELEC 370 Instrumentation and Data Acquisition — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Lab, MAT 220 Calculus, ELEC 152 Circuit Theory I, ELEC 153 Circuit Theory II, ELEC 160 Electronics I, ELEC 161 Electronics II, and ELEC 201 Digital Electronics; IT 211 Fundamentals of Programming or IT 313 Intermediate Programming

This course provides an introduction to virtual instrumentation and data acquisition. Topics covered include virtual instruments, sub virtual instruments, editing and debugging, structures, arrays and clusters, graphs and charts, data acquisition, and analysis. Power electronics design and engineering standards are also dealt with. This course contains a lab component.

Students registering for this course will be assessed a course resource fee.

ELEC 495 Integrated Technology Assessment BEL — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This is the required capstone course for the B.S. Electrical Engineering Technology program. It requires reflections on the student's past academic and professional experiences and using the information gained from this reflective exercise to develop evidence-based learning statements related to the Electrical Engineering Technology degree outcomes, resulting in the integrated technology assessment (ITA) portfolio.

The course features an online examination designed to assess the basic knowledge and understanding achieved in electrical engineering technology. This examination is administered in Module 2 through Module 7.

Finally, the student is required to undertake a hardware based capstone project spread through all the course modules, and demonstrate integrated learning experience and the outcomes of this degree program.

ENG 101 English Composition — 3 credits

Prerequisite: None

This class provides students with foundational knowledge and skills to prepare them for academic and professional writing. By analyzing the work of other writers, students will learn to approach writing from a rhetorical and genre-based perspective. They will practice sentence- and paragraph-level writing, learning to revise and correct their own work. They will also work on finding, documenting, and effectively integrating sources into a research-based essay. Both traditional (textual) and multimodal (textual and visual) composition will be addressed.

ENG 101A Advanced Composition — 3 credits

Prerequisite: None

This class provides students with foundational knowledge and skills to prepare them for academic and professional writing. By analyzing the work of other writers, students will learn to approach writing from a rhetorical and genre-based perspective. They will practice sentence- and paragraph-level writing, learning to revise and correct their own work. They will also work on finding, documenting, and effectively integrating sources into a research-based essay. Both traditional (textual) and multimodal (textual and visual) composition will be addressed. This is an accelerated class designed for students with significant previous academic writing experience. Less experienced students are encouraged to take the 15-week ENG 101.

ENG 101ELL College Composition for English Language Learners — 3 credits

Prerequisite: None

This section of college composition is tailored to the special needs of English language learners. It will cover sentence-level writing (grammar, mechanics, and style), paragraph writing, and writing in a variety of essay formats, culminating in a persuasive research-based essay. Students will practice important skills such as developing a research question, conducting library research, developing a thesis, and appropriately integrating sources.

ENG 102 Composition II — 3 credits

Prerequisites: ENG 101 Composition I, ENG 101A Composition I, or equivalent (required)

This course is designed to help you improve your academic and workplace writing skills. The course emphasizes research-based, argument-driven writing. You will complete a research paper, a workplace proposal, and an oral presentation related to your academic discipline or profession. You will practice finding, evaluating, and citing sources; paraphrasing and summarizing; outlining and paragraphing; and revising and proofreading.

ENG 102A Advanced Composition II — 3 credits

Prerequisites: ENG 101 Composition I, ENG 101A Composition I, or equivalent (required)

This course is designed to help you improve your academic and workplace writing skills. The course emphasizes research-based, argument-driven writing. You will complete a research paper, a workplace proposal, and an oral presentation related to your academic discipline or profession. You will practice finding, evaluating, and citing sources; paraphrasing and summarizing; outlining and paragraphing; and revising and proofreading.

ENG 202 Business Writing — 3 credits

Prerequisite: ENG 101 English Composition or equivalent

Business Writing assists students in becoming confident, efficient business communicators. Students learn and apply strategies for designing and delivering effective workplace messages, both written and oral, that address audiences, purposes, and common business situations and problems. Using scenario- and case-based assignments, students analyze audience needs, define outcomes for their communication, and plan strategies for successfully achieving those outcomes. The course covers digital and routine communication forms, including reports, proposals, and presentations. Business Writing equips students with a range of tools to navigate today's business world successfully.

ENG 312 Scientific and Technical Writing — 3 credits

Prerequisite: ENG 101 English Composition or equivalent

Scientific and Technical Writing focuses on the development and application of rhetorical strategies used in writing about science and technology. You will work on communication projects in your chosen scientific/technical communication fields; analyze writing situations and develop strategies for addressing audiences, organizing information, using appropriate style, and presenting the work using effective document design for both technical and non-technical readers; and produce writing designed to make even "hard" science and technology accessible. Let's get started!

GEOL 108 Earth Science and Society — 3 credits

Prerequisite: None

The three threads of this course are Earth, as represented by the four natural spheres—atmosphere, biosphere, hydrosphere, and lithosphere; Society, as represented through the effects of Earth processes on humans and society and the effects of the human existence on the physical nature of the Earth; and Technology, which has greatly expanded in geoscience research. These threads are tied together by our semester-long project that enables you to relate your studies directly to your community. Everyone will select a study area—your hometown, your current location, or another area with which you are familiar—and conduct a mini–Natural Resources Inventory of the area as related to each of the four natural spheres assessing the quality of the air and water, the land cover, and geologic hazards.

This course requires the use of Microsoft Excel.

GEOL 114 Introduction to Oceanography — 3 credits

Suggested Prerequisite: Basic Algebra

This course introduces oceanography as an integrated science that utilizes many basic sciences to understand the ocean that dominates the surface of our planet. During the course we'll explore the global ocean/atmosphere system as well as waves, tides, and currents of the world ocean with a focus on understanding its impact on our lives. Our studies will span the globe to give you an up-close view of some of the most significant challenges facing our marine ecosystem including climate change, pollution, and other human activities. We'll also explore the adaptations of marine animals and other inhabitants of the ocean in the face of such challenges.

HEM 125 Introduction to Homeland Security — 3 credits

Prerequisite: None

This course provides an overview of the discipline of homeland security and emergency management. Since the September 11th terrorist attacks, homeland security and emergency management have evolved in response to the changing threat landscape. This course will address the all-hazards approach to homeland security and the numerous components that encompass this vast and ever-changing field. Topics covered include: the need to balance terrorism threats, natural disasters,

and other hazards; the critical role of crisis communications and social media; intelligence and counterterrorism, border security and immigration; and transportation safety and security. Particular attention is paid to emerging threats to cybersecurity and the sixteen critical infrastructure sectors. Finally, the principles of all-hazards risk management including mitigation, preparedness, response, and recovery will be covered throughout the course in support of the larger roles and structures of the homeland security enterprise. As you begin your Homeland Security and Emergency Management degree, you engage with the most important threats and governing responses, embarking upon your continuous professional development within the homeland security and emergency management community.

HEM 350 International Terrorism — 3 credits

Suggested Prerequisite: CJ 101 Intro to Criminal Justice or equivalent

This course provides an examination of the historical, political, social, religious contexts, and modern manifestations of international terrorism and terrorist organizations. Terrorism originating in the Middle East, Europe, Asia, and Latin American will be included.

HEM 352 Domestic Terrorism — 3 credits

Suggested Prerequisite: HEM 125 Introduction to Homeland Security or equivalent

This course introduces students to terrorism originating in the United States. Homegrown terrorism and its unique characteristics will be studied, as well as the foundations of domestic terrorism, with an examination of its history and philosophies. Topics include current and active domestic terrorist groups, their organizational structure, philosophies, and networks. Students will study the causes and dynamics of different types of domestic terrorism, along with the strategies used combating this phenomenon.

HEM 356 Emergency Management — 3 credits

Suggested Prerequisite: HEM 125 Introduction to Homeland Security or equivalent

This course covers the organization and management of the various aspects of emergencies due to natural disasters, man-made disasters, terrorism, or war. Reactive procedures covered will include response, mitigation and recovery efforts. Proactive measures will include the preparedness and training of both government entities and private citizens.

HEM 450 Counterterrorism — 3 credits

Suggested Prerequisite: HEM 350 International Terrorism, HEM 352 Domestic Terrorism, HEM 354 Managing Homeland Security, or HEM 355 Analyzing Intelligence, Terrorism and National Security.

This course introduces the principles and approaches to countering terrorism in the United States and abroad. Students will examine the question of jurisdiction and activities associated with

counterterrorism; whether they should be primarily law enforcement-oriented or military-oriented. The legal and ethical concerns and the restrictive rules of collecting intelligence by military and other non-law enforcement organizations are analyzed.

HEM 460 Infrastructure Security and Policy — 3 credits

Suggested Prerequisite: HEM 125 Introduction to Homeland Security or equivalent

This course deals with the various methods and techniques that have been developed to protect society's critical infrastructure, as well as their influence on policy and decision-making. It covers the historical background of critical infrastructure and its importance; exploring current trends in infrastructure sensitivity and the impact on a networked environment. The course embraces an all-hazards approach to homeland security, critical infrastructure protection and assurance, and emergency management. The course will examine the National Response Framework (NRF) and how it can be applied locally; public-private partnerships; information sharing; the need for resiliency planning to respond to changes within the threat environment; risk assessments; and new, related regulations.

HEM 498 Homeland Security and Emergency Management Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Homeland Security and Emergency Management capstone is intended as the last course in the major. Throughout the term, students will discuss various topics in regards to the homeland security enterprise and emergency management; including preparation, mitigation and recovery from man made, natural and accidental disasters. Students will also research and submit application papers, the topics of which will reflect the integrated components of homeland security and emergency management. This course is designed to allow students the opportunity to demonstrate their abilities to understand, analyze, synthesize and present the content, concepts, policies and theories in the field.

HIS 101 United States History I — 3 credits

Prerequisite: None

This course is an introductory survey of US history from pre-European contact through the end of Reconstruction in 1877. Students will examine the major political, social, and economic trends in the American colonies and new nation, with a particular focus on diversity and cross-cultural encounters. Students will learn to think like a historian by contextualizing the past through a research project about a major trial in early American history, applying historical information to our contemporary world, and reading and interpreting primary sources.

This course uses a lower-cost interactive webtext instead of a traditional textbook.

HIS 102 United States History II — 3 credits

Prerequisite: None

This course is an introductory survey of US history from the end of Reconstruction in 1877 through the recent past. The course examines the evolution of the United States from a nation torn apart by war to a global superpower. Students will study major political, social, and economic trends in the modern United States, with a particular focus on diversity and cross-cultural encounters. Students will engage in primary and secondary source analysis and learn to communicate historical arguments using a variety of tools.

This course uses a lower-cost interactive webtext instead of a traditional textbook.

HIS 120 World History I — 3 credits

Prerequisite: None

This course examines the rise of the major world civilizations in Asia, Africa, Europe, and the Americas from their earliest beginnings through to the early modern era. It focuses on economic, social, political, and cultural factors that contributed to their birth and sustained their growth and development. Students will explore the political institutions, social systems, gender roles, religious systems, and cultures of these civilizations. They will also look at the contributions of individual men and women to their communities. In particular, the course highlights the interconnectedness of many societies as they passed ideas, technologies, people, and goods back and forth to each other.

HIS 322 Revolutionary America — 3 credits

Suggested Prerequisite: HIS 101 United States History I or equivalent recommended.

This course examines conditions both in Great Britain and in the American colonies that caused resentment, rebellion, a military uprising, a declaration of independence, and a persistent eight-year-long war. Students will examine how the colonies successfully broke away from Great Britain and how the former colonies formed themselves into a new polity with a new kind of government. This course will be a thematic exploration into some of the important historical problems during revolutionary America. Many of these problems remain central to the history of American life and culture—the origins and development of democracy and republicanism, the founding of a new type of government, and the way we frame our nation's founding today. Through primary and secondary source analysis, students in this course will also gain valuable research, writing, and critical thinking skills.

HIS 325 African American History — 3 credits

Prerequisite: None

This course surveys the history of the African American people from their origins in Africa, through slavery and emancipation, through waves of migration from countryside to city and South to North, through wars and depression, through the recent Civil Rights and Black Power Movements, to the

present. Students will focus on questions of social development, political struggle, culture, and identity. Through 5 key themes of challenges, culture, causality, courage and complexity, students will apply historiographical skills to unravel issues of the present day and interpret a variety of sources. Students will also have the opportunity to select a topic of their choice and history.

The course uses no-cost open educational resources in place of a textbook.

HIS 335 United States Civil War — 3 credits

Prerequisite: None

The Lincoln presidency. Antietam. The Emancipation Proclamation. Gettysburg. Draft Riots. Sherman's March. Appomattox. The Civil War was a pivotal turning point in American history and its legacies are still with us today. From its antecedents in Antebellum America to its legacies in the Reconstruction era through today, this course will investigate the causes and consequences of the war. The course will cover the major battles and the military and political circumstances that led to the Union's victory and Confederacy's defeat. It also covers the social, cultural, and economic histories of the war and its impact on the people who lived through it on the battlefields and the home front.

HIS 350 World War I — 3 credits

Prerequisite: None

Known colloquially as the "Great War" and the "War to End All Wars," World War I was a watershed event in the twentieth-century. Borne out of imperial rivalries and complex European alliances, the war erupted suddenly in 1914 and ended more than four years later, at the eleventh hour of the eleventh day of the eleventh month. In the years between, the Allied and Central Powers engaged in a horrific and devastating "Total War," drafting unprecedentedly large armies and transforming their economies to support the war effort, yet producing little more than stalemate and death on much of the Western Front. The Great War changed how wars were fought and introduced new technology to the battlefield. Students in this course will examine the origins and consequences of the war, the major strategic decisions, as well as the intertwining history on the homefront of the combatant nations. Students will engage with the historical material through innovative games and simulations which are designed to allow students to experience the war's major decision points and strategy as if they were really there. Along with the simulations, students will read primary source accounts of the war to understand the war's significance, its toll on the "Lost Generation," and its ramifications today as we commemorate the war's one-hundredth anniversary.

This course includes gaming technology that requires students to have a web browser that meets the minimum Excelsior system requirements.

The course uses no-cost open educational resources in place of a textbook.

HIS 353 Holocaust — 3 credits

Prerequisite: None

This course examines the "Holocaust," the deliberate, systematic, and mechanized murder of more than six million Jews and hundreds of thousands of other victims by Nazi Germany during World War II. The class will take a broad view of this atrocity, seeking to explain why and how it was possible and, ultimately, asking what lessons we can learn from this history for the present day. The Holocaust will be approached as an event with multiple, complex causes: a centuries-old history of European anti-Semitism; the advent of modern "racial science" and ethnic nationalism; the global economic, social, and political crises of the early twentieth century; the rise of Adolf Hitler and the Nazi Party in Germany; the structure of the Nazi State; the context of Hitler's "war of annihilation" on the Eastern Front; and the willingness of many "ordinary" Germans and non-Germans to participate in the Nazi's plans. We will look at the experiences of victims and "bystanders" as well as perpetrators in order to understand this tragedy from multiple perspectives. Students will gain valuable research, writing, and critical thinking skills while also learning to analyze complex ethical problems.

HIS 356 The Global Cold War — 3 credits

Prerequisite: None

This course examines the period in world history from the Yalta Conference in 1945 to the end of the Soviet Union in 1991, generally called the Cold War. Students examine the political, economic, and militaristic motivations behind superpower behavior and the role of these actions in laying the foundations for global circumstances today. In exploring the relationship between the First, Second, and Third Worlds in this period, students understand the complex mix of individuals and ideology that shaped the events of the Cold War and continue to dramatically shape global affairs today.

HSC 112 Medical Terminology — 3 credits

Prerequisite: None

This course will prepare you for accurate oral and written use of medical language in a variety of health care settings and from multiple practitioner perspectives. You will gain a practical understanding of medical terminology that includes basic elements and word structure, body references, and specific vocabulary of the human biological systems. You will learn to interpret medical language into common terms and the proper language structure when using medical terms.

HSC 121 Health Care in the United States — 3 credits

Prerequisite: None

This course provides the students with opportunities to explore the structure and function of the United States (US) health care delivery system. Students will learn about health care finance, settings for care, modes of delivery, the role of technology, and key trends in health care.

HSC 124 Professionalism in Health Care — 3 credits

Prerequisite: None

This course provides students with an opportunity to explore multiple aspects of professionalism in the health care occupations. Topics covered include cultural competence, legal and ethical issues, effective communication, interdisciplinary teams, and professional competence.

HSC 292 Associate in Health Sciences Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course will assess the knowledge students gained throughout the curriculum of the Associate's in Health Science degree program. Students will have the opportunity to demonstrate their understanding of the health care delivery system as it relates to specific health care professions. Students will also exercise and refine their professional skills through activities such as resume writing and responding to interview questions. Students will apply effective critical thinking and communication skills throughout the course.

HSC 302 Principles of Health Care Management — 3 credits

Prerequisite: None

This course provides you with critical knowledge to fulfill the role of health care manager. In this course you will be introduced to US law, governing bodies, and regulatory controls that set standards for healthcare and challenge health care managers when addressing legal, financial, ethical, and quality control issues. You will investigate current trends and critical issues that have emerged in the 21st century, and you will explore ways in which health care managers can respond to these changes. You will learn about opportunities as well as challenges present in today's health care environment that are important to health care managers when managing conflict and making decisions within a health care organization.

HSC 305 Critical Issues in Health Care Management — 3 credits

Prerequisite: None

This course provides you with an overview of current issues that influence the delivery of health care. During this course, you will investigate current trends and critical issues that have emerged in the early 21st century and will explore ways in which health care managers can respond to these changes. You will learn about opportunities as well as challenges present in today's health care environment that are important to health care managers.

HSC 310 Writing and Communication in the Health Science Professions 3 credits

Prerequisite: None

Effective communication skills are vital in the health professions. Taking this course early in a degree program provides essential preparation for academic work. A broad range of topics are explored including communication styles, cultural awareness, communication through social media, writing as a process, and effective professional presentations. The essential skill of writing to persuade, while communicating important health practices, is practiced preparing for communicating with clients and the public. This is a writing-enriched (WE) course.

HSC 312 Ethics of Health Care 3 credits

Prerequisite: None

This interdisciplinary course guides students through a systematic analysis of contemporary ethical issues in health care and human services. Students will use ethical theories, principles, and codes to develop ethical decision-making processes for addressing difficult ethical dilemmas that are often encountered by professionals in human services and healthcare fields. As legal policies and historical considerations often underpin ethical issues, students will become conversant in pertinent policies to better understand the complexities of the ethical issues encountered by professionals.

HSC 320 Health Care Issues in Culturally Diverse Populations 3 credits

Prerequisite: None

This course introduces students to the concepts of culture and cultural diversity as they relate to health, illness, and the health care delivery system. There are many types of diversity, including but not limited to religious, racial, ethnic, gender identity, sexual orientation, socioeconomic, disability, regional, and others that exist in our global society. We will examine the roles that belief systems, values, and health practices play in people's interactions with health providers. Common myths and assumptions will be explored. We will also investigate strategies that health professionals can implement to create more inclusive services.

HSC 330 Legal and Regulatory Environment of Health Care 3 credits

Prerequisite: None

In this course you will be introduced to U.S. law and the legal process in healthcare. You will acquire a foundation for understanding the scope, limits and consequences of legal obligations. You will also learn about the governing bodies and regulatory controls which set standards for healthcare, and you will apply your knowledge in identification of legal issues often encountered in health administration.

HSC 375 Health and Wellness — 3 credits

Prerequisite: None

This course focuses on the latest trends in health, nutrition, physical activity, and wellness. From stress management and sleep to overall well-being, we will explore personal health, health related attitudes and beliefs, and individual health behaviors.

HSC 402 Managing Stress — 3 credits

Prerequisite: None

This course focuses on the nature of stress and the connection between mind, body and spirit. Students will study the different theoretical models of stress from a variety of theorists while exploring coping strategies and relaxation techniques for healthy living in today s changing world. Students will also create an individualized stress management program plan.

HSC 403 Nutrition for Wellness — 3 credits

Prerequisite: None

This course uses several short game-based learning activities to learn decision-making about nutrition based on environmental circumstances and health conditions. Students learn how nutrition relates to health, wellness, and disease prevention. Students develop personalized nutrition plans and gain an understanding of the impact of nutrition at all stages of life. Students will gain knowledge on how to separate fact from fiction. Food safety and innovations in food technology will be examined.

HSC 414 Budget and Finance in Health Care Organizations — 3 credits

Prerequisite: None

This course guides students through an examination of financial principles and techniques used by managers in health care facilities. Budget preparation and management, and analysis in the context of the evolving health care environment are the focus of this course. This course is required for students enrolled in the Nursing Management Certificate Program, Bachelor of Science in Health Care Management, the Management emphasis of the Bachelor of Science in Health Sciences, and is used to fulfill nursing elective credit requirements for the Bachelor of Science in nursing program.

HSC 432 Introduction to the Health Care Delivery System — 3 credits

Prerequisite: None

This course provides a comprehensive overview of the U.S. health care delivery system and the forces that influence it. Students will examine the continuum of health care delivery from prevention through individualized clinical health care, including the importance of interprofessional collaboration. Students will explore historical influences on today s U.S. health care delivery system and will

have the opportunity to investigate the roles of government, finance, regulators, and providers in the health and public health arenas. The inter-connectedness of the U.S. health care delivery system with global health care systems will be explored.

This course duplicates HSC 431/NUR 431. Credit for only one of these courses will be applied toward graduation.

HSC 445 Introduction to Health Care Informatics — 3 credits

Prerequisite: None

This multidisciplinary course introduces students to the role of information management in health care. Students will explore benefits, issues, risks and challenges related to the electronic health record and other information systems in the health care environment. Students will also explore the field of consumer informatics and its use in providing health related information to health consumers. The course will address the role of the health provider in working with computers and information management systems in health care.

HSC 450 Economics of Health Care — 3 credits

Prerequisite: None

This course introduces you to the field of healthcare economics. During the course, you will learn the concepts and principles of microeconomics as they apply to healthcare. You will explore why and how healthcare differs from other markets. Topics to be covered include the cost of health care, funding of health care, and government regulation. In addition, there is a focus on behavioral economics and emerging trends in multiple health care settings.

HSC 464 Health Sciences Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This end-of-program capstone course of the Bachelor of Science in Health Sciences curriculum requires students to demonstrate mastery in previously learned knowledge, principles, and skills to analyze case-based problems common in the health field and propose evidence-based solutions. This is an exciting opportunity to challenge yourself in the role of an expert as you address a real-world situation. You will also have opportunities to interact with other class members, not only as students but as soon-to-be-graduating professional colleagues, as you discuss and compare your perspectives on health issues. The capstone will also provide you with a place to consider your next steps as a bachelor's-level graduate.

HSC 470 Healthcare Management Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This end-of-program capstone course of the BS in Health Care Management curriculum requires students to demonstrate previously learned knowledge, principles, and skills to analyze health science-based case problems. Using a variety of case analysis tools, students will analyze cases both as a member of a team and individually and will discuss case studies that examine the professional role in health care. This course provides students with an opportunity to demonstrate their ability to integrate and apply knowledge of the arts and sciences, business functions, and health care management principles and concepts.

HUM 253 Mythology — 3 credits

Prerequisite: None

In this course, students will study mythology while drawing on mythological themes and patterns to understand the nature of their own "hero's journey." They will examine a variety of classical, contemporary, and diverse cultural mythologies, ranging from Marvel's Avengers to the Epic of Gilgamesh, from Star Wars to the Odyssey.

The only required text for this course is an eBook that is available through the Excelsior library.

HUM 300 Ethics — 3 credits

Prerequisite: None

Why doesn't Batman kill the Joker? Is Spider-Man right that with great power comes great responsibility? In this course, you can easily explore a variety of approaches to ethics by examining moral issues through superheroes and their world-shaking struggles.

The course uses superheroes to investigate enduring human questions and controversial issues to deepen your engagement with the ethical dimensions of our world. Your foundation includes traditional ethical theories such as relativism, utilitarianism, and virtue ethics and, also, the more current feminist, postmodern, and global ethical theories. Ethics influences all our relationships, shapes our decisions at work, and deeply infuses our culture. Superheroes can help us see how even the smallest decisions can have far-reaching consequences.

If you are a military student, this course may help you apply ethical concepts to civilian contexts.

Most of the required books and articles are accessible through the Excelsior library and in the course.

HUM 306 Creative Problem Solving — 3 credits

Prerequisite: None

Given the rapid changes in today's economy and workplace, creativity and innovation continue to be important skills that support career growth. Because employers continuously rate the ability to solve problems as an essential skill, this course is designed to introduce and strengthen a student's ability to move through logical problem-solving processes in order to creatively find solutions to problems that are personally or professionally relevant to them. Neuroscience research affirms that all people possess the same mental capacities as people with highly inventive minds, so students will study innovators and global thinkers who will show them the crucial techniques to increase their competency, sharpen their skills, and develop their innovative mindset.

HUM 307 Critical Thinking — 3 credits

Prerequisite: None

In this class, students will learn how to effectively solve personal and professional problems and achieve goals by honing their critical thinking skills and practices. From tackling real world situations and case studies, to evaluating arguments from a range of perspectives, they will have the opportunity to skillfully articulate positions, drawing from their own experiences and applying the concepts developed in this class.

HUM 321 I Feel Your Pain: Illness and Empathy in the Arts — 3 credits

Prerequisite: None

This course explores what happens when people become ill and how their experience of the care they receive from medical practitioners can affect and change their lives, for better or for worse. We look at current Western practices surrounding end-of-life care, the processing and acknowledgment of grief, and the tendency to deny our very mortality. We witness what people in stigmatized groups undergo when they seek medical treatment. And we confront what happens when a person, either ill or well, decides to end their life on their own terms. Throughout all of these explorations, we examine why empathy is crucial to both giving and receiving good care and how exposing ourselves to the arts can help foster empathy skills in those of us who live with, care for, and support the ill and dying.

This course was cross-listed with NUR 321. Credit for only one of these courses will be applied toward graduation.

IND 101 Cornerstone A: Foundations — 3 credits

Prerequisite: None

The future: the only constant is change. The only certainty is uncertainty. So how do you prepare today for what might come tomorrow? In this introductory, interdisciplinary course unique to Excelsior University, students explore foundational skills and mindsets such as grit and self-regulated learning to help them navigate the uncertainty and change of our future societies and workplaces. In this first-course experience, students investigate, reflect, and plan for their future academic and

career journeys. In researching the major problems of our future world, student learn to challenge their prior assumptions, keep an open mind, and build their research, writing, critical thinking, argumentative reasoning skills.

This course must be completed with a grade of C or higher. Registration in this course is restricted to incoming students with fewer than 60 transfer credits. This course duplicates IND301 and CCS120. Credit for only one of these courses will be applied toward graduation.

The Cornerstone cannot be completed in the same term as a Capstone course.

IND 203 Introduction to Professional Ethics — 3 credits

Prerequisite: None

In this interdisciplinary course, students will develop the analytical skills necessary to examine ethical issues in the workplace. Students explore conventional ethical theories and principles, develop ethical decision-making, and resolve common dilemmas. Students discuss the multiple challenges faced by professionals and identify ethical practices or codes that apply to each of their own professions.

The only required text for this course is an eBook that is available through the Excelsior library.

IND 301 Cornerstone B: Pathways — 3 credits

Prerequisite: None

The future: the only constant is change. The only certainty is uncertainty. So how do you prepare today for what might come tomorrow? In this upper-level, interdisciplinary course unique to Excelsior University, students hone critical skills and mindsets such as grit, self-regulated learning, metacognition, and intellectual curiosity to help them navigate the uncertainty and change of our future societies and workplaces. In this first-course experience, students investigate, reflect, and plan for their future academic and career journeys. In researching and posing solutions for the major problems of our future world, student hone their ability to challenge their prior assumptions, keep an open mind, and strengthen their research, writing, critical thinking, argumentative reasoning skills.

This course must be completed with a grade of C or higher. Registration in this course is restricted to incoming students with 60 or more transfer credits. This course duplicates IND 101 and CCS 120. Credit for only one of these courses will be applied toward graduation.

The Cornerstone cannot be completed in the same term as the Capstone course.

INL 102 Information Literacy — 1 credit

Prerequisite: None

Information literacy is the ability to find, evaluate, interpret, and use information legally, ethically, and effectively. This course provides a broad overview of information literacy concepts, including the differences between academic and popular research methods, finding and evaluating sources, reading sources critically, writing with sources, and safely navigating information networks such as the internet. Students must complete information literacy within their first 13 credits at Excelsior.

INT 401 Professional Experience — 3 credits

Prerequisites: None; however, it is recommended that this course be taken toward the end of the student's program of study.

This course explores characteristics and benefits of Problem Based Learning using a provided problem in the student's respective field of study. Students will work toward resolving an open-ended problem rather than one with a defined solution. Application of previous coursework in addition to critical thinking and analysis will be used in solving the problem, and you will receive guidance from your instructor throughout the course. The course offers opportunities to apply the Problem-Based Learning concepts with action planning exercises. The assessment module demonstrates strategies for assessing students' life readiness skills throughout an open-ended project. Students will also work on self-branding throughout the course in order to better assess their strengths and areas of interest in applying previous experience and to aid in career planning.

IT 200 Hardware and Software Essentials — 3 credits

Prerequisite: None

This course immerses students in the fundamental skills needed for computer technology, covering essential topics such as computer hardware (including mobile devices), operating systems, basic networking, and security. Students explore the roles and practices of a PC technician and examine current information technology trends. By the end of this course, students are proficient in configuring operating systems and networks, identifying and addressing security issues, and troubleshooting hardware and software. This preparation aligns with the exam objectives of the CompTIA A+ certification program, paving the way for an entry-level PC technician career.

IT 210 Object-Oriented Programming — 3 credits

Prerequisite: None

This course will cover problem-solving and algorithm development using the Java programming language. Fundamentals of good programming style, process design, coding, debugging and documentation will be covered. Students will be introduced to object-oriented programming features including encapsulation, inheritance, and polymorphism.

IT 211 Fundamentals of Programming — 3 credits

Prerequisite: None

This course introduces students to basic programming concepts using the Python language. Topics include variables, Boolean logic, loops, user input handling, output display and file operations, lists, strings, object-oriented programming, inheritance, recursion, and Graphic User Interface (GUI) programming. Throughout the course, students engage in multiple debugging exercises to hone their problem-solving skills. By the end of this course, students are equipped to apply these concepts to develop executable programs that address real-world needs.

IT 221 Introduction to Computers — 3 credits

Prerequisite: None

This course equips students with fundamental knowledge of computer systems and their components, covering computer hardware and architecture, application software, operating systems, networks, and the Internet. It also introduces advanced topics such as information privacy and security, databases and data warehouses, data mining, and legal, ethical, and privacy issues in the information technology field. Additionally, students engage in learning activities to develop skills needed to work with the Microsoft Office suite. By participating in this course, students gain a comprehensive understanding of computer systems and advanced IT topics.

IT 250 Business Data Communications — 3 credits

Prerequisite: None

This course offers an in-depth overview and practical application of data communications and networking concepts within a business environment. It covers key topics such as data communication models, protocols, standards, and services; networking technologies and communication media; network topology, design, and architecture; network management; wireless technologies; network security; and cryptography. Through hands-on labs and assignments based on real-world business scenarios, students apply their knowledge and skills effectively.

This course prepares students for the CompTIA Network+ certification exam..

IT 313 Intermediate Programming — 3 credits

Prerequisites: None

This intermediate programming course focuses on problem-solving and algorithm development using Java, a widely used language in object-oriented programming. Students learn to code proficiently and debug programs and applications in Java, skills essential in the IT industry. This course prepares students to meet common expectations in software development roles by analyzing problems and applying coding solutions.

IT 321 Computer Systems Architecture — 3 credits

Prerequisites: IT 211 Fundamentals of Programming, or IT 313 Intermediate Programming

This course provides an introduction to the basic components and structure of a generic operating system. It highlights critical aspects such as processes, process management, and synchronization, along with threads, interrupts, and interrupt handling. Additional topics include memory management, virtual memory management, resource allocation, and an introduction to file systems, protection, and security. Students learn to create and debug programs, analyze computer system architecture, understand computer arithmetic and logic, and evaluate computer performance. By the end of the course, students are equipt with the foundational knowledge necessary to understand and work with operating systems.

IT 360 Operating Systems — 3 credits

Prerequisite: None

This course provides an introduction to the basic components and structure of a generic operating system. It highlights critical aspects such as processes, process management, and synchronization, along with threads, interrupts, and interrupt handling. Additional topics include memory management, virtual memory management, resource allocation, and an introduction to file systems, protection, and security. Students learn to explain the functions and features of operating systems, differentiate processing methods, and analyze the need for security and protection in OS design. By the end of the course, students are equipt with the foundational knowledge necessary to understand and work with operating systems.

IT 370 Database Management Systems — 3 credits

Prerequisite: None

This course examines the technology and impact of the design of database systems on the organization. It covers the application, design, and implementation of database systems. Topics include an introduction to basic database concepts, database design principles including Entity-Relationship (E-R) diagrams and database normalization, SQL queries, transaction management, distributed databases, data warehousing, and database administration. The course focuses on the relational model.

IT 371 Web Design and Development — 3 credits

Prerequisite: None

This course will provide practical instruction on the design, creation, and maintenance of web pages. The course will cover the fundamental principles of web programming and formatting. This will include learning the difference between client-side and server-side scripting technologies, effective use of web authoring tools, and code development. The course will also cover web design standards and the need for integrating human-computer interaction principles in web design. The final project in the course will enable learners to apply current development and production practices to design web pages.

IT 375 Human Computer Interactive Design — 3 credits

Prerequisite: IT 371 Web Design and Development

The course starts with fundamental concepts related to human behavior through the lens of HCI (human-computer interaction), human-centered design, user experience (UX) and user interface (UI). These concepts are applied experientially throughout the 8 modules of the course. Research design, persona development, information architecture, low and high fidelity prototyping using wireframing are all used to develop a minimally viable product (MVP) using HTML and CSS. The course long project is the culmination of material covered throughout the course and can be used as a portfolio item to showcase classwork for an interview or other employment situation.

IT 380 Overview of Computer Security — 3 credits

Prerequisite: None

This course teaches essential terms and concepts fundamental to understanding cybersecurity at an introductory level. Course topics include Security Principles, Business Continuity, Disaster Recovery & Incident Response Concepts, Access Controls Concepts, Network Security, and Security Operations. Students learn to recognize ethical concerns in cybersecurity, assess the impact of cybersecurity on global society, and evaluate the pros and cons of AI and other emerging technologies. By participating in this course, students gain the knowledge and skills necessary to pursue the (ISC)² Certified in Cybersecurity (CC) credential.

IT 390 Project Management — 3 credits

Prerequisite: None

This course explores the system development life cycle (SDLC) and project life cycle, enhancing skills in budget and timeline management. Students use project management software to design project schedules, employing tools such as bar charts, PERT (Program Evaluation and Review Technique), and the critical path method to effectively manage and optimize project execution. They learn and demonstrate essential project management concepts, develop comprehensive project plans, manage project scope and resources, and execute risk management strategies.

IT 406 Computer Forensics — 3 credits

Prerequisite: IT 380 Overview of Computer Security

This course explores the system development life cycle (SDLC) and project life cycle, enhancing skills in budget and timeline management. Students use project management software to design project schedules, employing tools such as bar charts, PERT (Program Evaluation and Review Technique), and the critical path method to effectively manage and optimize project execution. Students learn to describe essential project management concepts, develop comprehensive project plans, manage project scope and resources, and execute risk management strategies. Additionally, students identify and apply the phases and techniques related to cyber investigations and digital forensics.

IT 422 Advanced Networking — 3 credits

Prerequisite: IT 250 Business Data Communications, or related course work

IT 422 introduces students to Switching and Routing as it pertains to the LAN. Students will learn about technologies such as VLANs, EtherChannels, DHCP, device configuration, and troubleshooting. Students will also get an introductory look at network security from the perspective of the LAN.

IT 424 Network Operating Systems — 3 credits

Prerequisite: IT 250 Business Data Communications

In this course, students will identify the main functions of workstation and network operating systems and be able to distinguish between the two. The basic functions of common network operating systems including Windows, Linux and MacOS will be examined and compared. Common examples of network utility software and Internet software, software licensing agreements, and network security/backup/recovery will be explored.

IT 426 Wireless Technology — 3 credits

Prerequisite: IT 250 Business Data Communications, or related course work

This course describes the infrastructures, components and protocols of a wide range of wireless technologies. The course commences with a brief review of networking fundamentals including software and hardware used for interconnection of traditional wired networks. Examines existing wireless technologies such as global positioning satellite (GPS), cellular digital packet data (CDPD), general packet radio service (GPRS), infra-red (IR), the operation and protocols for simplex tone and data paging systems, and local multi-point communication systems (LMCS). Addresses additional technologies such as Bluetooth, digital audio broadcast (DAB), and IMT-2000.

IT 428 Telecommunications Management — 3 credits

Prerequisite: A background in Data Communications, and Computer Networking, or equivalent coursework/experience

This course focuses on the management of diverse network systems involving a set of layered responsibilities, which ensure that network communications channels are continuously available and perform optimally from source to destination. Topics include differentiating between technical, financial and operational responsibilities, network capacity planning and traffic analysis techniques, measurement of network reliability and availability, basic hardware and software network diagnostic tools, network security issues, and network help desk operations.

IT 430 Network System Design and Management — 3 credits

Prerequisite: IT 250 Business Data Communications, or related course work

This course covers network design and management principles that network analysts, architects, engineers, and administrators must consider when planning, designing, implementing, and maintaining their

network. Course topics include network management functions, network and system architectures, data and network communications technologies and protocols, server architectures and network operating systems, network security, and network and system administration. Additional topics covered that impact network design and management include network management tools and applications, wireless network architectures, interoperability, cloud computing, and virtualization.

IT 460 System Administration — 3 credits

Prerequisite: IT 360 Operating Systems

This course equips students with the knowledge and hands-on skills necessary for administering systems and their resources. Topics include directory services, user account management, file and print services, load balancing, and security and user/client administration. Through hands-on lab assignments, students set up and manage a fully functioning computer network of systems, tackling challenges involving the installation, configuration, and management of servers. Additionally, this course prepares students for the CompTIA Linux+ certification exam. Students learn to install and configure Linux-based servers, manage users and file systems, and implement security monitoring tools and techniques.

IT 495 Integrated Technology Assessment BIX — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

Students in the course will complete an information technology group project that demonstrates information technology system integration as well as the ability to fulfill all outcomes of the Information Technology degree." Also replace the last paragraph with this: "Students will also demonstrate their knowledge of information technology fundamentals and practices including programming, information management, system administration and maintenance, operating systems and computer architecture, data communications and networking, human-computer interaction, and web systems and technologies.

You will also be tested on your knowledge of information technology fundamentals and practices spanning programming, information management, system administration and maintenance, operating systems and computer architecture, data communications and networking, human-computer interaction, and web systems and technologies—to ensure that you can meet the needs of industry as you venture forth in your career.

LA 298 Associate Degree Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The associate degree capstone is the culminating experience for students in the Associate Degree in Liberal Arts program. In the course, students demonstrate and reflect on the knowledge and skills

they have acquired in the degree program and in other educational experiences up to this point. Students demonstrate mastery of the five Associate Degree in Liberal Arts learning outcomes: written and oral communication, cultural and global diversity, problem solving, ethics, and professional development. Students will demonstrate these outcomes through individual and group assignments, multi-modal presentations, and a final research paper.

This is an intense 8-week course with significant research and writing expectations. It is strongly recommended that students have prior experience with online course work, and particularly Excelsior University courses, before attempting this course. This course requires the completion of the listed prerequisites and the permission of the student's advisor.

LA 498 Liberal Arts Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

"Education is the most powerful weapon which you can use to change the world," argued Nelson Mandela. So how are you going to change the world? In this culminating course for students in the Bachelor's in Liberal Arts degree program, you will think critically about our current and future world. To demonstrate your achievement of the program outcomes, you will complete an independent research paper, group project, and reflective journal. Together, we will apply the skills and knowledge we have built on our educational journeys to build a better world.

LA 498HIS History Capstone — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course is a culminating experience for students in history. As a capstone, this course is designed to bring together your cumulative knowledge and skills from your history program. You will question and consider: what are the fundamental skills of the historical discipline and how can they be applied to better understand the past, present, and your future goals? How does a historian think, gather evidence, interpret and contextualize the past, and communicate to diverse audiences? You will also examine historical methodology and the concept of historiography through a research project.

LA 498NS Natural Science Capstone 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course is the culminating experience for students completing a major in Natural Sciences. A senior level course designed for advanced students and working professionals who are seeking to tie it all together. The course stretches across the natural science fields to apply multiple theories and research approaches to current events from the perspective of a variety of disciplines, including but not limited to Geology, Chemistry, Physics and Biology. Students will use their critical thinking skills along with oral and written communication skills while reviewing and analyzing ethical questions and the concepts of diversity across the natural science disciplines. Through a mixture of discussions, presentations and written analysis, students apply their previous learning in new ways both analyzing and synthesizing new perspectives on their learning. This a reading and writing intense course that should serve as the culmination of the students' work at the Bachelor's degree level.

This is an intense eight-week course requiring significant research and writing from the student.

LA 498PSY Psychology Capstone

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This is a competency-based, senior level course designed for advanced students and working professionals seeking to complete their bachelor's degree in psychology. Course content focuses on demonstrating the competencies associated with the psychology degree program student learning outcomes. Through a mixture of discussions, reflective writing, and multimedia presentations, students apply knowledge, skills, and abilities to showcase their learning and interests. This course requires students to research and connect psychological theory to real-world problems, as students think deeply about their academic and career goals.

LA 498SS Social Science Capstone 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course is the culminating experience for students completing a major in Social Sciences. This is a senior-level course designed for advanced students and working professionals who are seeking to make important connections among social science discipline areas. The course applies social science theory and best practices of evidence analysis to current events and reviews the theoretical

foundations of the economics, political science and sociology disciplines. Students will evaluate the usefulness of these disciplines in analyzing social problems, and apply them to specific social policy dilemmas. Through a mixture of discussions and written analyses, students will review major theories, organize, and relate theoretical principles to evidence about real-world problems and gain experience analyzing decision making challenges that attend important social policy subjects.

MAT 101 Mathematics for Everyday Life — 3 credits

Prerequisite: None

The goal of this course is to help students develop mathematical reasoning and problem solving skills that will serve them well in their lives both in and out of school. Topics will include the important real-world applications of measurement units, managing money, statistics in the media, the mathematics of voting, and mathematics in the arts and nature. Providing correct solutions to routine problems is not the goal; more important is the ability to communicate effectively about mathematical reasoning and to solve realistic, practical problems both collaboratively with other students and individually.

MAT 101 is a survey course introducing the student to a variety of mathematical topics. It does not prepare a student for future courses that require a knowledge of algebra (e.g. Precalculus or Statistics).

MAT 108 Elementary Algebra — 3 credits

Prerequisite: None

This course is designed for students who have not yet become proficient with the fundamental topics of algebra needed for further study in mathematics and statistics. Covered in this course are operations on signed numbers, properties of real numbers, linear equations and inequalities, the Cartesian coordinate system, graphing, polynomials, rational and radical expressions and equations, factoring, and quadratic equations.

MAT 114 Intermediate Algebra — 3 credits

Prerequisite: None

This course covers algebra at an intermediate level in order to prepare students for subsequent courses in mathematics. Major topics include real numbers and algebraic expressions, equations and inequalities, functions and graphs, systems of equations and inequalities, polynomial expressions and functions, rational and radical expressions, and quadratic equations and functions.

MAT 120 Precalculus — 3 credits

Prerequisite: MAT 114 Intermediate Algebra or equivalent

Precalculus is a preparatory course for students who will go on to take calculus, emphasizing concepts fundamental to the field of study. This includes Functions and Graphs; Inverse Functions

and Their Graphs; Polynomial and Rational Functions; Systems of Equations and Inequalities; Exponential and Logarithmic Functions; Sequences and Series, Trigonometric Functions; Right and Oblique Triangle Trigonometry; Applications of Trigonometry.

MAT 201 Statistics — 3 credits

Prerequisite: MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra

This course covers statistical skills such as collecting, organizing, summarizing, and analyzing information to draw conclusions or answer questions. Major topics include descriptive statistics, frequency distributions, probability, binomial and normal distributions, statistical inference, linear regression, and correlation.

MAT 201 duplicates BUS 233 Business Statistics, BUS 231 Business Data Literacy and MAT 215 Statistics for Health Care Professionals. Credit in only one of these courses will be applied toward graduation. MAT 201 also duplicates the Excelsior Examination MATx210. Students will receive credit for either the course or the examination, as both will not be applied toward graduation. Prerequisite: MA T101 or College Algebra.

MAT 205 Discrete Structures — 3 Credits

Prerequisites: MAT 220 Calculus I or MAT 201 Calculus II

This course provides the mathematical foundations for information technology and other technology fields. Topics covered in this course include logic, relations, functions, recursion, induction, set theory, patterns of inference, elementary combinatorics, algorithm complexity, and graph theory. It also introduces applications of discrete structures such as social network analysis and/or language modeling.

MAT 220 Calculus I — 4 credits

Prerequisites: MAT 116 Precalculus Algebra and MAT 118 Trigonometry, or MAT 120 Precalculus

This course provides students with an introduction to the basic concepts of the differential and integral calculus. Topics covered include functions; limits and continuity; differentiation rules; application to rates, approximations, and extremum problems; L'Hôspital's rule; approximation of definite integrals; the Fundamental Theorem of Calculus; definite and indefinite integration; applications of integration including area and arc length; and integration by substitution.

MAT 221 Calculus II — 4 credits

Prerequisites: MAT 220 Calculus I

This course is a continuation of MAT 220, Calculus I. Topics include techniques of integration, sequences, series, conics, parametric equations, vectors in space, and a brief introduction to ordinary differential equations.

MET 220 Statics — 3 credits

Prerequisites: EGR 280 Introduction to 3-D Modeling, PHYS 201 Physics I, PHYS 202 Physics I Laboratory, MAT 120 Precalculus, MAT 220 Calculus I, and MAT 221 Calculus II

This course introduces engineering mechanics in static systems. You apply basic principles of physics to the analysis of systems experiencing some combination of forces and torques, with an eye toward engineering applications. Statics deals with two- and three-dimensional systems of particles and rigid bodies in static equilibrium. In a general sense, each principle is applied first to a particle, then to a rigid body subjected to a coplanar system of forces, and finally, to three-dimensional force systems acting on a rigid body. Special attention devoted to forces in structures such as truss, frames, and machines. After building a fundamental understanding of these topics, we explore analysis of internal forces developed in structural members. Vector algebra are used throughout. The subject is called statics because it is concerned with particles and rigid bodies that are in equilibrium; these will usually be stationary (i.e., static).

MET 225 Strength of Materials — 3 credits

Prerequisites: EGR 280 Introduction to 3-D Modeling, PHYS 201 Physics I, PHYS 202 Physics I Laboratory, MAT 120 Precalculus, MAT 220 Calculus I, MAT 221 Calculus II, and MET 220 Statics

Strength of Materials addresses the stresses that are formed in rigid bodies due to the application of forces and torques. These stresses are used to size and for material selection of rigid bodies. This course also covers the theory and supports the application of essential mechanics of materials principles. Topics include concept of stress and strain, mechanical properties of materials, generalized Hooke's law, axial load, torsion, bending, transverse shear, combined loadings, and transformation of stress and strain components.

MET 270 Dynamics — 3 credits

Prerequisites: None

This course provides a thorough and systematic introduction to the subject of dynamics of particles and rigid bodies. It covers the relationship between action and reaction when an object moves and kinetic equations of motion for a rigid body.

MET 275 Introduction to Microprocessors and Microcontrollers — 3 credits

Prerequisites: PHY 203 Physics II, PHYS 204 Physics II laboratory, MAT 114 Intermediate Algebra or MAT 120 Precalculus, NUC 255 Electrical Theory, IT 211 Fundamentals of Programming

This course covers the basic principles and applications of microprocessors and microcontrollers, with a particular focus on their role in robotics. The curriculum includes the hardware and software aspects of microprocessor systems, such as interfacing, assembly language programming, and microprocessor-based systems. Microprocessor and microcontroller applications in data acquisition and process control systems are introduced, as well as the architecture, operation, and programming of

8-, 16-, and 32-bit microprocessors. The course features a lab component using MATLAB Simulink, incorporating hands-on programming, interfacing with sensors and actuators, and designing basic robotic functionalities activities using microprocessors and microcontrollers. Upon completion of the course, students have the foundational knowledge and skills necessary to understand and apply microprocessors and microcontrollers in mechanical engineering, particularly in the context of robotics. Note, students registering for this course are assessed a course resource fee.

MET 280 Mechanics for Robotics — 3 credits

Prerequisites: EGR 280 Introduction to 3-D Modeling, PHYS 201 Physics I, PHYS 202 Physics I laboratory, MAT 120 Precalculus, MAT 220 Calculus, MAT 221 Calculus II, MET 220 Statics, MET 225 Strength of Materials, MET 270 Dynamics

This course explores the fundamental principles of mechanics as they apply to robotics, providing a deep understanding of the mechanics governing the motion, dynamics, and control of robotic systems. Through theoretical discussions and practical applications, topics such as force analysis, torque analysis, equilibrium, motion analysis, and mechanisms commonly used in robotic systems are studied. Emphasis is placed on developing a comprehensive understanding of the mechanical components of robotic devices and their interactions with the environment. A laboratory component using SolidWorks is embedded into the course, offering exercises and projects to gain practical experience in applying mechanical principles to solve real-world problems in robotics. Students acquire essential knowledge and skills necessary for designing, analyzing, and optimizing the mechanical components of robotic devices. Note, students enrolling in this course are assessed a course resource fee.

MET 360 Manufacturing Processes — 3 credits

Prerequisites: EGR 280 Introduction to 3-D Modeling, EGR 290 Manufacturing Processes

This course explores core manufacturing processes, including casting, molding, forming, cutting, machining, joining, and the manufacturing of reinforced polymers (composites) and ceramic powder processing. Additionally, it covers Computer-Aided Manufacturing (CAM), programming, networking, and data communications, which are essential for modern manufacturing. Key focus areas include Design for Manufacturability (DFM), which streamlines product development to minimize costs and delays, and quality assurance practices, emphasizing inspection, testing, and defect analysis. Hands-on exercises and simulations provide practical experience in utilizing CAM software and conducting quality inspections. By the end of the course, students have a thorough understanding of manufacturing processes, reading them to optimize production workflows, enhance product quality, and innovate in industrial sectors. Note, students registering for this course are assessed a course resource fee.

MET 380 Applied Finite Element Analysis — 3 credits

Prerequisites: PHYS 201 Physics I, PHYS 202 Physics I Laboratory, MAT 120 Precalculus, MAT 220 Calculus I, MAT 221 Calculus II, EGR 280 Introduction to 3-D Modeling, EGR 290 Advanced 3-D Modeling, MET 220 Statics, MET 225 Strength of Materials

This course provides a foundation in applied computational mechanics, preparing students to tackle complex engineering problems in various industrial contexts. The course focuses on modeling

techniques, meshing, application of boundary conditions, solving systems of equations, and post-processing of results for static, dynamic, thermal, and nonlinear analyses to predict how a part or assembly behaves under given conditions. Key topics include static and dynamic analysis, thermal analysis, and nonlinear analysis, all with an emphasis on real-world applications. Through hands-on lab sessions and projects, students gain practical experience in computational mechanics and develop a balanced theoretical background. Using Ansys software, students learn to set up models, perform meshing, run analyses, and interpret results to optimize designs, reducing the need for physical prototypes. Students gain practical experience with FEA software, learning to validate models and apply FEA to real-world engineering problems, including optimization and verification. Upon completion of this course students are equipped with the skills necessary to effectively apply FEA, contributing to innovation and optimization in mechanical design and analysis. Note, students registering for this course are assessed a course resource fee.

MET 390 Robotic Control Systems — 3 credits

Prerequisites: PHYS 203 Physics II, PHYS 204 Physics II Laboratory, MAT 114 Intermediate Algebra or MAT 120 Precalculus, NUC 255 Electrical Theory, MET 275 Microprocessors and Microcontrollers, and IT 211 Fundamentals of Programming

This course presents the theory and application of control systems specifically tailored for robotic platforms. Students explore the principles of control theory and their practical implementation in the design, operation, and optimization of robotic systems. The curriculum covers a range of topics, from classical control methods to modern techniques, providing a solid foundation for understanding, developing, and implementing control systems in various robotic applications. Incorporating programming, networking, and data communications, this course offers hands-on experience through a lab component. Through lectures, labs, and projects, students develop proficiency in designing, implementing, and analyzing control systems for robotics. By the end of the course, students are equipped with the knowledge and skills to innovate in robotics engineering, contributing to advancements in automation and robotics technology. Note, this course requires software that students must purchase if they do not already own it. If a student already owns the software, no additional purchase is necessary.

MET 400 Robotics and Automation — 3 credits

Prerequisites: PHYS 201 Physics I, PHYS 202 Physics I Laboratory, PHYS 203 Physics II, PHYS 204 Physics II Laboratory, MAT 114 Intermediate Algebra or MAT 120 Precalculus, MET 220 Statics, MET 225 Strength of Materials, MET 270 Dynamics, NUC 255 Electrical Theory, MET 275 Microprocessors and Microcontrollers, MET 280 Mechanics for Robotics, MET 390 Robotic Control Systems, IT 211 Fundamentals of Programming

This course provides a thorough exploration of the principles, technologies, and applications of robotics and automation. Students study the interdisciplinary nature of these fields, gaining a solid understanding of both theoretical foundations and practical implementation aspects. Covering topics from basic robotic mechanisms to advanced automation systems, the course equips students with the knowledge and skills to design, develop, and implement robotic and automated solutions across various industries. The course includes programming, networking, and data communications, offering

hands-on experience through a lab component. Students gain practical experience with robotic hardware, industrial automation equipment, and software platforms such as ROS (Robot Operating System) and PLC (Programmable Logic Controller). By the end of the course, students are prepared to tackle challenges in robotics engineering and automation, contributing to advancements in technology and innovation in diverse industrial sectors. Note, this course requires software that students must purchase if they do not already own it. If a student already owns the software, no additional purchase is necessary.

MET 495 Mechanical Engineering Technology Capstone — 3 credits

Prerequisites: Capstone must be the last course taken. All major core and university requirements must be complete. The Capstone can be paired with 1 other course that is considered to be a general education course (excluding courses to meet the Written English requirement and the Ethics requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Mechanical Engineering Technology capstone course integrates all fields of mechanical engineering technology. Students work in teams on practical engineering solutions to industry-level projects, supporting critical thinking and the development of research, teamwork, planning, and communication skills. Projects include open-ended design problems, design methodology, problem statements and specifications, alternative solutions, feasibility considerations, and detailed system descriptions, including realistic constraints like economic factors and social impact. The project experience includes regular feedback from faculty, peers, and a review panel of industry experts. Upon completion of this course, students demonstrate integrated competencies from prior coursework, showcasing enhanced skills in communication, teamwork, report writing, and presentations.

MIL 230 United States Military History — 3 credits

Prerequisite: None

To better understand the current and future challenges of new and dangerous warfare tactics, this course will describe and analyze military strategy as well as the causes of war throughout the evolution of the United States Military. Additionally, it will examine how the military has confronted social changes and diversity and analyze the ethical challenges of a new operational environment.

This course replaces MIL 130. Credit for only one of these courses will be applied toward graduation.

MIL 301 Great Military Leaders — 3 credits

Prerequisite: None

Great Military Leaders presents an overview of military leadership and great military leaders throughout history who have left a mark of excellence in world history. The course examines the qualities of military leaders and analyzes specific leadership traits that contributed to military leaders' excellence in leadership. Through this analysis, the students will be able to compare and contrast leadership throughout history and isolate those leadership traits and qualities that make a great leader and then apply those traits and qualities to new situations.

MIL 312 Military Leadership: Skills for the 21st Century — 3 credits

Prerequisite: None

This course introduces undergraduate students to contemporary military leadership through a focus on decision-making, ethical leadership, an examination of the elements of national power in the 21st Century, and analysis of challenges and opportunities in a dynamic global context. The course will expose students to the theories and application of leadership in the military. Throughout this course, students will gain an understanding of Military Leadership, Military History, and the global challenges of the military today through research and analytical writing.

MIL 498 Military Studies Capstone — 3 credits

Prerequisites: The capstone course represents a culmination of your public administration skills, by integrating classroom learning with practical experience. You will apply your skills to solve real problems for public and nonprofit organizations. Students draw on the coursework and their own work experiences to develop specific recommendations for design, implementation, and evaluation of the project tasks.

The Military Leadership Capstone exposes students to relevant theories of military leadership, their applications to military operations, and leaders throughout history. By examining military leadership within the context of historical and political settings, students will develop a comprehensive knowledge of traits and characteristics that will contribute to their own leadership abilities. This course addresses all aspects of military leadership, how it is applied, what worked and what failed and why, and explores the diplomatic, economic, political, and social aspects of conflict and war. Students will improve their ability to think critically, and learn to become agile and adaptive leaders and decision makers.

MUS 210 History of Rock and Roll — 3 credits

Prerequisite: None

This course provides an introduction to the genre of rock and roll, its form and derivations, and rock and roll artists and bands spanning the years 1955 to 1970. Through reading and numerous listening examples, this course will look at the state of American popular music after World War II, the inception of rock and roll in the 1950s, the growth of youth culture in America, and the growing popularity of rock and roll through radio, film, and television.

NS 110 Science in Today's World — 3 credits

Prerequisite: None

The purpose of this course is to provide students with an overview of current and emerging trends in science and technology so that they will be able to make informed decisions and be informed consumers. It will introduce the scientific method and terminology used in reporting scientific results. It will also survey current topical science issues, preparing students to read about scientific, technological, and medical advances in the press and assess the scientific conclusions presented.

NS 115 Introduction to Astronomy — 3 credits

Prerequisite: None

Welcome aboard the USS Kepler! During the next eight weeks, we will be exploring this big, beautiful universe of ours! The itinerary of our voyage allows, after a brief look at a few key physical principles and the history of their development, a look at the cosmos on an increasingly large scale. Our journey will begin with a detailed study of our solar system as well as a discussion of planetary systems around other stars that are being discovered almost daily. From there, we'll examine the nature of stars how they are born, live, and die, and how they constitute the fundamental building blocks of one of the most important cosmic structures, the galaxy. This study of galaxy formation and evolution will lead us into a brief exploration of the current research in cosmology, including the as-of-yet undiscovered nature of dark energy and dark matter. We've reserved you a seat aboard our shuttle, so let's prepare to launch!

This course replaces PHYS 110. Credit for only one of these courses will be applied toward graduation.

NS 120 Weather and Climate — 3 credits

Prerequisite: None

This is a course designed to provide the student with a basic understanding of the dynamic, thermodynamic, and kinematic principles that control atmospheric processes and form daily and climatic weather events. The significance of atmospheric composition, global circulation, and energy and moisture transfer will be covered, as well as familiarity with standard weather observations. These foundations will allow the student to engage in interactive discussions, using critical thinking, to describe basic meteorological processes and comprehend safety needs during severe weather. A view into the intricacies of weather forecasting, descriptions of regional climates, and potential impacts of global climate change will be included.

NS 130 Are We Alone? Life in the Universe — 3 credits

Prerequisite: The student should be comfortable performing simple algebraic calculations using calculators or spreadsheet software.

This course uses the Drake Equation to answer the question Are We Alone In the Universe. The Drake Equation is not only a model for estimating the number of alien civilizations in our galaxy but also a means of touring the many different fields of science upon which this question touches. By the end of this course, you will arrive at a personal estimate of how many alien civilizations exist in our galaxy. You will also conceptualize what one of these alien species might be like and how they might interact with their environment (including how they might seek to communicate with us). The Galaxy awaits. Let's get started!

NUC 210 Health Physics and Radiation Protection — 3 credits

Prerequisites: None

This course provides an understanding of radiation protection principles essential for nuclear power plant operations. Key topics include radioactivity and radiation interactions, the biological impacts of ionizing radiation, and essential radiological calculations. The curriculum also examines radiation sources, detectors, and the standards outlined in 10 CFR 20, with an emphasis on both external and internal dosimetry methods. Understanding the standards provides students with an understanding workplace and environmental monitoring techniques. The course also highlights radiation protection principles and strategies, preparing students to handle radiological emergencies effectively. With this set of knowledge and skills, students can describe the international and national framework of radiation protection standards, explaining the basis of applicable federal regulations and guidance, as well as demonstrate proficiency in methods for safeguarding workers, the public, and the environment from radioactivity and radiation. Additionally, students gain the ability to interpret radioactivity and radiation measurements, applying standard methods for reporting results effectively.

NUC 211 Radiation Measurement Lab — 1 credit

Prerequisite: NUC 210 Health Physics and Radiation Protection or equivalent; NUC 210 may be taken concurrently with this course.

This course provides experience in the use of instruments for the detection and analysis of radiation. Instruments included in the course are gas-filled detectors, scintillation counters, semiconductor detectors, radiation spectroscopy, neutron detectors, dosimetry, external dosimetry, and counting statistics.

NUC 240 Atomic and Nuclear Physics — 4 credits

Prerequisites: NUC 210 Health Physics and Radiation Protection or equivalent

Required Knowledge: To comprehend the course materials, the students need to have the following knowledge: Algebra, trigonometry, and basics of differential calculus, integral calculus, and differential equations; college level Physics I, Physics II, Physics I or Physics II Lab, and Chemistry with Lab; health physics radiation protection, and radiation measurements; basic computer literacy for technical problem solving, including installing software, naming files, transferring files, and navigating the internet; computer applications, including use of Microsoft Office (Word, Excel, PowerPoint, and Project).

This course will provide a foundational introduction to Atomic and Nuclear physics, including key components of modern and quantum physics. Successful completion of this course will help you complete later coursework in this curriculum.

This course covers the structure of the atom and of the nucleus, atomic and nuclear energy states, the sources of radioactivity, the detection and measurement of the various types of radiation, nuclear reactions and neutron interactions, nuclear fission and fusion and the application of these concepts. These topics are discussed with focus on practical applications. This course will enhance learning in later topics in reactor physics, radiation safety, electronics, materials science, and chemistry.

NUC 245 Thermodynamics 3 credits

Prerequisites: MAT 120 Precalculus

This course provides an understanding of thermodynamic and fluid flow principles, emphasizing their application to systems, particularly in nuclear power plant operations. Topics include thermodynamic properties, measurements, systems and processes, phase change, property diagrams, laws of thermodynamics, compression processes, heat transfer and heat exchange, boiling heat transfer, heat generation, decay heat, continuity equation, types of flow, Bernoulli equation, and pumps. The course includes laboratory work using a Generic Pressurized Water Reactor (PWR) simulator. This simulator provides hands-on experience with the circulating water system, steam generator heat balance, main and reheat systems, overall plant efficiency, flux distribution, decay heat production, and load rejection. Based on a real operating unit, this web-based simulator is thoroughly tested and verified to perform plant maneuvers realistically and accurately. By the end of the course, students are able to analyze thermodynamic processes in closed and open systems to identify the optimal or most efficient use of energy resources. Note, the PWR simulator utilizes specific technologies that may present accessibility challenges for individuals with disabilities. Accessibility inquiries can be directed to the department chair.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUC 246 Thermal Measurement Laboratory

Prerequisite: MAT 120 Precalculus. Students should not take NUC 246 Thermal Measurements Laboratory if they if have taken NUC 245 Thermodynamics or have met the thermodynamics requirement with a lab.

In order to comprehend the course materials, students need to have the following knowledge: General Physics and Fundamentals of Differential and Integral Calculus.

This laboratory course provides students with an understanding of thermodynamic principles and how thermodynamics principles apply to systems, including the importance of understanding thermodynamic principles for nuclear power plant operations. This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator including Introduction to PWR Simulator, Circulating Water System, Steam Generator Heat Balance, Main and Reheat System, Overall Plant Efficiency, Flux Distribution, Decay Heat Production, and Load Rejection.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUC 250 Introduction to Heat Transfer and Fluid Mechanics — 3 credits

Prerequisites: PHYS 201 Physics I, PHYS 202 Physics I Lab, MAT 120 Precalculus, NUC 245 Thermodynamics

This course provides a fundamental grounding in the principles of heat, heat transfer, and fluid mechanics, as they apply to power plant operation. While designed to meet the requirements of the Nuclear Uniform Curriculum Program, specifically Section 1.1.5 Heat Transfer and Fluid Flow of ACAD 08-006 for Non-Licensed Nuclear Operators, this course has broad applicability for anyone interested in power plant technology, regardless of the heat source used. The course covers the following broad topics: Temperature, its measurement, and pressure-temperature relationships in power plant steam and water systems; heat, its various forms, mechanisms and mechanics of heat transfer, and the related power plant components used to transfer heat; and fluid mechanics as they relate to heat and heat transport in power plant steam systems and power plant water systems.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUC 255 Electrical Theory — 3 credits

Prerequisites: PHYS 203 Physics II, and PHYS 204 Physics II Laboratory. and MAT 114 Intermediate Algebra; or MAT 120 Precalculus

This course examines the theory of electrical circuits and electronic control components used in nuclear and commercial power plants. Topics include AC and DC current, voltage, capacitance, inductance, energy, power, Kirchhoff's laws, linear voltage-current characteristics, digital logic gates, voltage regulation and amplification using diodes, transistors, and operational amplifiers, transformers, DC and AC motor and generator operations, and battery construction, theory, and operation. The course utilizes the open-source online electronic circuit simulator Falstad to provide hands-on learning experiences. By the end of the course, students can design, modify, and analyze AC and DC circuits to achieve and improve desirable output characteristics.

NUC 260 Power Plant Components — 3 credits

Prerequisites: MAT 114 Intermediate Algebra, MAT 120 Precalculus

This course covers the theory, design, and application of mechanical and electrical components such as heat exchangers, valves and actuators, pumps, turbines, diesel engines, electrical motors, transformers, instrument controls, and air compressors. Group discussions focus on practical applications in power plants. Students have access to WSC's Generic Pressurized Water Reactor (PWR) simulator, enhancing their understanding of components and system interrelations. By the end of this course, students can present the basic theory, construction, and application of plant electrical equipment, such as heat exchangers, steam turbines, electrical generators AC electrical motors, transformers etc, and identify ways to improve overall plant efficiency.

NUC 271 Fundamentals of Reactor Safety — 3 credits

Prerequisite: None

This course provides an overview of nuclear reactor plant safety design topics, including regulatory requirements, reactor plant safety analysis, reactor protection systems, plant procedural structure, and emergency planning. It also explores significant industry events such as Three Mile Island, Chernobyl, Fukushima, and the impact of the 9/11 terrorism event. Laboratory work is conducted using a Generic Pressurized Water Reactor (PWR) simulator. Note, the PWR simulator utilizes specific technologies that may present accessibility challenges for individuals with disabilities. Accessibility inquiries can be directed to the department chair.

NUC 280 Leading Change in the Nuclear Industry — 3 credits

Prerequisite: None

This course provides learners with the theory and knowledge necessary to lead change in the nuclear industry. Topics include leadership theories associated with organizational change, visionary leadership, changing behaviors, resistance to change, and conflict. Discussions will focus on change management processes and ethical practices relevant to the nuclear industry to ensure the safe and efficient operation of nuclear facilities.

NUC 285 Leadership Communications in the Nuclear Industry — 3 credits

Prerequisite: None

This course will provide students with the knowledge and skills to formulate effective strategies for communicating with stakeholders in the nuclear industry. Students will be able to identify appropriate media and methods of communication, as well as develop feedback and monitoring strategies to ensure that the communication is effective. In addition, students will analyze communication strategies and provide an oral presentation of a proposed strategy.

NUC 323 Material Science — 3 credits

Prerequisites: CHE 101 General Chemistry I, MAT 120 Precalculus, MAT 220 Calculus I, MAT 221 Calculus II

This course explores the use of materials in nuclear engineering applications. Topics include an overview of basic nuclear plant operations, atomic bonding, crystalline and non-crystalline structures, diffusion, phase diagrams, mechanical and thermal behavior, failure analysis and prevention, structural materials, ceramics, corrosion, radiation effects on materials, and material challenges associated with reactor core operation. Additionally, the course examines materials commonly used in reactor core and nuclear plant design. Students gain an understanding of the properties and behaviors of materials critical to nuclear engineering, equipping them to address material-related issues in reactor design and operation.

NUC 330 Reactor Core Fundamentals 3 credits

Prerequisites: NUC 210 Health Physics and Radiation Protection, and NUC 240 Atomic and Nuclear Physics

This course is an introduction to the theory behind operational neutron chain reaction systems. Specific topics in the course include neutron cross sections, fast, epithermal, and thermal neutron fluxes, reaction rates, the fission process, neutron production, neutron multiplication, the six-factor formula, reactivity, subcritical multiplication, prompt and delayed neutron fractions, reactor period, reactivity coefficients, control rod worth, and fission product poisons.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUC 350 Plant Systems Overview 3 credits

Prerequisites: NUC 271 Fundamentals of Reactor Safety, or NUC 330 Reactor Core Fundamentals

This course provides an overview of the design, layout, and function of major systems associated with the two nuclear power plant designs currently used for U.S. power production: pressurized water reactors (PWR) and boiling water reactors (BWR). The curriculum examines a typical nuclear power plant system by system, focusing on major components, controls, and design features. Emphasis is placed on plant system interconnections and functions relative to nuclear safety. PWR and BWR simulation learning tools are utilized to apply and reinforce course material through dynamic learning activities. Laboratory work is conducted using a Generic Pressurized Water Reactor (PWR) simulator. By the end of the course, students have a comprehensive understanding of the critical systems in nuclear power plants and their importance in ensuring operational safety and efficiency. Note, the PWR simulator utilizes specific technologies that may present accessibility challenges for individuals with disabilities. Accessibility inquiries can be directed to the department chair.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUC 360 Nuclear Leadership— Risk Management/Leadership Courage 3 credits

Prerequisites: None

This course covers the knowledge and skills necessary to integrate leadership into operational decisions associated with nuclear power plants. Students will be able to develop teams and integrate them into the framework of a commercial nuclear business. This will include developing and demonstrating appropriate business acumen as well as demonstrating an understanding of risk in decision making processes. In addition, the course will focus on helping students develop leaderships styles appropriate to improving the effectiveness of their future organizations.

NUC 495 Integrated Technology Assessment BNX — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This capstone course integrates all fields of nuclear engineering technology. Students will draw on their knowledge of nuclear engineering technology and competencies to analyze reactor plant scenarios. The purpose of the course is to integrate the learning achieved in individual nuclear engineering technology courses taken, evaluated industry training, and naval nuclear power training to earn a nuclear engineering technology degree. The knowledge and competencies acquired in natural sciences, health physics and radiation protection, thermodynamics, heat transfer and fluid flows, reactor core fundamentals, and plant systems overview will be utilized to study the principles in nuclear engineering technology. Students will participate in a reactor plant simulation experience that requires considering multiple theoretical concepts and applying those concepts to plant applications. An individual capstone project and a watch team capstone project will be developed and presented to the instructor.

This course contains laboratory work based on a Generic Pressurized Water Reactor (PWR) simulator.

This course utilizes specific technologies that may not be accessible to individuals with disabilities. If you have any questions or difficulties, please contact your instructor.

NUR 101 Introduction to Professional Nursing — 2 credits

Prerequisites: NUR 104 Essentials of Nursing Care: Health Safety, NUR 105 Essentials of Nursing Care: Health Differences, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra.

This introductory course focuses on the competencies and core values inherent in the role of the Registered Professional Nurse. Collaboration with interprofessional healthcare team members is presented. Assignment, delegation, and supervision responsibilities of the Registered Professional Nurse, as well as legal influences, ethics, and scope of practice are explored.

Delivery: Online course delivered over 8 weeks.

NUR 104 Essentials of Nursing Care: Health Safety — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra

This content focuses on the use of nursing process to provide and manage patient-centered care for persons across the lifespan. Patient teaching is discussed. Documenting and reporting nursing care and the use of informatics in health care are presented. The concepts of health promotion, maintenance, obtaining a health history, and the techniques of physical assessment are presented. Attention to safe and effective care with respect to environmental safety needs, emergency preparedness, use of restraints, infection control, and the prevention and management of pressure injury is explored. Pharmacology, safe medication administration and related nursing care are also addressed. Safe use of the nursing process is fundamental in this course.

All the skills labs in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Students must purchase one skills kit (available in the bookstore) for use in the NUR 104 and NUR 105 course. Items within them are necessary for students to use during their application of nursing clinical skills assignments for evaluation and feedback by the course instructor.

Delivery: Online course delivered over 8 weeks.

NUR 105 Essentials of Nursing Care: Health Differences — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: NUR 104 Essentials of Nursing Care: Health Safety, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra. May be taken concurrently with NUR 104 Essentials of Nursing Care: Health Safety.

This content focuses on the application of the nursing process to support nursing judgment for the provision of evidence-based, patient-centered care. Patient-centered care addressing the promotion of health and achievement of optimal outcomes for patients experiencing common health problems related to nutrition, elimination, oxygenation, fluid, and electrolyte balance, mobility, activity, sleep, and rest is presented in this content. Knowledge of anatomy and physiology and the nursing process is used to support

nursing judgment. Ethical and legal implications along with evidence-based standards of nursing practice are presented in relation to safe, quality nursing care for patients and families across the lifespan.

All the skills labs in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Students must purchase one skills kit (available in the bookstore) for use in the NUR 104 and NUR 105 course. Items within them are necessary for students to use during their application of nursing clinical skills assignments for evaluation and feedback by the course instructor.

Delivery: Online course delivered over 8 weeks.

NUR 108 Transition to the Professional Nurse Role — 3 credits

Prerequisites: NUR 104 Essentials of Nursing Care: Health Safety, NUR 105 Essentials of Nursing Care: Health Differences, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra

The knowledge and competencies in relation to the role of the Registered Professional Nurse are addressed in this content. Assignment, delegation, and supervision responsibilities of the Registered Professional Nurse are emphasized. Recognition of the Registered Professional Nurse role in collaboration with the various interprofessional healthcare providers is presented. Forces affecting the role of the Registered Professional Nurse such as nursing history, nursing organizations, regulatory agencies, ethics, law, technology, health care delivery systems and scope of practice are explored.

Delivery: Online course delivered over 8 weeks.

NUR 109 Foundations in Nursing Practice — 3 credits

Prerequisites: NUR 104 Essentials of Nursing Care: Health Safety, NUR 105 Essentials of Nursing Care: Health Differences, NUR 101 Introduction to Professional Nursing or NUR 108 Transition to the Professional Nurse Role, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra. May be taken concurrently with NUR 101 Introduction to Professional Nursing or NUR 108 Transition to the Professional Nurse Role.

This content focuses on the application of the nursing process to support nursing judgment for the provision of patient-centered care. The foundations of nursing practice include the care of culturally diverse patients experiencing health problems related to discomfort, pain, and sensory impairment. Growth and development and its relationship to health, injury prevention, illness, and continuity

of care in a variety of settings are studied. Chronic illness, disability, and end of life needs, as well as pertinent ethical, legal, and regulatory requirements and the standards of professional nursing practice are addressed. Concepts and theories from the natural and social sciences are applied while caring for patients and families across the lifespan.

Delivery: Online course delivered over 8 weeks.

NUR 209 Reproductive Health — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: All Nursing Phase I requirements, ENG 101 English Composition or ENG101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra.

This content focuses on the application of the nursing process to support nursing clinical judgment and patient-centered care in reproductive health across the lifespan. A variety of reproductive health conditions and problems are presented including current topics in reproductive health, male and female reproductive disorders, childbearing, congenital anomalies, genetic disorders, and an introduction to newborn and pediatric health. Evidence-based, culturally sensitive nursing care, standards of professional nursing practice, as well as ethical, legal, and regulatory requirements are addressed. Principles, concepts, and theories from the natural and social sciences in relation to safe, quality nursing care are applied to patients and their families across the lifespan.

The laboratory component is a practice experience using virtual simulation patients included in the required resource for the course.

All the laboratory requirements in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Delivery: Online course delivered over 8 weeks.

NUR 211 Health Differences Across the Life Span 1 — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: All Nursing Phase I requirements, NUR 209 Reproductive Health, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra. May be taken concurrently with NUR 209 Reproductive Health.

This requirement focuses on the application of the nursing process to support nursing judgment and the provision of patient-centered care for patients with acute and chronic cardiovascular and respiratory health problems, impaired blood cell formation, and abnormal cell growth. Evidence-based, culturally sensitive nursing care, standards of professional nursing practice, as well as ethical, legal,

and regulatory requirements are addressed. The natural and social sciences are applied to the delivery of quality nursing care for patients and families across the life span.

The laboratory component is a practice experience using virtual simulation patients included in the required resource for the course.

All the laboratory requirements in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Delivery: Online course delivered over 8 weeks.

NUR 212 Health Differences Across the Life Span 2 — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: All Nursing Phase I requirements, NUR 209 Reproductive Health, NUR 211 Health Differences Across the Life Span 1, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra.

This requirement focuses on the application of the nursing process to support judgement and the provision of patient-centered care. A wide variety of health problems are presented. These include mental health disorders, cognitive impairment, diabetes mellitus, and dysfunction of endocrine, hepatic, biliary, renal, and pancreatic systems. Evidence-based, culturally sensitive nursing care, standards of professional nursing practice, as well as ethical, legal, and regulatory requirements are addressed. The application of anatomy and physiology, microbiology, and social science concepts is essential for the provision of safe quality patient care.

The laboratory component is a practice experience using virtual simulation patients included in the required resource for the course.

All the laboratory requirements in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Delivery: Online course delivered over 8 weeks.

NUR 213 Health Differences Across the Life Span 3 — 3 credits

(2.5 credits didactic, 0.5 credits lab)

Prerequisites: All Nursing Phase I Requirements, NUR 209 Reproductive Health, NUR 211 Health Differences Across the Life Span 1, NUR 212 Health Differences Across the Life Span 2, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra. May be taken concurrently with NUR 212 Health Differences Across the Life Span 2.

This course focuses on the application of the nursing process to support nursing judgment for the provision of care for persons with health problems related to infectious and communicable diseases, tissue trauma, neurological dysfunction, and musculoskeletal disorders. Content areas include immune function, chain of infection, perioperative nursing, neuromuscular functional assessment, and musculoskeletal disorders. Health problems such as HIV/AIDS, tuberculosis, hepatitis, degenerative diseases, stroke, and trauma are highlighted. Evidence-based, culturally sensitive nursing care, standards of professional nursing practice, as well as ethical, legal, and regulatory requirements are addressed. Principles, concepts, and theories from the natural and social sciences in relation to safe quality nursing care are applied to clients and families across the lifespan.

The laboratory component is a practice experience using virtual simulation patients included in the required resource for the course.

All the laboratory requirements in this course must be successfully completed with a satisfactory grade of "Complete" to pass this course, regardless of the course numeric grade. Skills labs are graded as Satisfactory (Complete) or Unsatisfactory (Incomplete).

Delivery: Online course delivered over 8 weeks.

NUR 250 Clinical Nursing Practicum: Care of Patients Across the Lifespan — 4 credits

(2.5 credits didactic, 1 credit lab, 0.5 credit clinical)

Prerequisites: All Nursing Phase I and Nursing Phase II requirements, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra.

Completion of required clinical documentation. Verification of Health Care Experience (VHCE) form must be submitted when no more than 6 credits in general education are still needed. The VHCE form expires three (3) months after the date with supervisor's signature. Students should consult with the academic advising team regarding the VHCE form. LPN license will be reviewed to ensure the license is still active and unencumbered.

Verification of Health Care Experience (VHCE) form must be submitted when no more than 6 credits in general education are still needed. The VHCE form expires three (3) months after the date with

supervisor's signature. Students should consult with the academic advising team regarding the VHCE form. LPN license will be reviewed to ensure the license is still active and unencumbered.

In this clinical course, students focus on the application of contemporary competencies and practice guidelines for the delivery of safe, quality patient care. Laboratory experiences provide opportunities for further development of nursing judgment applicable to the clinical environment. Students provide direct care for patients across the lifespan who are experiencing non-critical medical-surgical conditions in the acute care setting. A satisfactory grade in the clinical experience is required to pass the course, regardless of the course numeric grade.

The laboratory component is a practice experience using virtual simulation patients included in the required resource for the course. Other lab experiences include pre-post clinical briefings and synchronous lab(s).

A satisfactory grade in the laboratory components of this course is required to pass the course, regardless of the course numeric grade.

This course must be completed through Excelsior University.

Delivery: Hybrid course delivered over 8 weeks. Online lecture, synchronous online weekly labs and in-person clinical components.

NUR 275 Competencies for Contemporary Nursing Practice — 3 credits

(2 credits didactic, 1 credit lab)

Prerequisites: All Nursing Phase I and Nursing Phase II requirements, NUR 250 Clinical Nursing Practicum: Care of Patients Across the Lifespan, ENG 101 English Composition or ENG 101A Advanced Composition, PSY 235 Lifespan Developmental Psychology, SOC 101 Introduction to Sociology, BIO 115 Anatomy and Physiology I (NonLab), BIO 116 Anatomy and Physiology II (NonLab), BIO 212 Microbiology, MAT 101 Mathematics for Everyday Life or MAT 114 Intermediate Algebra.

The course is designed for students to apply competencies for contemporary nursing practice. Assessment Technologies Institute (ATI) products for NCLEX preparation are integrated throughout the course, including Comprehensive and Content Mastery Assessments that focus on nursing fundamentals, adult medical-surgical, pharmacology, pediatric, newborn and women's health, mental health, and leadership. Emphasis is placed on remediation to strengthen areas of weakness identified through practice assessments.

Students will participate in four NCLEX Success Sessions, which emphasize content knowledge, clinical judgment, professional values, and comprehensive NCLEX preparation.

The course includes a laboratory component for group collaboration, demonstrating teamwork, interprofessional collaboration, and understanding medical emergencies. Additionally, students must complete

a mandatory pediatric practice experience with a community partner addressing pediatric healthcare needs. Failure to complete and submit mandatory course components will result in failing the course.

This course must be completed through Excelsior University.

NUR 275 contains weekly one-hour, synchronous, virtual clinical group debriefing sessions via Zoom web conferencing. Students will be required to sign up for a debriefing session day/time from available time slots posted by the course instructor.

The laboratory component is a practice experience using virtual simulation patients included in the required resources for the course.

Delivery: Online course delivered over 8 weeks.

NUR 290 Nursing Capstone: Advanced Clinical Practicum — 4 credits

(2.5 credits didactic, 1.0 lab credit, 0.5 credits clinical)

Prerequisites: Completion of all required clinical documentation. The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course further develops the role of the nursing professional, focusing on advanced skills, knowledge, judgment, professional values, and NCLEX preparation. It includes a clinical experience where care for multiple patients in a healthcare facility is required. Clinical experiences are scheduled, requiring travel to a clinical site during the course term.

The instructional portion integrates products from Assessment Technologies Institute (ATI) for NCLEX preparation, including the Virtual ATI series (vATI), designed in partnership with Excelsior to prepare for NCLEX success. The laboratory component includes ATI Video Case Studies to enhance clinical judgment and critical thinking skills. Additionally, a mandatory ATI 2-Day Live Review is held during the last week of the course.

To successfully pass the course, a satisfactory grade in clinical practice, attendance at the mandatory ATI 2-Day Live Review, and a grade of C or higher are required.

This course must be completed through Excelsior University.

Delivery: Hybrid course delivered over 8-weeks. Online lectures, synchronous and asynchronous labs, and in-person clinical components.

NUR 301 Bridge for Professional Socialization — 2 credits

Prerequisite: ENG 101 English Composition or ENG 101A Advanced Composition

This course expands on the content of NUR 101 and focuses on the student transitioning to the role of a baccalaureate-prepared nurse. Professional nursing concepts are expanded on, and the pivotal role nurses play in health care is emphasized. Building on previous knowledge and experience, students participate in intellectual dialogue on the role of the nurse in a diverse society and examine how their own professional development can affect policy changes within the profession and in health care. Promoting critical analysis through a person-centered care experience will transform and create new ways of approaching professional practice.

Delivery: Online course delivered over 8 weeks.

NUR 336 The Profession of Nursing, Becoming Influential — 3 credits

Prerequisite: ENG 101 English Composition or ENG 101A Advanced Composition

This course will focus on the core values of professional nursing and their associated behaviors. Building on previous knowledge and experience students will critically consider nursing's professional roles and responsibilities in the healthcare delivery system. Selected concepts will be presented in the context of social justice and will include the use of nursing theory and evidence-based knowledge to provide care for diverse populations, ethics and value-based professionalism, professional confidence, empowerment, and caring and compassion. In addition to classroom dialogue and written assignments, students will engage in a 1-hour practice experience that will support new understandings for professional practice.

Delivery: Online course delivered over 8 weeks.

NUR 338 Introduction to Informatics for Nurses — 2 credits

Prerequisite: None

This course provides knowledge about the informatics roles and skills utilized in professional nursing practice. Emphasis is placed on the use of information processes and information technology to support patient care interventions in an interprofessional healthcare environment. The course will focus on the use of information technology tools to support healthcare decision-making for patients, healthcare consumers, and professional colleagues. Nursing informatics specialization competencies and the role of nurses in improving patient outcomes and supporting a safe healthcare environment, through the use of information technology, will be included.

Delivery: Online course delivered over 8 weeks.

NUR 342 Holistic Health Care Across the Life Span — 4 credits

Prerequisite: Active and unencumbered RN license

This course focuses on the role of the professional nurse in the health promotion of individuals and populations. Emphasis is placed on enhancing communication skills, cultural competence, and physical assessment skills for registered nurses. Care of individual patients and populations is analyzed within the context of environmental influences, social determinants of health, and culture. Students will explore the role of technology in improving access to care and optimizing health care outcomes. Students will complete a practice experience that includes a health history, a comprehensive physical assessment, a genogram, and a teaching plan on a live adult volunteer. Supporting practice experiences, such as digital clinical simulations, will be used to augment direct, hands-on practice experience. Students will purchase Shadow Health's Digital Clinical Simulations to practice and enhance clinical reasoning skills. This course includes 45 hours of practice experience.

Delivery: Online course delivered over 15 weeks.

NUR 356 Leadership and Management in Nursing — 4 credits

Prerequisite: Active and unencumbered RN license

Nurse leaders engage in ethical decision-making processes that align with organizational priorities. Leaders make a variety of strategic decisions including people management, prudent use of financial resources, and development of a vision for the organization and team. Leading a team is a complex endeavor and involves clear communication of the vision, the ability to work in inter- professional teams, a passion for the mission, the ability to make decisions under pressure and uncertainty, and the ability to motivate others to embrace the vision. This course analyzes the interrelated relationship between leadership and decision making, and examines how wisdom, research, personal values, and theory enhance leadership and decision-making skills. The course will use a mix of reading, course conversations, case studies, teamwork, and reflective exercises to explore the role of nurse leaders.

Delivery: Online course delivered over 15 weeks.

NUR 430 Research in Nursing — 3 credits

Prerequisites: Active and unencumbered RN license, MAT 201 Statistics. May be taken concurrently with MAT 201 Statistics.

This course focuses on the role of the baccalaureate prepared nurse in translating and disseminating current evidence into clinical practice. The integration of theory, evidence, best practices, cultural considerations, and patient preferences in clinical decision making will be examined. Students will develop a basic understanding of the generation of knowledge by examining research processes and appraising the value of current evidence for practice. Course content analyzes the collaborative role of the baccalaureate prepared nurse in the inter-professional team, with a focus on improvement of

patient outcomes. The Iowa Model will be used as a framework for an evidence-based practice proposal. Advocacy for the protection of human subjects in research will be emphasized, and students will evaluate ethical practices that protect patients from harm. The student will explore the impact of health care economics on research and the translation and application of research findings. The role of nurse sensitive outcomes in establishing evidence-based practice will be examined.

Delivery: Online course delivered over 8 weeks.

NUR 446 Teaching and Learning in a Diverse Society — 3 credits

Prerequisite: Active and unencumbered RN license

This course focuses on nursing principles and concepts as applied to the promotion and preservation of the health of populations. Students participate in rich interactive activities that involve a needs assessment, community connections, cultural awareness and sensitivity, health literacy, teaching and learning, advocacy, and critical self-reflection. The course requires 20-hours of practice experience. The practice experiences include four interviews with community members and members of the Interprofessional team, completing a needs assessment for a community's learning needs, preparing a teaching plan and teaching materials, delivery and evaluating a teaching session, and writing a letter to community leaders related to an identified health need. Satisfactory performance in the practice experience of this course is required for a passing grade in the course.

Delivery: Online course delivered over 8 weeks.

NUR 448 Community Health Nursing: Caring for the Public's Health — 4 credits

Prerequisite: Active and unencumbered RN license

This course integrates evidence, theory, standards, and knowledge from nursing, public health, and other disciplines to guide population-focused nursing practice. Importance is placed on the application of the core functions of public health: assessment, policy development, and the assurance of available and necessary health services for diverse populations. Emphasis is placed in identifying determinants of health, advocating for vulnerable populations, prioritizing primary prevention, and utilizing available resources to improve the health of populations. Population-focused nursing involves assessing the health care needs of a specific population and making health care decisions for the population as a whole rather than for individuals. This course includes practice experiences in the community. This course includes 45 hours of practice experience.

Delivery: Online course delivered over 15 weeks.

NUR 462 Nursing Capstone — 4 credits

Prerequisities: Active and unencumbered RN license. The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Capstone course provides an opportunity for students to synthesize concepts of professional nursing, develop a quality improvement initiative, apply principles of interprofessional collaboration, and demonstrate self-development. The course is designed to help students apply leadership principles related to effective communication, collaboration, and delegation within interprofessional teams through the work done on the quality improvement initiative. This course also provides students with the opportunity to demonstrate professional self-development through the group debriefing and self-reflection activities. The Capstone course is also designed as a culminating nursing course for the RN baccalaureate student with a practice experience component that includes 45-hours of direct practice experience (PE).

This course must be completed through Excelsior University.

This course includes 45 hours of direct practice experience. Satisfactory performance in the practice experience of this course is required for a passing grade in the course.

PHYS 201 Physics I — 3 credits

Prerequisites: MAT 116 PreCalculus Algebra, and MAT 118 Trigonometry or MAT 120 Precalculus

This is the first course of a 2-course, algebra-based Physics sequence. The material covered in the course is divided into four conceptual areas of Physics: 1) Forces and Motion, 2) Conservation Laws, 3) Properties of Matter, and 4) Oscillations and Waves. Some of the mathematics to be applied in the course will be reviewed as needed. This course is recommended for technical coursework and careers.

PHYS 201 duplicates the Excelsior University Examination PHYx140 Physics. Students will receive credit for either the course or the examination, as both will not be applied toward graduation.

PHYS 202 Physics I Laboratory — 1 credit

Prerequisite: MAT 116 Precalculus and MAT 118 Trigonometry, or MAT 120 Precalculus Algebra, and PHYS 201 Physics I. May be taken concurrently with PHYS 201 Physics I

The course covers a wide range of basic topics in Physics I in a simulated laboratory setting. The activities are chosen to give students the opportunity to experiment, observe, measure, record, discover, and understand the close relationship between the experimental observations and principles under study.

PHYS 203 Physics II — 3 credits

Prerequisite: MAT 116 Precalculus and MAT 118 Trigonometry, or MAT 120 Precalculus

This course includes a study of electric charge, electric and magnetic forces, the electromagnetic field, light optics, and modern physics. This course is recommended for technical coursework and careers.

This course is visual and media rich. If you have any difficulties accessing any materials because of a disability, please contact **Accessibility Services**.

PHYS 204 Physics II Laboratory — 1 credit

Prerequisite: MAT 116 Precalculus and MAT 118 Trigonometry, or MAT 120 Precalculus Algebra, and PHYS 203 Physics II. May be taken concurrently with PHYS 203 Physics II

The laboratory covers a wide range of basic topics in Physics Il. The activities are chosen to give students an opportunity to perform the experiments and record observations. In this lab students measure, experiment, observe, discover, and understand the close relationship between the experimental observations and principles under study.

POL 320 The Geopolitics of Energy and Global Climate Change — 3 credits

Prerequisite: None

Energy consumption is the lifeblood of the US and global economy, yet we seldom investigate the costs involved in making a gallon of gas cheaper than a gallon of milk. When you fill up your tank, have you ever wondered where the fuel comes from or what it really takes to make this necessary energy source so readily available? When you hear about costly wars, international rivalry, or domestic strife in energy-rich regions like Russia, the South China Sea, Arctic, or the Middle East, do you question how these might be related? Beyond the near constant rivalry over energy, even alternative energy technologies used in renewables, global climate change looms as an almost incalculable cost. In this course you develop a geopolitical lens onto energy and climate change by looking at powerful state, military and corporate actors, each pursuing its own, often conflicting, objectives. You examine how these actors influence geopolitics and climate change, such as with the homeland and national security implications of increased resource rivalry, sea levels, storm intensities, Arctic melt and drought. In this course you examine the political realities of energy today and the possibilities of different, more sustainable tomorrows.

POL 351 War and Peace After the Cold War — 3 credits

Prerequisite: None

This course analyzes key actors and trends in international relations since the end of the Cold War in 1989–1991. Explore how cooperation accompanying the end of the Cold War faded into an 'Age of Terror' and great power rivalry. Students look at conflict and cooperation throughout the post-Cold War period and examine important events, including: the end of the Cold War; the Balkans Wars; the rise of the interdependent global economy; Islamic Fundamentalism and the War on Terror;

Russia-China-US competition emerging since 2008; and, the fate of American dominance of world politics. The course ends with the contemporary debate over America's role as global leader amidst challenges from ascending states like China and non-state threats from terrorist groups and global health and climate dilemmas.

This course replaces POL 350. Credit for only one of these courses will be applied toward graduation.

PSY 101 Introduction to Psychology I — 3 credits

Prerequisite: None

In this course, students will apply psychological principles and theory to their everyday lives. In addition to foundational topics like psychology as a science, learning and memory, human development, and consciousness, they will learn about some more specific topics like stress and health, psychological disorders and therapy, and human sexuality. Concepts learned in this course can be applied in any career to better understand behavior, thought, and emotion.

PSY 220 Psychology of Personality — 3 credits

Prerequisite: None

This course provides an overview of personality psychology and related issues. Students will explore the history and systems of personality, analyze current theories and evidence associated with personality psychology, and learn how personality is assessed and researched. Learners examine individual differences, including the way gender, race, religion, and national origin impact personality development and expression. The course places special emphasis on personality in the work-place to help learners identify careers appropriate for their personality and better understand the traits that are highly valued by employers.

This course uses a lower cost interactive webtext instead of textbooks.

PSY 235 Lifespan Developmental Psychology — 3 credits

This course introduces the science of lifespan development and the concept of human growth as being a product of the interaction among biology, psychology, and environment of the individual. It examines the physical, cognitive, psychosocial, and environment factors across the lifespan. Students will explore, analyze, and present theories and evidence associated with developmental science from conception through death. Concepts learned in this course can be applied to any career focusing on health or human services and can help learners raise healthier children and live in more functional families.

PSY 280 Abnormal Psychology — 3 credits

Prerequisite: None

In abnormal psychology, students will talk, think, and share their ideas about mental health diagnoses, the cultural contexts in which they exist and are treated, and most importantly, the unique people who have them.

This course uses all open educational resources and does not require the purchase of a textbook.

PSY 305 Research Methods — 3 credits

Prerequisite: Written English I and Written English II, and MAT 201 Statistics

During this course students will investigate how research is conducted in the social sciences. They will learn research methods and techniques that you are likely to come across in their professional and personal lives. Throughout the course, students will have opportunities to apply the different research methods and techniques that you have learned. Lastly, they will leave the course with an understanding of research methods that will give them the knowledge and skills needed to gather, evaluate, and apply information and research findings.

PSY 330 Educational Psychology — 3 credits

Prerequisite: None

Educational psychology is an applied field examining how learning occurs at all ages. It covers topics such as learning and cognition, cognitive development, motivation to learn, classroom management, teacher-centered and learner-centered instruction, and various contexts in which learning occurs. Students will uncover evidence-based strategies for effective teaching, learning, and assessment as well as ways to create effective learning environments. Upon completion of this course, students will be able to apply their knowledge of educational psychology to any career that involves teaching or training.

PSY 340 Psychology of Learning — 3 credits

Prerequisite: None

This course examines the question, "What does it mean to learn?" It provides an overview of the major theories that explain the dynamics of behavior and learning in humans and animals. It covers topics such as classical and operant conditioning, social learning, learning occurring through the media, memory, and forgetting. The focus of the course is making course concepts meaningful by helping students create connections between learning and career outcomes. The concepts learned can be applied to any career in which it s important to teach, influence, or change the behavior of self or others.

This course uses all open educational resources, and does not require the purchase of a textbook.

PSY 360 Social Psychology — 3 credits

Prerequisite: None

This course analyzes how people influence and are influenced by the real or imagined presence or others and how people interact with and relate to those around them. Topics include research in social psychology, social cognition, social perception and judgment, attitudes and attitude change, conformity and obedience, group behavior, attraction and intimate relationships, helping behavior, aggression, prejudice, and the application of social psychology to other fields including the legal system. The concepts learned in this course can be applied to all careers in which one works with and in teams, as well as work where it is important to influence or persuade others.

PSY 362 Psychology of Human Sexuality — 3 credits

Prerequisite: None

This course analyzes how people influence and are influenced by the real or imagined presence or others and how people interact with and relate to those around them. Topics include research in social psychology, social cognition, social perception and judgment, attitudes and attitude change, conformity and obedience, group behavior, attraction and intimate relationships, helping behavior, aggression, prejudice, and the application of social psychology to other fields including the legal system. The concepts learned in this course can be applied to all careers in which one works with and in teams, as well as work where it is important to influence or persuade others.

This course uses a lower cost interactive webtext instead of textbooks.

PSY 365 Psychology of Diversity — 3 credits

Prerequisite: None

This course introduces students to a study of understanding how people think, feel, behave, and interact within diverse social contexts. Fully understanding the psychology of diversity requires consideration of the historical, political, educational, economic, and societal factors that influence psychological processes and people's responses to diversity. Students will study both differences and similarities that are at the intersections of gender, race, ethnicity, sexual orientation, weight, age, language, veteran status, and other factors. Readings, including recent journal articles, provide a greater understanding of diversity and the interrelationship between diversity and psychology, and an appreciation for the value of diversity. Students develop a better understanding of themselves and the world around them in an appreciation for a global society. The concepts learned in this course can be applied to any career in which it is valuable to have a better understanding of how to successfully leverage the benefits of diversity.

PSY 380 Biopsychology — 3 credits

Prerequisite: None

This course examines how neurons work individually and together to enable behavior, feelings, and thoughts. It covers the structures and functions of the nervous system, including the biological bases of behavioral development, perception, learning, memory, cognition, motivation, language, sleep, and psychological disorders. The concepts learned in this course can be applied to any health science or human service career.

This course uses a lower cost interactive webtext instead of textbooks.

PSY 420 Human Motivation — 3 credits

Prerequisite: None

Motivation can be thought of as what energizes and directs human behavior. When studying motivation, researchers attempt to answer the questions: "What causes behavior?" and "What causes behavior to vary in intensity?" This course examines the major issues and theories that describe and explain human motivation across the globe. It considers behavior from biological, psychological, and social perspectives. Students will analyze and integrate information from empirical research in psychology in order to develop an understanding of motivation that is applicable to all individuals, including students' own lives. The concepts learned in this course can be applied to across a multitude of settings including leading, managing, counseling, nursing, teaching, and parenting.

PSY 440 History and Systems — 3 credits

Prerequisite: PSY 101 Introduction to Psychology I

This course provides an overview of historical perspectives and theoretical developments that have contributed to the modern discipline of psychology throughout the world. In addition, students will study the terminology, theoretical systems and theorists. Major perspectives will be discussed, including Gestalt psychology, structuralism, behaviorism, psychoanalysis, and cognitive psychology. Students also study psychology of social change and the development of modern psychological branches and applications. The concepts learned in this course are particularly relevant for learners making connections across different fields and disciplines in psychology.

PUBH 301 Introduction to Public Health — 3 credits

Prerequisite: None

Public health is the science and art of protecting and improving the health of the population as a whole. This course provides students with a deeper understanding and appreciation of today's complex U.S. public health system. Students will explore the origins of the modern public health system, the contributions of public health practice, and the critical issues facing it today. Throughout the course, students will be introduced to a broad array of career opportunities and learn how these professions work together to prevent and mitigate health risks in the general public.

PUBH 302 Research Methods in Public Health — 3 credits

Prerequisite: PUBH 301 Introduction to Public Health

During this course, students will investigate how public health research is conducted. The course introduces the language of research, critical thinking in the consumption of information, and the elements of the research process within quantitative, qualitative, and mixed methods approaches. Students will complete the course with an understanding of research methods that will give them the knowledge and skills needed to gather, evaluate, and apply information and research findings to public health issues.

PUBH 303 Public Health Policy and Leadership — 3 credits

Prerequisite: PUBH 301 Introduction to Public Health

Public health policy and leadership are critical components in the field of public health, aimed at improving the health and well-being of populations. In this course, students will explore public health policy and how effective public health leadership is crucial in promoting and safeguarding communities' health. Students will explore how public health policies encompass disease prevention, health promotion, environmental health, healthcare access, and emergency preparedness. Students will examine the qualities of public health leaders in their ability to be visionary, communicate effectively, work collaboratively, make decisions, and be adaptable.

PUBH 304 Introduction to Epidemiology — 3 credits

Prerequisite: PUBH 301 Introduction to Public Health

Epidemiology is the study of the distribution and determinants of health and illness at the population level and the application of epidemiology in controlling the issue or illness. During this course, students are introduced to the basic concepts, principles, and application of epidemiology to understand procedures for studying, preventing, and controlling diseases, environmental health hazards, and accidents. Current real-world public health scenarios will be discussed and applied to the material.

PUBH 305 Environmental Public Health — 3 credits

Prerequisite: PUBH 301 Introduction to Public Health

This course is designed to introduce students to the basic principles of environmental health and the history and accomplishments of the field. During this course, students will explore the impact of environmental exposures on human health and the impact that humans have on the environment. Students will learn about environmental health issues and determinants of health impacting the population on a global scale. These issues include the human health effects of exposure to physical, chemical, and biological agents, the effects of indoor and outdoor pollution, the impact of climate change on human health, the global environmental burden of disease, and health equity.

PUBH 306 Critical Issues in Public Health — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, and PUBH 305 Environmental Public Health

This course examines emerging population-based issues, changing public and health policies, and contemporary global health concerns. Students explore current public health issues within the context of their impact on national and global populations. Critical issues discussed include natural and man-made disasters, food and environmental safety, veterans' health, infectious and chronic diseases, human rights violations, and other public health issues.

PUBH 401 Biostatistics in Public Health — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

This course provides a foundational overview of statistical techniques employed in public health research. It encompasses fundamental probability theory, descriptive statistics, principles of statistical inference, regression and correlation methodologies, and analysis of variance in understanding public health research data. In this course, students will develop a proposal for a statistical analysis of a public health research topic of interest to them.

PUBH 402 Global Health — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

This course provides a comprehensive overview of community-level, societal, and geopolitical factors that influence global health in developing countries. Students will explore interdisciplinary perspectives of global health regarding health care systems, environmental health and disasters, trends in communicable and non-communicable diseases, and cutting-edge improvements in global health interventions. Students will examine similarities and contrasts across cultures and environment, with attention to issues of health equity and shifting ideologies in global health.

PUBH 403 Social and Behavioral Health — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

In this course, students will learn what social theory is and what it can and cannot do to understand human behavior. Students will develop expertise in a health behavior of interest to them and learn how to apply theory to develop interventions that can support healthier behaviors and ultimately healthier outcomes for people and communities.

PUBH 404 Health Disparities — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

This course provides an exploration of health disparities within the United States, focusing on the multi-faceted factors that contribute to unequal health outcomes across diverse demographic groups. Through a critical lens, students will examine the causes, consequences, and potential solutions related to health disparities. The course integrates theoretical frameworks, empirical evidence, and practical strategies to promote health equity.

PUBH 405 Health Education: A Cross-Cultural Perspective — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

Cross-cultural health education skills are important in public health. This course equips students with essential career competencies, including assessing educational requirements, and planning, delivering, and evaluating culturally sensitive health education for diverse populations. By applying learning theories and utilizing motivational interviewing techniques, students gain the tools to address potential barriers faced by clients. A key emphasis is on debunking common misconceptions related to health and nutrition, especially those perpetuated by media and social platforms.

PUBH 406 Health Promotions — 3 credits

Prerequisites: PUBH 301 Introduction to Public Health, PUBH 302 Research Methods in Public Health, PUBH 303 Public Health Policy and Leadership, PUBH 304 Introduction to Epidemiology, PUBH 305 Environmental Public Health, and PUBH 306 Critical Issues in Public Health

This course will introduce students to the professional field of health promotion and education by examining the role of health educators, the history of health education, the settings where health educators are employed, the theoretical and philosophical perspectives of health education, and the ethics of the profession. Students develop an understanding of the role of health promotion and education by assessing, planning, implementing, and evaluating health challenges that affect our communities.

PUBH 407 Public Health Capstone — 4 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

In this capstone course, students synthesize academic coursework, theoretical knowledge, practical skills, and experiential learning. The primary objective is to validate their comprehensive understanding of foundational public health principles. Through a multi-component project, students demonstrate their proficiency in essential elements of public health practice and research.

SOC 101 Introduction to Sociology — 3 credits

Prerequisite: None

This course offers an introduction to the major concepts, theoretical perspectives, research methods, and scholars in sociology. Sociology is the scientific study of human social behavior, and this course examines several important sociological topics, including culture; socialization; deviance; social inequality; social institutions; and social change. This course also explores various socio-historical and socio-cultural frameworks across the world, promoting an appreciation for unique cultural identities and institutions. Students will improve their analysis, understanding and interpretation of contemporary social issues in this rapidly changing world. This course encourages the practical understanding of sociology through exploration of students' everyday social world, and the often invisible and taken-for-granted social forces that shape it.

SOC 110 Introduction to Interdisciplinary Social Science — 3 credits

Prerequisite: None

This course introduces students to the study of the leading disciplines that make up the social sciences, particularly: economics, political science, psychology, and sociology. Students will explore the origins of the leading social science disciplines, important theories related to them, and begin the course-long project of comparing, contrasting, and combining their approaches to the primary, interdisciplinary subject of the course human behavior and organization. In learning about each discipline, students will gain a greater understanding of the common interests and research concerns of all social scientists. One of these common features among social scientists is the desire to identify patterns and solve problems. The nature and purpose of inquiry is common to all social sciences—how and why do individuals and groups behave as they do? Are causes of these behaviors possible to find, thus making it possible to solve their worst forms and consequences? The course emphasizes an interdisciplinary approach to the study of human behavior and organization, and shows the importance of using many different social science fields to understand and solve contemporary problems, whether at the local or global level of human society.

SOC 240 Addictions In America — 3 credits

Prerequisite: None

This course helps students develop a greater understanding of a variety of addictions. Using an ecosystems approach, the addictive process and recovery will be studied, including the reciprocal interaction between addicted individuals and their various social systems. Students will examine substance abuse and behavioral compulsions in considerable detail with a focus on addiction in various populations as well as the business of drugs and prevention. Attention will be given to the biological and genetic factors in the etiology of addiction, family issues, and community responses. The consequences of addictions will be studied at the individual, family, and community levels. This course draws on current research in the field of addictions, and emphasizes critical analysis of contemporary controversies. This course builds on the foundations of health and human services knowledge and skills to help students better understand this complex problem affecting American society.

This course was cross-listed with HSC 240. Credit for only one of these courses will be applied toward graduation.

TECH 180 Personal Protection Equipment for Electrical Work — 3 credits

Prerequisite: None

This course focuses on instrumentation, temperature, pressure, and flow measurements, transducers, pneumatic and hydraulic systems, programmable logic controllers, and process control. Students explore the characteristics and operations of various types of transducers and measuring instruments. The curriculum also covers the importance of system models and their relationship to process control. Students gain practical experience and a thorough understanding of how these elements integrate within industrial settings. By Using the knowledge acquired in this course, students can select and adopt safety procedures and tools and communications protocols appropriate to the environment to ensure electrical and fire safety at worksites.

TECH 185 Blueprint Reading — 3 credits

Prerequisite: None

This course introduces blueprints, facility floor plan diagrams, and blueprint components. In the classroom portion, students will learn to interpret blueprints and facility diagrams. In the simulation component, learners will practice reading blueprints for lockout/tagout (LO/TO) procedures, utilize LO/TO practices, and apply and verify LO/TO protocols. Hands-on experience using Wisc-Online equips students with essential skills for maintaining safety and compliance in industrial environments.

TECH 200 Technical Writing — 3 credits

Prerequisite: ENG 101 or equivalent course

This course introduces students to effective technical approaches in written and digital communications, including email, presentations, technical reporting, and technical instructions. This course will introduce students to writing technical problem statements, presenting information to target audiences, conducting research with proper citation, preparing written arguments, and written exercises in voice, tone, and style for the technologist.

TECH 225 Applied Instrumentation and Control — 3 credits

Prerequisites: PHYS 203 Physics II and PHYS 204 Physics II Lab; MAT 114 Intermediate Algebra or MAT 120 Precalculus; ELEC 152 Circuit Theory I and ELEC 153 Circuit Theory II or NUC 255 Electrical Theory

This course focuses on instrumentation; temperature, pressure, and flow measurements; transducers; pneumatic and hydraulic systems; programmable logic controllers; and process control. In this course the students will have the opportunities to explore the characteristics and operations of different types of transducers and measuring instruments. The importance of system models as well as their relationship between process control will also be covered in this course.

TECH 230 Technology and Society — 3 credits

Prerequisite: None

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change and the evaluation of the implications of technology. Upon completion, students should be able to critically evaluate the implications of technology upon society.

TECH 231 Navigating Technology: Concepts, Roles, and Careers — 3 credits

Prerequisite: TECH 230 Technology and Society

This introductory course serves as a gateway for students to explore the dynamic and interconnected fields of information technology (IT), cybersecurity, and computer science. Building upon foundational concepts of technology and society, this course provides an understanding of the distinctive roles each field plays in shaping our digital world as well as a hands-on introduction to common tools used in each field. Emphasizing the unique elements within each discipline, the course offers insights into the exciting and diverse landscape of information technology, cybersecurity, and computer science.

TECH 233 Electrical Power Distribution — 3 credits

Prerequisites: PHYS 203 Physics II and PHYS 204 Physics II Lab; MAT 114 Intermediate Algebra or MAT 120 Precalculus; ELEC 152 Circuit Theory I and ELEC 153 Circuit Theory II or NUC 255 Electrical Theory

This course provides students a comprehensive overview of commercial Electrical Power Distribution. Students examine power system flow dynamics along with those elements and facilities associated with electrical power generation, its transmission, and subsequent distribution to gain a working understanding of Electrical Power Distribution. Additionally, students assess frameworks associated with economic, regulatory, and energy accounting practices to gain in depth understanding of how and why telemetry, communication, and control requirements are vital to maintaining electrical power system stability and reliability.

TECH 240 Job Task and Troubleshooting — 3 credits

Prerequisites: TECH 180 Personal Protection Equipment for Electrical Work , TECH 185 Blueprint Reading

This is a course to introduce troubleshooting and safety strategies that enable students to solve problems in a safe, cost-effective and timely context and apply appropriate troubleshooting strategies when repairing electrical equipment. In simulation part of the course, the learner will perform hazard analysis, read blueprint, inspect work areas, select LO/TO equipment, troubleshoot and repair electrical equipment.

TECH 250 Renewable Energy Overview I: Solar and Geothermal 3 credits

Prerequisite: None

This course provides an overview of Solar (Photovoltaic) energy, Solar Thermal energy, and Geothermal energy. It also covers green building technologies, focusing on sustainable systems design. The political, economic, and environmental impacts of these renewable energy sources will be discussed, offering a comprehensive understanding of their role in the modern energy landscape. By the end of the course, students can evaluate the effectiveness and impact of solar and geothermal energy solutions in various contexts.

TECH 251 Renewable Energy II: Wind And Water 3 credits

Prerequisite: None

This course offers an overview of wind energy and water energy for both commercial and non-commercial applications, including sustainable system design and green building technologies. The course also explores the political, economic, and environmental impacts of wind and water energy, providing a thorough understanding of these renewable energy sources, providing students with the knowledge and skills to assess the viability and impact of wind and water energy systems in different applications. By the end of this course, students can explain the energy conversion process to extract useful power from bioenergy, wind and hydro systems and can also explain sustainable design and construction relating to bioenergy, wind and water for commercial and non-commercial use.

TECH 260 Energy Industry Fundamentals 3 credits

Prerequisite: None

The Energy Industry Fundamentals course provides students with a comprehensive understanding of the energy industry. Aligning with tiers 4 and 5 of the Energy Competency Model developed by the Center for Energy Workforce Development (CEWD) and the U.S. Department of Labor, this course covers emerging principles and concepts impacting the energy industry, compliance with safety and health procedures, and the workings of electric power and natural gas generation, transmission, and distribution. Additionally, it explores various entry-level energy careers and current hot topics in the energy sector. The course prepares students for the CEWD Energy Industry Fundamentals certificate exam. By the end of the course, students can distinguish various electric power generation equipment, technologies, and systems, and understand energy-related career requirements.

TECH 290 Integrated Technology Assessment AAST 3 credits

Prerequisite: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The Associate in Applied Science in Technology capstone course provides an online portfolio development experience, requiring students to reflect on their past academic and professional experiences. Students learn how to develop an online portfolio and compose learning statements supported by

documented evidence that demonstrates the achievement of program outcomes. Throughout the course, students compile appropriate evidence and create an Integrated Technology Management Assessment report. This report demonstrates their mastery of core competencies, reflects on their learning experiences, and effectively showcases their skills and knowledge to potential employers.

TECH 330 Economic Analysis for Technologists — 3 credits

Prerequisite: MAT 114 Intermediate Algebra or MAT 120 Precalculus.

This course equips students with essential economic analysis tools for effective project management, preparing them to integrate economic considerations into their engineering practices for cost-effective and efficient project outcomes. Combining theory and practice, key concepts covered include the time value of money, spreadsheet functions for calculations, cost-benefit analysis, present worth analysis, annual worth analysis, rate of return, project evaluation, breakeven analysis, and inflation. The course emphasizes the importance of economic decision-making in engineering. Students learn to perform economic evaluations, understand the impacts of inflation, depreciation, and taxes, and manage risks and uncertainties. They apply economic principles to engineering problems, make informed financial decisions, and effectively communicate results. Upon completion of this course, students know how to apply economic analysis techniques to evaluate the economic feasibility of engineering projects, accounting for various effects such as inflation, depreciation, and taxes.

TECH 340 Introduction to Energy Utilization — 3 credits

Prerequisite: None

This course explores how supply and demand dynamics shape the energy sector nationally and globally. Students critically examines economic, political, environmental, and social factors influencing technological advancements in energy, highlighting how access to resources and economic volatility impact how individuals and societies value and use energy resources. This systemic analysis provides students with a deep understanding of the multifaceted factors driving energy decisions and their broader implications. Upon completion of this course, students develop the ability to analyze the factors that shape the energy sector nationally and globlly, as well as explain how variations in economic, political, environmental, and social factors affect technological advancements related to the production, transmission, and consumption of energy.

TECH 490 Technology Management Capstone: Integrated Technology Assessment (ITA)

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The capstone can be paired with 1 other course that is considered to be general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

This course is an online portfolio development experience that requires students to reflect on their past academic and professional experiences and use the information gained from this reflective exercise to develop learning statements related to the Bachelor of Professional Studies (BPS) in Technology

Management degree outcomes. The learning statements must be supported by documented evidence that demonstrates that the outcomes have been met. Students learn how to develop an online portfolio during the first module of the course and then work under the guidance of a faculty mentor during the remainder of the semester to compose learning statements, compile appropriate evidence, and create the Integrated Technology Assessment report.

Graduate Courses

ACC 500 Accounting for Managers — 3 credits

This course is intended to help the student understand how to analyze a company's basic financial statements and annual report. By the end of the course, you should be familiar with the four basic financial statements, some of the key accounts on the balance sheet as well as the overall accounting cycle. As a manager, you should be able to effectively analyze a company's financial statements and annual report. Additionally, managers should be able to conclude on a company's profitability, efficiency, liquidity and solvency.

ACC 504 Corporate Financial Reporting and Disclosure — 3 credits

The course will cover an in depth examination of financial report disclosures, with an emphasis on how firms use financial reporting to achieve such ends as managing earnings or keeping debt off of the balance sheet. By the end of the course, students will have an appreciation for what information is missing from the primary financial statements, the knowledge to understand the content of important footnotes, and the tools to conduct financial analyses using the information contained therein. The course will use a combination of textbook problems, case studies, and most importantly, actual financial report disclosures. The course is geared for students going into public accounting, investment banking, equity research, or consulting.

ACC 505 Financial Statement Analysis — 3 credits

Prerequisite: BUS 500 Accounting for Managers

Are you interested in following economic and industry trends as it relates to company performance, analyzing financial statements in light of company strategy and external factors, building financial models to value a company and writing investment recommendations? If so, you will find this course interesting and useful. This course starts with an overview of financial reporting and ends with various approaches to valuation including cash flow, earnings, and market based methods. The core of this course is about gathering, analyzing, and using information to make informed decisions. While there is certainly no one set approach to financial statement analysis and valuation, one popular method is to use a top down valuation approach, which is what will be focused on in the course.

ACC 515 Accounting for Government and Non-for-Profit Organizations — 3 credits

This course is designed to provide a comprehensive overview of the accounting, managerial, auditing, fiduciary, financial reporting, and regulatory issues related to Government and Not-for-Profit organizations. It builds on the concepts, principles, and processes shared within BUS 500 Managerial Accounting and ACC 510 Financial Reporting and Disclosure.

ADR 670 Conflict Management and Alternative Dispute Resolution — 3 credits

This course provides an introduction to the human resource field of conflict management and alternative dispute resolution through case analyses. You will examine the major causes of conflict, the effects of personality and perception on conflict, and recommended strategies to manage the conflict in organizations. Learn about your own styles for managing conflict and develop competency in interaction with other styles.

Cross-listed with BUS 670.

ADR 671 Mediation — 3 credits

The ability to work toward a consensus and reduce potential conflicts in a variety of contexts is of utmost importance in today's society. This course provides an overview of mediation processes. You will learn a variety of communication and negotiation skills in order to settle disputes outside of a courtroom setting. Working collaboratively, you will also create an operations plan for a mediation center, and make recommendations about the type of center for your assigned state.

Cross-listed with BUS 671.

BUS 500 Accounting for Managers — 3 credits

This course is intended to help the student understand how to analyze a company's basic financial statements and annual report. By the end of the course, you should be familiar with the four basic financial statements, some of the key accounts on the balance sheet as well as the overall accounting cycle. As a manager, you should be able to effectively analyze a company's financial statements and annual report. Additionally, managers should be able to conclude on a company's profitability, efficiency, liquidity and solvency.

BUS 501 Business Communications — 3 credits

This course focuses on the development of clear written and oral communication skills. It examines a variety of communication techniques, formats, and processes for sharing organizational information. The course explores the use of audiovisual and electronic media to enhance the quality of presentation and communication.

BUS 502 Global Business Environment — 3 credits

This course examines the global business environment and its impact on an organization's business strategy and decision making. It focuses on the complexities and risk/reward assessments that arise due to highly diversified markets, cross cultural issues, globalization, international organizations (WTO, IMF, World Bank, etc.), nongovernmental organizations (NGOs), foreign direct investment, and currency risk challenges.

BUS 504 Human Resource Management — 3 credits

This course will provide students with an understanding of the evolution and roles of human resource management in organizations, as well as an overview of the basic functions of HR management. These functions include: staff planning; recruitment and selection; job analysis and design; performance management; labor relations and laws; training and development; compensation and rewards; HR strategy; strategic, corporate, and HRM objectives; HRM policies, practices and leadership behavior; employee involvement; diverse workforces; the impact of globalization; and HR s role in change management and internal consulting. This is a 3-credit course, requiring a minimum of 18 hours of course engagement each week in an 8-week term, or 9 hours per week in a 15-week term (refer to the Credit Hours Calculation Policy in the Student Handbook), Course engagement includes

such activities as discussions, reading, study time, and assignments. Textbooks are generally not required for this course. However, course materials may update in a given term prior to registration opening. Students should therefore always review course material requirements and associated costs at our bookstore for the term in which they are registering.

BUS 505 Finance — 3 credits

What projects should an organization invest in? Where will an organization obtain finance to pay for investments? How will an organization manage day-to-day financial activities such as cash collections and payments? The purpose of this course is to provide students with an overview of the problems facing financial managers in an uncertain world. It is intended to develop students' critical thinking and problem solving competencies in financial statement analysis, capital structure, and capital budgeting. The course is focused on applying financial theory to analyze real life situations with students placed in the role of a financial manager making decisions in an uncertain environment with an incomplete data set.

BUS 506 Marketing — 3 credits

This course presents a systematic framework for understanding marketing management and strategy. It focuses on creating and executing marketing strategies and policies and examines the ethical, legal, social, and environmental issues relevant to the development of sound marketing strategies and policies.

BUS 509 Resilient Leadership and Organizational Behavior — 3 credits

This course equips students with the knowledge and skills to navigate dynamic organizational environments through resilient leadership. Participants evaluate resilient leadership theories, formulate strategies for fostering workplace resilience, and analyze case studies to discern their impact on organizational culture and performance. The course emphasizes creating innovative solutions, applying resilient leadership for positive organizational change, and synthesizing research contributions to scholarly discourse and practical applications. Additionally, students develop a comprehensive resilience plan, integrating leadership principles to fortify organizations in ever-evolving contexts. This holistic exploration prepares leaders to thrive in dynamic professional landscapes.

BUS 510 Health Care Policy, Politics, and Power — 3 credits

This course examines the critical role of health care leaders in the policy making arena. Students examine the federal policy making process, key issues in health policy, and the roles power and politics play in policy development and implementation. Students explore health care reforms and efforts to respond to disparities in health outcomes for vulnerable populations.

BUS 510 is cross-listed with HSC 510. Students in the business degree should register for the BUS version of this course, and health science degree students should register for the HSC version of this course. Students may not take both versions of the course and have the credit count toward graduation.

BUS 512 Compensation and Benefits — 3 credits

This course studies the total rewards provided to employees in return for their contributions to an organization, investigates its strategic and tactical aspects, and examines current issues with compensation and benefits. The principles of modern compensation and benefits are considered from legal, practical, and theoretical perspectives. Students will examine how compensation and benefits can add strategic value by aligning total compensation with organizational goals and investigate the challenges facing organizations operating on a global scale.

BUS 514 Employment Law — 3 credits

Each year, the Equal Employment Opportunity Commission (EEOC) reports the number of complaints of harassment and discrimination they received due to protected categories, including: national origin, race/color, sex, genetic information, sexual harassment, age, disability, pregnancy, and retaliation. These complaints were not able to be successfully resolved by employers. This course explores the way legislation directs and regulates the relationship between an employer and employee. Students will examine how legal principles relate to the organizations in which employee's function. In addition, this course will address legal issues in non-for-profits and entrepreneurial firms. Students will also learn how to investigate complaints properly, as well as engage in preventative measures for harassment and discrimination.

BUS 515 Labor Relations and Conflict Management — 3 credits

This course explores the complex relationship among management, unions, and employees in the workplace. The course will concentrate on the behavioral and organizational issues that arise in the often-contentious environment of a unionized workplace. Students will study and learn the general nature of labor relations. This will include the historical, legal, and structural environments that have greatly influenced contractual management; the negotiation, administration, and major contents of labor relations documents; struggles and disputes between labor and management; and the various tools and mechanisms to resolve these conflicts.

BUS 516 Communication Strategy for the Health Care Leader — 3 credits

Highly effective leaders must be excellent communicators; building a communications toolkit is essential. This course equips students with health communication strategies for use with a variety of stakeholders within and outside of the health care system. Students examine a variety of communication contexts, including communication management, intercultural and intergenerational communication, and health campaign messaging. Evolving communication technologies are explored. Students apply what they have learned by developing a communication strategic plan.

BUS 516 is cross-listed with HSC 516. Students in the business degree should register for the BUS version of this course, and health science degree students should register for the HSC version of this course. Students may not take both versions of the course and have the credit count toward graduation.

BUS 517 Employee Staffing and Development — 3 credits

This course covers key principles and practices in staffing and employee development. The course focuses on the interdependence of effective organizational performance with proper staffing, including recruiting and selection functions and proper assessment of personnel and employment training involved in human resource management.

BUS 520 Operations Management — 3 credits

Prerequisite: IND 503 Data Driven Decision Making

This course provides a managerial focus on the fundamental understanding of manufacturing and service operations and their role in the organization, with special emphasis on international dimensions. Topics include, but are not limited to: process flow analysis, inventory management, capacity planning, logistics, facilities location, supply chain management, total quality management, human resource management, technology management and manufacturing and service strategy. The course is integrative, and emphasizes the fit and relationship of operations with other functions of the firm.

BUS 521 Operations and Project Managemen — 3 credits

Students learn about advanced project management principles and develop schedules focusing on key concepts. The emphasis is on applying operations strategies for optimal processes, resource use, and efficient supply chains to enhance organizational performance. Through advanced techniques, students navigate project and operational risks for successful outcomes. Quality management, including Six Sigma methodologies, ensures high-quality deliverables. The course incorporates data analytics and quantitative methods for informed decision-making, utilizing KPIs to measure and improve performance. Essential team management skills, team development, conflict resolution, and effective project communication tools are integral components. This learning experience equips students for success in the dynamic fields of operations and project management.

BUS 522 Global Operations and Supply Chain Management — 3 credits

Global Supply Chain/Operations Management is one of the core courses required for MBA learners. The purpose of this course is to provide a fundamental understanding of manufacturing, distribution, inventory and service operations, and their role within the organization. The course will survey a wide range of operations topics, including process flow analysis, inventory management, capacity planning, logistics operations, supply chain management, quality in operations, project management, manufacturing, distribution, and service operations. The course will deal with these topics through a managerial, applications-oriented perspective, with special emphasis placed on the international dimension of operations. Students will work on a team and solve practical operations management issues involving cutting edge technology that will be relevant to them in the years to come. This course is forward-looking and will give students a chance to use their imagination for the good of customers and at the same time help their business reach people all over the world.

BUS 524 Corporate Finance and Accounting — 3 credits

This comprehensive course equips participants with the essential skills for strategic financial decision-making. Through a blend of theoretical understanding and practical application, participants learn to conduct financial analyses that integrate accounting and auditing, ensuring accurate and transparent reports. The course delves into optimizing capital structures, incorporating auditing principles to assess the impact of financing options on financial health. Participants gain proficiency in analyzing a firm's performance using financial statements and explaining complex financial transactions such as mergers, leverage buyouts, and divestitures of assets. Moreover, the course focuses on the development of integrated financial plans, incorporating accounting, auditing, and forecasting for informed and strategic decision-making.

BUS 526 Strategic Management of Health Care Organizations — 3 credits

This course explores theories and principles underlying strategic planning specific to health care environments. Through case study analyses, students learn strategies on how to position health care organizations in order to sustain a competitive advantage in a volatile reimbursement-driven industry. Some of the topics covered in this course include strategic positioning, strategies of mergers and acquisitions, and competitive advantage and profitability.

BUS 526 is cross-listed with HSC 526. Students in the business degree should register for the BUS version of this course, and health science degree students should register for the HSC version of this course. Students may not take both versions of the course and have the credit count toward graduation.

BUS 530 Project Management Principles and Application — 3 credits

This course covers the key components of project management process including effectively defining the project, identifying the scope, project lifecycle, communication, planning, performing, and controlling the project. Case studies and a final project are used to examine best practices, including risk assessment.

BUS 532 Ethical Risk Management and Compliance — 3 credits

Businesses face various risks, including financial, operational, strategic, compliance, and reputational risks, in this volatile and unpredictable world. The goal of risk management is not only to minimize the negative impact of potential threats but also to capitalize on opportunities that may arise. This course provides a comprehensive exploration of ethical risk management and compliance in the business context. Participants apply ethical theories and frameworks to navigate complex business scenarios, ensuring adherence to laws, regulations, and industry standards. The course emphasizes the development of ethical expectations, policies, and procedures to foster an organizational culture of ethical awareness and compliance. Participants also learn to prioritize ethical conduct in managing stakeholder relationships and effectively navigate complex, global business interests. Furthermore, the course equips individuals with the skills to apply risk mitigation techniques, establishing a resilient organizational framework that places a premium on ethical conduct and compliance.

BUS 535 Quality and Productivity Methods in the Management of Technology 3 credits

This course presents current management techniques and processes for improving products, services, and processes. Students will examine social media in context with advertising, marketing, and public relations. Additionally, students will gain basic hands-on experience with current social media technology. Practical applications with both limitations and opportunities of different social media contexts will be explored to assess their impact on appropriate constituencies and/or organizational cultures. Finally, the course will focus on demonstrating best practices for developing and implementing effective techniques, tactics, and strategies to more effectively and efficiently reach target markets.

BUS 540 Strategic Management of Innovative Technology 3 credits

Examines theories and methods to prepare managers to handle strategic issues related to the effective management of innovative technologies. Explores the principles of strategic management with direct application to technology. Integrates: strategy setting, implementation and assessment; historical cases of business innovation through a maturation lifecycle; and application of lessons learned in contemporary business cases.

BUS 545 Social Media: Marketing 3 credits

This course will develop the students' ability to strategically create and implement an effective social media marketing campaign. Focus will be placed on fully understanding and integrating appropriate social media tools for supporting and improving the effectiveness of organizations marketing and communicational processes. Students will examine social media in the context of advertising, marketing, and public relations. Practical applications will be explored to assess the impact of social media technologies on appropriate constituencies and/or organizational cultures.

BUS 550 Contingency Planning 3 credits

This course examines the planning process in organizations to continually confront the unlikelihood of a disaster causing an unexpected interruption of normal operations. Specifically, it provides an overview of the key elements and strategies of implementing a crisis management program within an organization. Undertaking a business function analysis approach, students will be able to define anticipated consequences when a disruption of normal organizational operations occurs and develop a recovery plan built around desired outcomes.

BUS 552 Leadership 3 credits

Focuses on the leadership process within the broad context of organizational dynamics. Explores leadership from four different perspectives: the leader; the follower; the situation; and leadership skills. Theories, concepts and models are applied to workplace situations.

BUS 553 Organizational Behavior — 3 credits

This course provides an overview of the principles of organizational behavior using evidence-based practice. You will discover how individual differences impact organizations (including your own), learn how to apply management and leadership skills to specific situations, apply proper business ethics to situations, and examine how culture plays a role in today's global business world. In the final assignment you will practice how to present a portfolio worthy solution proposal to the key stakeholders in an organization.

BUS 554 Change Management — 3 credits

A study of the process of change and change management. Focuses on the types of changes that take place within organizations, identifying the key issues and challenges associated with each type of change. Uses macro and micro tools for working with change, including management skills and styles, communications patterns, and force-field and gap analysis.

BUS 561 Virtual Training and Development — 3 credits

This course provides an overview of facilitating training programs in a virtual environment. It addresses adult learning principles involved in the design of virtual training, strategies for engaging employees during training, the use of training methods for synchronous and asynchronous learning, and ways to assess the effectiveness of the training program.

BUS 562 Virtual Team Management — 3 credits

This course provides an overview of managing virtual teams, including managing global teams. It addresses conflict management, performance issues, knowledge sharing, and data analytics for virtual teams.

BUS 563 Data Analytics — 3 credits

This course provides students with an understanding of how data analysis enables companies to be more competitive. Students apply data analysis techniques to assess how organizations can integrate data analysis throughout operations to improve organizational decision making. Case studies and the introduction of relevant tools will be used to demonstrate the application of data analysis to improve organizational operations.

BUS 564 Big Data and Visualization — 3 credits

Prerequisites: IND 503 Data Driven Decision Making (for MS in Organizational Leadership) and BUS 563 Data Analytics (for both MS in Organizational Leadership and Graduate Certificate in Data Analytics)

This course introduces students to the impact of big data on various industries. Students will explore the growth of data via the Internet of Things (IoT) and will explore various strategies being used within industry to utilize data to improve decision making. Through case analysis, students will assess how big data, machine learning and artificial intelligence are impacting organizations and how these organizations are developing strategies to capitalize on the opportunities presented.

BUS 570 Information Technology — 3 credits

This course examines the strategic, operational, and ethical uses of information technology. It explores global and electronic markets and data management, and it examines how IT can support customer and supply chain management.

BUS 572 Technology and Project Management — 3 credits

In the employment market, many projects are controlled by the professions of Engineers, Architects, Construction Managers, and Lab Scientists. These conditions leave a massive opportunity for MBA-level employees. That role is in planning Information Technology projects. This course explores the use of project management methods and processes applied to Information Technology management, maintenance, and innovation. Students will examine MBA-level managers' roles as stakeholders, subject matter specialists, end-users, business analysts, and project managers. The course examines the challenges of managing current organization technology platforms, replacement through product choices and new implementations, and opportunities for innovation—issues of strategy, change, risks, and ethics.

BUS 573 Strategic Brand Marketing — 3 credits

This course provides students with insights and strategies for positioning their organizations and its associated products and/or services in highly competitive consumer and B2B markets. Topics include customer loyalty, branding, pricing, promotion, digital marketing, marketing information systems, sales structures and compensation, industry marketing, marketing communications, lead management, and marketing campaign strategy.

BUS 670 Conflict Management and Alternative Dispute Resolution — 3 credits

This course provides an introduction to the human resource field of conflict management and alternative dispute resolution through case analyses. You will examine the major causes of conflict, the effects of personality and perception on conflict, and recommended strategies to manage the conflict in organizations. Learn about your own styles for managing conflict and develop competency in interaction with other styles.

Cross-listed with ADR 670.

BUS 671 Mediation — 3 credits

The ability to work toward a consensus and reduce potential conflicts in a variety of contexts is of utmost importance in today's society. This course provides an overview of mediation processes. You will learn a variety of communication and negotiation skills in order to settle disputes outside of a courtroom setting. Working collaboratively, you will also create an operations plan for a mediation center, and make recommendations about the type of center for your assigned state.

Cross-listed with ADR 671.

BUS 696 Organization Leadership, Technology and Analytics Capstone 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the Capstone. Students can only take an elective or concentration course with the Capstone.

This course allows students to showcase and apply their skills in organizational leadership, technology, and analytics to a real-world scenario. It will culminate in a final project that assesses all program learning outcomes and allows the student to showcase their work in an employer-focused e-portfolio.

BUS 697 Human Resource Management, Diversity and Technology Capstone 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the Capstone. Students can only take an elective or concentration course with the Capstone.

In this course, students will apply the advanced theoretical and practical knowledge attained throughout the master's in human resource management program. Students will also demonstrate their understanding of the legal and human resource dimensions of organizations, including distributed workplaces, through analysis as well as the integration of communication and leadership skills for remote employees. This capstone course provides opportunities to define, analyze, and apply human resource theories and models to resolve complex organizational problems, and students learn strategic objectives to enhance organizational performance.

BUS 698 MSM Capstone 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the Capstone. Students can only take an elective or concentration course with the Capstone.

This is the Master of Science in Management (MSM) Capstone course. It integrates previous study and various management disciplines to formulate, analyze, and implement effective management strategy. Students will analyze complex management situations to make strategic decisions under conditions of uncertainty.

BUS 699 MBA Business Strategy Capstone 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the Capstone. Students can only take an elective or concentration course with the Capstone.

MBA capstone course. Integrates previous study and various business disciplines to formulate, analyze, and implement effective business strategy. Students will analyze complex business situations for making strategic decisions under conditions of uncertainty.

CBC 600 Implications of Legalization of Cannabis: Policy and Compliance 3 credits

In this course, you will learn how cannabis legalization has had an impact on various institutions, entities, and individuals while also exploring the dilemmas between policy and legal regimes. You will examine the importance of compliance, how to create standard operating procedures and employee training, and how to develop a community plan. You will also participate in the

development of a class wiki that will serve as a valuable resource that you will take with you at the conclusion of the course. Lastly, you will compile your work into an electronic portfolio that you can use to present to prospective employers.

CBC 601 Complexities of Cannabis as Commerce — 3 credits

In this course you will look at the national and local, laws and regulations that have shaped the current legalized cannabis industry. You will also study existing cannabis tax schemes, assess their impacts on businesses and effectiveness in meeting individual cannabis program goals, and suggest improvements, as well as develop strategies for businesses and governments to plan for and meet shifting tax burdens. You will then analyze economic, legal, and public health implications of traceability and transport of cannabis and cannabis industry supporting products. You will explore how raw materials and products are traced through the supply chain, and what kind of technology is required to do so.

CBC 602 Risk Assessment in Cannabis Control — 3 credits

In this course students will explore the tensions between taxation and profitability, public safety, diversion, patient access, and community integration along with advertising, marketing, sales, consumer use, and social equity. The student will learn through various stakeholder lenses such as regulators, operators, and consumers. Students will also identify risks associated with technology and data standards, and risks associated with various components of the supply chain.

CYS 500 Foundations of Cybersecurity — 3 credits

This course provides students with the knowledge and tools necessary to research and identify cybersecurity threats and take action to minimize, mitigate, or eliminate them. Course topics include continuous training within organizations and the company-wide impact of cybersecurity. By participating in this course, students gain practical skills in threat identification and response, as well as an understanding of the importance of ongoing cybersecurity education.

CYS 503 Communications and Network Security — 4 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course is an introduction to network security fundamentals, security policies, networking threats, and technologies. Design and implementation of secure communications networks, network management, and network scanning are covered. Technical topics include device hardening, encryption, proxies, firewalls, VPN and remote access design, NAT, DHCP, VoIP and other network design considerations. Students learn how to implement a security plan, itemize security threats, and list the elements of security in networked and mobile systems. Honeypots, sinkholes, and other network defenses are examined.

CYS 504 Network and Communication Security — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course introduces students to network security fundamentals, organized into four parts. The first part covers the basics of private key and public key cryptography, including common encryption algorithms such as AES, RC4, and RSA. The second part builds on cryptography to design secure protocols for confidentiality, authentication, and data integrity, with examples like IPSec, SSL/TLS, and VPNs. The third part examines how cyber attacks proceed from reconnaissance to exploits and intrusions, with an emphasis on web attacks (such as phishing, SQL injection, and drive-by downloads) and malware. The final part focuses on intrusion prevention, detection, and response, covering firewalls, spam filters, intrusion detection systems, and risk management. Students learn protocols for secure communication over unsecure networks and modern technologies for protecting computers from various threats. Real-world cases are discussed, and students gain hands-on experience utilizing lab environments. Note, students registering for this course are assessed a course resource fee.

CYS 522 Advanced Networking — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course builds on the basic networking concepts and focuses on several advanced networking topics including wireless and mobile networking, near field communications, RFID (Radio Frequency Identification) and the use of cryptography and encryption in data transmission and networking. This course will also discuss privacy and security issues related to the use of these networking technologies.

CYS 523 Software and Application Security — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course teaches secure programming techniques by focusing on foundational defensive strategies, cutting-edge protection methods, and security features for use in the development process. Critical skills covered include identifying security defects in code, fixing security bugs using secure coding techniques, incorporating security into the development process, and using open-source tools to test applications. The course also addresses design flaws in existing software packages. By participating in this course, students gain the knowledge and skills necessary to develop secure software and enhance the security of existing applications.

CYS 526 Cyber Attacks and Defense — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course investigates security issues, vulnerabilities, and mechanisms to identify, respond to, and prevent cyberattacks while building active defense systems. Students follow formal ethical hacking methodology, which includes reconnaissance, scanning and enumeration, gaining access, escalation of privilege, maintaining access, and reporting. Assignments in a laboratory environment provide students with hands-on experience on these topics. By participating in this course, students gain

the skills necessary to become proficient in ethical hacking and cybersecurity defense. This course prepares students for CompTIA CYSA+ certification. Note, students registering for this course are assessed a course resource fee.

Students registering for this course will be assessed a course resource fee.

CYS 528 Legal Compliance Issues in Cybersecurity

Prerequisite: CYS 500 Foundations of Cybersecurity

This course examines the ethical, legal, and regulatory compliance issues related to the practice of cybersecurity. Topics include data protection, due diligence, privacy laws, fraud and risk management, intellectual property, IT auditing, and ethical corporate codes of conduct. This course highlights the importance of comprehending the current legal landscape and keeping abreast of new laws and regulations, along with auditing frameworks, to minimize the risk of legal liabilities. Students learn key mandates and laws in cybersecurity, the IT audit process, and techniques to minimize liabilities and reduce risks from electronic and physical threats.

CYS 545 Security Policy and Compliance 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course focuses on security policy and compliance in cybersecurity, including legal, ethical, privacy, and governance issues. Students explore national and international policies, and gain understanding of the importance of security policy as the foundation of any security program in organizations. The course examines theory and principles by critiquing policy documents and discussing compliance issues and frameworks. Throughout this course students learn approachs to analyze and write security policies with a focus on compliance.

CYS 555 Cybersecurity in Healthcare 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course provides an in-depth analysis of the diversity of the healthcare industry, types of technologies, flow of information, and levels of protection. It presents a plan-protect-respond framework of relevant legal and regulatory requirements, ensuring an organizations' policies and procedures are in compliance with industry standards. The course examines how an organization manages information risk through security and privacy governance, risk management lifecycles, and principle risk activities.

CYS 556 Healthcare Information Systems 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity, CYS 555 Cybersecurity in Health Care

This course focuses on data and information technology to improve organizational performance in healthcare settings. System like the Nationwide Health Information Network (NwHIN) and other health information systems will be surveyed. Information systems and data management

fundamentals will be reviewed. The use of research tools and databases will be used to analyze organizational problems. The course includes exploration of electronic medical records (EMRs) that are used in the medical fields. Legal and ethical issues will be explored as will the other use of technologies in healthcare settings.

CYS 560 Information Assurance — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course offers comprehensive awareness, guidance, best practices, and assessments on the principles of information systems security. Students explore the foundational elements of information systems security as defined by industry experts and the International Information Systems Security Certification Consortium (ISC)², a leading certification authority. The curriculum covers key concepts of information systems security according to ISC²'s redesigned 'eight domains of knowledge' model for the Certified Information Systems Security Professional (CISSP) certification. By the end of the course, students are able to assess security risks, apply access controls, understand legal and compliance requirements, and develop effective security strategies. Students registering for this course are assessed a course resource fee.

Students registering for this course will be assessed a course resource fee.

CYS 565 Security Management Awareness — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course introduces Security Management awareness and provides important and cost-effective methods to protect sensitive information. Through a structured environment of physical, computer, and network security measures, implementation of effective user training, establishment of policies and procedures, and sharing of knowledge and expertise within an organization to protect sensitive information, each student is provided essential information to create and maintain a secure environment.

CYS 575 IT Risk Analysis and Management — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course examines information security risk analysis and management from a business perspective. The course will provide an overview of the key aspects of risk analysis and management, including asset identification and associated risk identification, qualitative and quantitative risk assessment and prioritization, determination of risk mitigation strategies, budgeting for risk, and ongoing risk management. This course will provide knowledge, skills, and techniques to identify, prioritize, and manage the many IT security risks facing businesses today. Students will also examine how IT risk management supports IT governance and decision making by businesses. The role of risk analysts, auditors, security personnel, and management will be discussed.

CYS 577 Global Cybersecurity — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course focuses on four general areas of cyber capabilities and trends in the global community. It analyzes the theory and practice of cybersecurity and cyberwar through the lens of cyber capabilities of nation-states and non-state actors. Students evaluate existing and emerging trends in cyber-related strategies and policies addressing challenges faced by governments. The course also examines global cybersecurity policies and discusses best practices. By participating in this course, students gain a comprehensive understanding of global cyber capabilities and the evolving landscape of cybersecurity.

CYS 586 Digital Forensics and Investigation — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

This course provides an in-depth analysis of digital defense planning, technologies, and methods to safeguard organizational networks, databases, and applications. It presents a plan-protect-respond framework of digital security, covering the interaction of policies, implementation, and oversight. Additionally, the course includes techniques for performing computer forensic investigations. Assignments in a laboratory environment provide students with hands-on experience on these topics. By participating in this course, students gain comprehensive knowledge and skills to enhance digital security and conduct forensic investigations. Note, students registering for this course are assessed a course resource fee.

Students registering for this course will be assessed a course resource fee.

CYS 596 Capstone Project in Cybersecurity — 3 credits

Prerequisites: The Capstone must be the last course taken. All major core and university requirement courses must be complete. The Capstone can be paired with one other course that is considered to be a general education course (excluding courses to meet the Written English Requirement and the Ethics Requirement), a concentration course, elective, or lab course (even if the lab is in the major).

The capstone course examines computer security technologies and principles, including cryptography, authentication, access control, database and software security, and management issues such as physical and infrastructure security, human factors, and security auditing. The course also covers IT security management, risk assessment, and legal and ethical considerations. As the final course in the program, it includes a research project and an audio presentation, allowing students to synthesize their knowledge and skills in computer security to address complex security challenges.

CYS 610 Cloud Technologies and Data Security — 3 credits

Prerequisite: CYS 500 Foundations of Cybersecurity

Cloud and data security, also known as cloud computing security, consists of a set of policies, controls, procedures, and technologies that work together to protect cloud-based systems, data, and infrastructure. These fundamental security measures are crucial for protecting cloud data, supporting regulatory compliance, safeguarding customer privacy, and setting authentication rules for

individual users and devices. This course covers principles such as authenticating access and filtering traffic, closely aligned with the ISC^2 Certified Cloud Security Professional (CCSP) certification. Cloud security can be customized to meet the specific needs of a business, providing flexibility and reducing administrative overhead. Assignments in a laboratory environment provide students with hands-on experience on these topics. Students learn to assess various applications of cloud security and understand how it is delivered, depending on the cloud provider or the security solutions in place.

Students registering for this course will be assessed a course resource fee.

ECO 508 Managerial Economics 3 credits

Everyone knows that success in business is a matter of strategy. However, not everyone knows how to think through decisions strategically, using the tools of game theory and economic analysis to gain an advantage over opponents, and to change the game fundamentally in your favor. In this course, you will learn to use tools developed by economists to address common situations faced by managers in a day-to-day business environment. You don't have to win a Nobel Prize to understand the economic principles that have won these distinctions for economists that developed game theoretic thinking, and decision-rules based on market structure, consumer and firm behavior, and other elements of a commercial environment. In this course, you will learn to analyze a market, competitors, customers, employees, and purchasing decisions in order to gain traction on the variety of commercial roads traveled routinely in the world of business management.

HSC 510/BUS 510 Health Care Policy, Politics, and Power 3 credits

This course introduces you to the core elements of healthcare policy analysis, policymaking, and the far-reaching impacts that power-policy dynamics have on how policies are written and implemented. You will develop leadership skills in health policy analysis, development, and critique. Strategies to advocate for improved health policy and power-sharing in increasingly volatile healthcare and political arenas will be explored. You will develop expertise in a health-related policy of interest to you through the completion of a term-length project.

HSC 510 is cross-listed with BUS 510. Students in the Health Sciences degree should register for the HSC version of this course, and Business degree students should register for the BUS version of this course. Students may not take both versions of the course and have the credit count toward graduation.

HSC 516 Communication Strategy for the Health Care Leader 3 credits

Healthcare leaders have a profound responsibility to communicate effectively with diverse audiences. An increasingly remote workforce has created a sense of urgency to communicate effectively in the digital space. This course provides an overview of prevalent communication theories and a conceptual framework for strategic, effective health communication. You will examine a variety of contexts

of communication typical to healthcare administrative roles, including communications planning, community-building, leading productive meetings, advocacy, inclusive communication across cultures, and crisis communication. Significant emphasis will be placed on new and emerging forms of leadership communication, ranging from myth-busting to social media and remote platforms. You will create a strategic communication plan within a health environment of your choosing and develop your own communication development plan.

HSC 516 is cross-listed with BUS 516. Students in the Health Sciences degree should register for the HSC version of this course, and Business degree students should register for the BUS version of this course. Students may not take both versions of the course and have the credit count toward graduation.

HSC 517 Contemporary Issues in Health Care Delivery Systems 3 credits

In this advanced healthcare delivery systems course, students gain an in-depth understanding of current issues and emerging trends facing leaders within healthcare delivery systems. The diversity and complexities of various healthcare settings are explored, along with the drivers of healthcare delivery. Themes of quality assurance, patient safety, access, and ethical leadership are infused throughout the course. Students apply what they have learned through analysis of real-life case studies.

HSC 525 Informations for Healthcare Leaders 3 credits

Information management is vital to the functioning of health and public health organizations. This course equips you with the skills to guide ethical, evidence-based decision-making around current and emerging information technologies. It examines the use of healthcare technology in warehousing, communicating data, and safeguarding data and electronic health records. You will learn to leverage the power of informatics and your teams to positively impact health outcomes, improve organizational processes, and ensure all health information is protected. You will have the opportunity to work on a term-length project in which you analyze and identify solutions for an informatics problem impacting a healthcare organization.

HSC 526 Strategic Management of Health Care Organizations 3 credits

Prerequisite: HSC 431 Introduction to Health Care Delivery Systems. This course is only a prerequisite for students in the MBA program that have no health care related background and are choosing this concentration.

This course explores theories and principles underlying strategic planning specific to health care environments. Through case study analyses, students learn strategies on how to position health care organizations in order to sustain a competitive advantage in a volatile reimbursement-driven industry. Some of the topics covered in this course include strategic positioning, strategies of mergers and acquisitions, and competitive advantage and profitability.

HSC 526 is cross-listed with BUS 526. Students in the Health Sciences degree should register for the HSC version of this course, and Business degree students should register for the BUS version of this course. Students may not take both versions of the course and have the credit count toward graduation.

HSC 528 Health Care Finance — 3 credits

Students in this course gain in-depth knowledge about the financial environment in which health care organizations operate. Students learn health care finance concepts, managerial and accounting principles, and various means of reimbursement for health services. Students complete a health care finance project to effectively demonstrate the steps in the budget process and practice using financial analysis tools.

HSC 561 Quality Management in Health Care — 3 credits

Healthcare quality is a cornerstone by which professionals practice and lead within their organizations. This course offers an in-depth exploration of healthcare quality, including essential principles and techniques relevant to quality improvement in all areas of health care. You will apply quality improvement theories and evidence-based processes to pressing quality issues facing health and public health providers and will learn how to use these processes to initiate and sustain changes.

HSC 644 Nutrition Science for Health Professionals — 3 credits

The world of nutrition has become increasingly controversial in recent decades. With so many diets to choose from and a population-wide quest for the "perfect diet, "understanding the science supporting healthy nutrition has never been more critical. Information that is portrayed as science-based is often at least partially inaccurate. This course will equip you with a foundational understanding of nutritional science. You will learn how to assess nutritional information for scientific rigor. From there, you will begin to apply the science to case-based learning, giving you opportunities to address nutritional issues in a culturally sensitive manner. You will learn about the role of food in culture, how food metabolizes in the human body, and how to formulate nutritional recommendations for both healthy individuals and those who are living with chronic disease.

HSC 645 Nutrition Across the Lifecycle — 3 credits

Nutritional needs change over the life course. This course will equip you with a foundational understanding of nutritional needs across the lifespan of healthy individuals from conception through elderhood. You will learn how to assess nutritional needs based on life stage and develop evidence-based dietary recommendations for diverse populations across the lifecycle. You will examine the socioeconomic, cultural, and environmental influences on nutritional needs and preferences. Using simulated nutrition case conferences, you will gain valuable skills in culturally sensitive assessment, nutrition education, and development of dietary recommendations.

HSC 646 Health Education: A Cross-Cultural Perspective — 3 credits

Health education is a critical tool for the health professional. This course will provide you with valuable career skills in assessing educational needs, planning, delivering, and evaluating culturally competent health education with diverse individuals and communities. By learning to apply learning theories and motivational interviewing, you will be equipped to deal with barriers that clients may

face. A major focus will be on identifying and dispelling prevalent myths around health and nutrition, particularly those fueled by media and social media. By the end of this course, you will develop a health education intervention that can serve as a model for use in your career.

HSC 648 Nutrition and Chronic Disease — 3 credits

Nutrition is a cornerstone for health and quality of life. Healthful nutrition is essential for the prevention of chronic disease and is a central intervention for people living with chronic disease. This course will provide you with an overview of various chronic conditions and the vital role that nutrition plays in prevention and treatment. You will explore a number of chronic conditions, including cancer, diabetes, cardiovascular disease, kidney disease, obesity, gastrointestinal diseases, and more. You will have the opportunity to apply your knowledge by completing assignments focused on either preventing or managing a chronic condition using nutritional best practices.

HSC 697 Graduate Health Sciences Capstone — 3 credits

Prerequisite: Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

This end-of-program capstone course allows you to synthesize and apply the knowledge acquired throughout your graduate program. You will demonstrate mastery of skills required for advanced practice roles through varied assessments that address current and emerging practice-based and system-based issues in health care.

HSC 698 MS in Health Care Administration Capstone — 3 credits

Prerequisite: Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

This end of course capstone provides students with the opportunity to demonstrate knowledge achieved throughout the program. Students will complete a special project designed to address an issue faced by health care administrators.

IND 501 An Interdisciplinary Approach to Ethical Leadership — 3 credits

The interdisciplinary first-course experience for graduate programs develops highly effective transformational leaders who formulate sustainable, ethically sound solutions to practical management problems encountered in a complex global environment. Students learn how to set direction and work with multiple constituencies with divergent needs through an ethical lens that includes social responsibility and the intersections of diversity, culture, and environment, and how these differences affect best practices in leadership in their respective disciplines.

IND 502 Strategic Talent Management in a Complex World — 3 credits

This interdisciplinary course enables students to acquire the skills necessary to lead strategically and decisively across all functions in an organization, including recruitment and selection of employees, training and development, performance appraisals, health and safety, labor relations, and change management. Students are introduced to leadership and talent management across disciplines and apply strategies to the private, public, and not-for-profit sectors. This course integrates legal, management, and social science research with an active learning approach to executive-level leadership education. Students apply these leadership skills through their own disciplinary lenses and gain an in-depth understanding of how these skills are applied in other disciplines.

IND 503 Data Driven Decision Making — 3 credits

This course is an interdisciplinary approach to research methods and is designed to provide students with an introduction to statistical theory and practice. Students will learn how to research a current issue and interpret statistics for the fields of criminal justice, business, health sciences, and public administration, assuming leadership roles in their discipline.

IND 522 Leading High Performing Teams — 3 credits

Teams accomplish what individuals alone cannot. Teams are vital to the world of work and managing teams well is a competitive advantage. In this course, students engage with management and leadership theories as a foundation for understanding how individuals evolve into high-performing teams. The course identifies sources of team conflict and provides an examination into various methods of resolution. Students reflect on personal team and leadership experiences and analyze various approaches. Through a critical analysis of a team, students investigate team leadership techniques and link observations and experiences to academic theories.

MBAE 508 Managerial Economics — 3 credits

In this course, students analyze real-world case studies to assess the application of economic theories in managerial decisions and propose alternative economic strategies for optimizing choices. They develop practical skills in formulating mathematical models, executing scenario analyses, and communicating economic insights through comprehensive reports and stakeholder-oriented presentations. The course also explores the impact of economic policies on business operations, guiding students in evaluating implications and devising adaptive or influential strategies. Additionally, students integrate economic principles into leadership strategies, fostering a culture of informed decision-making within organizations.

MBAE 509 Resilient Leadership and Organizational Behavior — 3 credits

This course equips students with the knowledge and skills to navigate dynamic organizational environments through resilient leadership. Participants evaluate resilient leadership theories, formulate strategies for fostering workplace resilience, and analyze case studies to discern their impact on organizational culture and performance. The course emphasizes creating innovative solutions, applying resilient leadership for positive organizational change and synthesizing research contributions to

scholarly discourse and practical applications. Additionally, students develop a comprehensive resilience plan, integrating leadership principles to fortify organizations in ever-evolving contexts. This holistic exploration prepares leaders to thrive in dynamic professional landscapes.

MBAE 521 Operations and Project Management — 3 credits

Students learn about advanced project management principles and develop schedules focusing on key concepts. The emphasis is on applying operations strategies for optimal processes, resource use, and efficient supply chains to enhance organizational performance. Through advanced techniques, students navigate project and operational risks for successful outcomes. Quality management, including Six Sigma methodologies, ensures high-quality deliverables. The course incorporates data analytics and quantitative methods for informed decision-making, utilizing KPIs to measure and improve performance. Essential team management skills, team development, conflict resolution, and effective project communication tools are integral components. This learning experience equips students for success in the dynamic fields of operations and project management.

MBAE 524 Corporate Finance and Accounting — 3 credits

This comprehensive course equips participants with the essential skills for strategic financial decision-making. Through a blend of theoretical understanding and practical application, participants learn to conduct financial analyses that integrate accounting and auditing, ensuring accurate and transparent reports. The course delves into optimizing capital structures, incorporating auditing principles to assess the impact of financing options on financial health. Participants gain proficiency in analyzing a firm's performance using financial statements and explaining complex financial transactions such as mergers, leverage buyouts, and divestitures of assets. Moreover, the course focuses on the development of integrated financial plans, incorporating accounting, auditing, and forecasting for informed and strategic decision-making.

MBAE 532 Ethical Risk Management and Compliance — 3 credits

Businesses face various risks, including financial, operational, strategic, compliance, and reputational risks, in this volatile and unpredictable world. The goal of risk management is not only to minimize the negative impact of potential threats but also to capitalize on opportunities that may arise. This course provides a comprehensive exploration of ethical risk management and compliance in the business context. Participants apply ethical theories and frameworks to navigate complex business scenarios, ensuring adherence to laws, regulations, and industry standards. The course emphasizes the development of ethical expectations, policies, and procedures to foster an organizational culture of ethical awareness and compliance. Participants also learn to prioritize ethical conduct in managing stakeholder relationships and effectively navigate complex, global business interests. Furthermore, the course equips individuals with the skills to apply risk mitigation techniques, establishing a resilient organizational framework that places a premium on ethical conduct and compliance.

MBAE 570 Information Technology — 3 credits

In this course, students explore the strategic role of information technology (IT) in modern organizations. They learn to recommend and justify the adoption of advanced business technologies, focusing on enhancing productivity and organizational efficiency. Students delve into the transformative power of IT, justifying its role in fostering innovation, enabling new business models, and maintaining competitiveness in dynamic markets. Additionally, students gain insights into the risks associated with IT, becoming proficient in implementing measures to ensure data security and privacy, with a particular emphasis on cybersecurity threats. The course also equips students with the skills to facilitate effective communication and collaboration within teams, utilizing collaborative tools and platforms. Furthermore, students develop the ability to create compelling data visualizations through data analysis, enabling them to communicate complex information and contribute to strategic decision-making processes.

MBAE 573 Strategic Brand Marketing — 3 credits

In this course, students master the art of creating impactful brand marketing campaigns, developing a deep understanding of various marketing frameworks and their applicability across diverse organizational cultures. They critically evaluate marketing contexts, examining the practical use of media to achieve organizational goals. The course also focuses on deriving value from social media activities, enabling students to generate a return on investment for time and resources invested. Additionally, students gain insights into the ethical and regulatory aspects integral to best-practice marketing programs, fostering a comprehensive understanding of responsible marketing strategies.

MBAE 595 Systems and Sustainability — 3 credits

In this course, students master advanced systems thinking, creating innovative and sustainable business strategies. They integrate corporate social responsibility into business practices, emphasizing ethical decision-making, community engagement, and responsible business conduct. Additionally, they develop strategies for business resilience, considering technological advancements, market changes, and societal trends, while cultivating an ethical organizational culture aligned with sustainability principles and values. The course prepares students to navigate complex challenges with creativity and contribute to responsible and sustainable business conduct.

MBAE 596 Strategy and Entrepreneurial Innovation — 3 credits

In this course, students acquire the skills to formulate strategic decisions aligned with organizational goals and responsive to dynamic market conditions. Emphasizing innovation and creative thinking, the course fosters a transformative culture, enabling students to apply effective strategies for organizational change and successful plan execution. Students gain the ability to identify opportunities for innovation and business growth in dynamic markets and execute global strategies for expanding market presence and achieving international outcomes. This comprehensive approach prepares them for leadership roles in evolving business landscapes, emphasizing sustainability and strategic decision-making.

MBAE 699 Business Strategy Capstone — 3 credits

Prerequisite: Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

In this capstone course, students integrate their acquired knowledge into a self-designed and led final project. They apply inclusive, sustainable business practices, leverage technology for efficiency, and make informed strategic decisions within the context of their project. Emphasis is on fostering inclusive teams, effective leadership communication, and navigating dynamic environments, all woven into their unique project. The experience encourages students to leverage business networks within their project, generating new ideas and opportunities. This culmination prepares students for leadership roles by integrating multidimensional skills for impactful contributions to the business landscape through their self-directed project.

MCJ 622\HSC 622 Grant Writing — 3 credits

The course provides hands on learning and instruction on the art of grant writing and how it can be applied in nonprofit, academic and institutional settings. Students will work through the grant funding and application process, including, program need, program development, budget, objectives and outcomes and evaluation, as well as, how strategic planning supports an organization in achieving its long term goals.

MCJ 518 Comparative Justice — 3 credits

The course will provide a critical examination of the history, significance, and method of comparing and contrasting global criminal justice with those prevailing in the United States. Moreover, the course gives students significant understanding that no system is perfect and each has their own strengths and challenges—a sound model. Students elaborate on methods of evaluation of the individual system from a law enforcement leadership perspective by systematically comparing the criminal justice systems and examine both what works and doesn't work dependent upon the overall circumstances—relative to cultural and historical contexts. Students digest how each balance individual rights and the necessity for order maintenance.

MCJ 522 Pillars of Criminal Justice — 3 credits

This course examines criminal justice issues from the perspectives of the three pillars (law enforcement, courts, and corrections) to see how they work together to affect change in society. Through the lens of current issues, theory, policy, and ethics the course will explore how actions taken by different components of the criminal justice system interact and play out in society. Students will have the opportunity to respond to events as a leader of each of the pillars.

MCJ 530 Legal and Constitutional Issues 3 credits

This course examines some of the more important legal and constitutional issues facing criminal justice practitioners. Topics such as the roles of the courts in our judicial system, the powers entrusted to the separate branches of our government, 1st and 2nd Amendment rights and guarantees, 4th, 5th and 6th Amendment protections and issues faced by the various players in the criminal justice system, and restrictions on employee freedom of speech will be discussed. The course also addresses lying and decision in criminal justice and racial prejudice and discrimination.

MCJ 628 Personnel Management in Criminal Justice 3 credits

This course presents highlights of the trials and tribulations of executives in Criminal Justice in all areas of personnel from recruitment and selection through training, motivation, discipline and promotion. The course evaluates, the policy and political considerations faced by those in a hiring position from the perspectives of different organization sizes and state laws such as right to work states versus union states.

MCJ 630 Risk Assessment in Homeland Security 3 credits

This course provides an introduction to critical infrastructure protection and the policies, strategies, and practical applications of risk and resilience efforts from an all hazards perspective. Topics covered include an in-depth examination of national infrastructure protection policy, the roles and responsibilities of sector-specific agencies, coordinating frameworks, public-private partnerships, and the emerging issues of cybersecurity, interdependencies, and climate change. With a focus on policies that support critical infrastructure strategies, this course is designed to enhance the student's ability to recognize and evaluate risks associated with human-caused, natural, and technological disasters through a myriad of risk management approaches, including best practices used by the homeland security enterprise.

MCJ 650 Terrorism and Counterterrorism 3 credits

This course focuses on the causes, methods, motivations and historical lessons surrounding terrorism with particular attention to the U.S. and the shift in rhetoric and resources in the government's reaction to terrorism following the events of 9/11. This course will provide students with a basic understanding of the most important issues and debates concerning terrorism and counterterrorism policies. Topics covered during this course include: definitions of terrorism, terrorism trends and measurement, causes of terrorism, domestic terrorism, international terrorism, the impact of 9/11, counterterrorism policy and practice, and the future of terrorism.

MCJ 651 Overview of Homeland Security and Emergency Management 3 credits

The homeland continues to experience new threats domestically, environmentally and through our cyber systems. Homeland Security and Emergency management professionals need to be able to predict, plan and execute plans to protect their communities. In this course emerging issues and lessons learned from past events will be explored. Students will identify potential threats in each of the 16 sectors, anticipate threats to their communities, identify the vulnerabilities and create plans to keep their communities safe. They will also present their plans to community stakeholders for consideration and implementation.

MCJ 652 Mental Health Issues in Criminal Justice — 3 credits

This course gives students an understanding of the ways criminal behaviors and mental health issues are dealt with in the criminal justice system. The course also explores the philosophical conflict between treatment and punishment, and resources available in the Criminal Justice System.

MCJ 660 Human Trafficking — 3 credits

This course on modern day slavery takes an in-depth look at human trafficking both domestically and internationally. It focuses on existing policies and practices of prevention and prosecution, such as victim and perpetrator identification, to combat these crimes and to protect and address the needs of victims. In the course student's role play members of a Human Trafficking Task force working a case as an investigator or as an advocate. Together the task force devises recommendations for future task forces.

MCJ 698 Capstone — 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

This is an advanced capstone course designed for students to demonstrate that they have successfully mastered the skills and knowledge presented to them during the course of the MSCJ program. Through a mixture of in-depth discussions, independent research, and written analysis, students will synthesize and apply knowledge gained in the core and concentration courses. By developing an original project focused on social justice, students will demonstrate that they can identify problems in the field and have mastered the ability to apply research and critical thinking skills to address criminal justice and policy issues. This is a reading- and writing-intensive course that serves as the culmination of the students' work at the Master's degree program. This is an intense eight-week course requiring significant research and writing from the student.

MPA 500 Introduction to Public Administration Theory and Practice — 3 credits

This course is an introduction to the study and practice of Public Administration. It will provide an overview of the field of public administration, focusing on the functional roles of public administration in the political process. It will introduce students to concepts and practices in public administration, focusing on accountability and performance. Additionally, this course will explore the practical application of concepts to current issues to the field of public administration.

MPA 502 Public Management in a Political Environment — 3 credits

This course analyzes concepts, methods, skills, and procedures involved in managing public organizations in a political environment. Throughout the course, you will consider problems of partnering, collaboration, social change, public opinion, organization, planning, decision making, performance evaluation, and management of human resources. The course utilizes project-based group assignments, individual assignments, discussions, and reflections to assess mastery of course concepts.

MPA 511 Public Budgeting and Financial Management — 3 credits

This course will allow you to examine the key aspects of a public sector budget from identifying and securing key stakeholder support, to identifying state and local funding sources to be allocated based on the needs of an organization. You will also study the theory of budgeting from the public sector perspective, with an emphasis on understanding and applying the principles of financial management.

Cross listed with MCJ 511.

MPA 531 Public Sector Technology — 3 credits

This course explores ways in which technology is transforming the public sector. It analyzes the use of new technologies and strategies to identify needs, develop solutions, and deliver services more effectively. Students will discuss technology in such areas as public safety, education, transportation, economic development, finance, administration, and health and human services.

MPA 651 Contemporary Issues in Nonprofit Management — 3 credits

This course explores the unique characteristics of non-profit organizations, and the impact of current issues on these entities in the United States. You will learn to expand your management and analytical skills, and your knowledge of the nonprofit sector in general, utilizing specific nonprofit management principles and techniques. Learning how to navigate the stakeholders in the nonprofit sector is a skill that is integral to management in the public arena.

MPA 698 Capstone in Public Administration — 3 credits

Prerequisites: Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

The Capstone course represents an integration of classroom learning with practical experience. You will solve real problems for public and nonprofit organizations through scenarios that apply to federal, state, and local levels of government, as well as an issue that you have identified in an organization of your choice. You will draw on the coursework and your own work experiences to develop specific recommendations for design, implementation, and evaluation of a project task. The course culminates with a complete, professional portfolio, ready to showcase to employers.

NUR 502 Theoretical Foundations of Nursing Practice — 3 credits

Prerequisite: Active and unencumbered RN license

This course focuses on the theoretical foundations of nursing practice through the exploration of nursing theories, organizational change models, and learning theories. The application of theories relevant to nursing practice will be emphasized. The examination of multiple theories and their implications on nursing knowledge development and practice will serve as a foundation for future graduate courses. In addition to the classroom discussions and written assignments, students will

engage in a 1-hour practice experience that will support new understanding of professional practice. This is an 8-week 3-credit hour course requiring a minimum of 18 hours of course engagement each week (refer to the Credit Hour Calculation Policy found in the Student Handbook.) Course engagement includes student activities such as discussions, reading, study time, practice experience, and assignments.

Delivery: Online course delivered over 8 weeks.

NUR 503 Transformational Nursing: Innovation, Inquiry, and Scholarship 3 credits

Prerequisites: Active and unencumbered RN license, NUR 502 Theoretical Foundations of Nursing Practice

This course explores historical knowledge development through the examination of nursing as an art and a science. The science of nursing will be examined through the fundamental patterns of knowing and the science of knowing. The master's-prepared nurse will develop the ability to apply ethical and moral reasoning, evidence-based competencies, and leadership strategies to promote innovation and to transform nursing practice. Students will use the spirit of inquiry, combined with personal creativity, and the translation of evidence to enhance interprofessional collaboration.

Delivery: Online course delivered over 8 weeks.

NUR 505 Advanced Pathophysiology 3 credits

Prerequisite: Active and unencumbered RN license

This course is an in-depth study of the pathophysiologic basis of disease as it affects individuals across the life cycle. Emphasis will be placed upon endogenous and exogenous factors which contribute to altered functional balance at the cellular, tissue, organ, and system levels. National and global health disparities caused by genetic, developmental, and environmental factors will be discussed. Assessment findings, diagnostic testing and interventions specific to selected health problems are explored to begin development of critical thinking skills for pathophysiologic causes and treatments of given disease processes.

Delivery: Online course delivered over 8 weeks.

NUR 506 Advanced Pharmacology 3 credits

Prerequisite: Active and unencumbered RN license

The purpose of this course is to examine pharmacotherapeutic agents used in the treatment of illness and the promotion, maintenance, and restoration of wellness in diverse individuals across the lifespan. This course will provide the foundation for safe, effective drug therapy and the role of the nurse in health promotion, disease prevention, and management. Emphasis will be placed on the

fundamentals of pharmacokinetics and pharmacodynamics as they relate to practice experience. This course includes 9 hours of practice experience through digital virtual patient activities simulating a real patient via Shadow Health.

Delivery: Online course delivered over 8 weeks.

NUR 507 Advanced Physical Assessment 3 credits

Prerequisite: Active and unencumbered RN license

This course focuses on comprehensive physical assessment which includes in-depth health history, physical and psychological signs and symptoms, developmental stages, pathophysiologic changes, and psychosocial and cultural characteristics of the clients across the lifespan. Emphasis is placed on applying critical thinking and diagnostic reasoning skills in assessing, diagnosing, and monitoring the health status of clients and families. Students obtain the practice skills necessary for advanced communication (i.e., clinical interviewing, focused history taking), psychosocial and physical assessment, critical diagnostic reasoning, differential diagnosis, and clinical decision-making through course readings, dialog, discussions, videos, simulations, and practical examinations. This course includes 45 hours of practice experience through digital virtual patient activities simulating a real patient via Shadow Health.

Delivery: Online course delivered over 15 weeks.

NUR 508 Research and Evidence-Based Practice 4 credits

Prerequisite: Active and unencumbered RN license

This course focuses on the development of the master's prepared nurse as a role model for the translation and generation of evidence in nursing practice. The goals of research, evidence-based practice, and quality improvement will be highlighted and the principles of each will be applied to the nursing setting. Students will examine personal practice in relation to policy, research from nursing and related fields, and research design to provide a comprehensive approach to care. The integration of theory, evidence, cultural considerations, ethics, technological aspects of scholarly inquiry, and clinical judgement when implementing changes will be emphasized. The student will cultivate leadership skills that will prepare them to collaborate in inter-professional teams that initiate, implement, and evaluate innovative practice changes.

Delivery: Online course delivered over 15 weeks.

NUR 515 Management Information for Decision Support — 3 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

This course provides an overview of clinical decision support focusing on the identification, acquisition, analysis, interpretation and application of data, databases, and decision making strategies which influence health care decisions for improved health care. The course delves into knowledge management and artificial intelligence and its impact on clinical decision making and patient safety. Using a consultant lens, the student will engage in organizational analysis to determine the best decision support system for implementation based on the needs of the clinicians within their chosen organization. Further, the student determines an implementation approach and plan, and identifies goals while evaluating the effectiveness of the selected system.

Delivery: Online course delivered over 8 weeks.

NUR 521 Data, Information, and Knowledge — 3 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

This is a course offering graduate nursing students the opportunity to focus on concepts involved in the design of a database. Specifically, we'll examine the usage, management, and evaluation of data through the application of basic concepts of database design as well as knowledge of data representation, data sets, and data integrity. Through the use of databases, critical discernment and reasoning are applied in composing queries and reports to assess healthcare problem prominence and identify solutions. Through course readings, incorporation of the ANA Nursing Informatics: Scope and Standards of Practice, discussion boards, and an individual project, students will build upon basic knowledge of data information, the data knowledge continuum, security of databases, and develop an understanding of large scale information system environments in order to understand risk, improve care delivery, and provide guidance in the integration of technology in nursing practice.

Delivery: Online course delivered over 8 weeks.

NUR 533 Policy, Ethics, and Population Health — 4 credits

Prerequisite: Active and unencumbered RN license

This course examines public policy, political ideology, and ethics as they shape health policy across populations. Political ideology, social and health policy are considered within the lens of population based health and reducing health disparities. The role of the master's-prepared nurse lead and advocate within the public policy arena is explored and discussed. Contemporary issues in health policy viewed from the perspective of ethics and the social and material determinants of health are considered. A primary focus of the course is consideration and development of the knowledge and skills that the master's prepared nurse needs to be a change agent in health policy. This is an 8 week 4 credit

hour course requiring a minimum of 18 hours of course engagement each week (refer to the Credit Hour Calculation Policy found in the Student Handbook.) Course engagement includes student activities such as discussions, readings, study time, and assignments.

Delivery: Online course delivered over 8 weeks.

NUR 615 Management of Clinical Systems 3 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

In Clinical Systems Management, students explore the theoretical basis and empirical evidence supporting leadership, communication, interprofessional collaboration, and systems thinking. A focus of this course is on acquiring the knowledge, skills, and disposition for advancing practice and supporting quality and safety as leaders in healthcare systems.

Delivery: Online course delivered over 8 weeks.

NUR 625 Management of Fiscal and Operational Systems 3 credits

Prerequisites: Active and unencumbered RN license, and all Phase I courses

The focus of Management of Fiscal and Operational Systems is to provide a foundation in the financial aspect and business strategies of health care in order to maximize organizational performance. Learners acquire knowledge and skills in developing and analyzing budgets, assessing/accessing variances, judging benchmarking, regulatory requirements, interprofessional collaboration, and forecasting future assets and revenues. This course encompasses the analysis of the environment that challenges health care organizations to maintain safe, quality patient care while shifting to meet regulatory and external requirements. The role of the masters prepared nurse, Nurse Manager, and Chief Nursing Officer in interprofessional financial planning for quality, safety, and financial stability will be addressed.

Delivery: Online course delivered over 8 weeks.

NUR 635 Leadership in Organizational Systems 3 credits

Prerequisites: Active and unencumbered RN license, and all Phase I courses

Leadership in Organizational Systems focuses on critical examination of leadership styles, strategies, and competencies of the nurse executive in order to successfully manage the health care enterprise. It emphasizes leadership skills for strategic planning, enhancing team performance and interdisciplinary collaboration, and creating a culture of quality performance.

Delivery: Online course delivered over 8 weeks.

NUR 646 The Nursing Leadership and Administration Capstone — 6 credits

Prerequisites: Active and unencumbered RN license. Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

The graduate nursing capstone is a culminating experience designed to provide learners with an opportunity to apply knowledge and skills acquired throughout the program of study focusing on the competencies of the graduate level nurse. This 6-credit course consists of several integrated components: discussion, reflective journal, scholarly paper, 135 practice experience hours, and project presentation. Assessment of the learner fs attainment of program competencies is built into these components. No additional hours will be awarded beyond the 135 hours. 6.00 Credits, 3 credits allotted to didactic and 3 credits to practice experience. Practice Experience: 135 hours practice experience of an independent project reviewed and approved by instructional faculty. Students will work with their approved mentor to design a leadership project, plan its implementation in detail, implement the project, and prepare a comprehensive evaluation plan for the project. Students use a qualified individual who volunteers to serve as their mentor* for their project. Participation of the mentor is subject to approval by the capstone faculty. Individual with master s degree or higher who has expertise within the designated specialization and agrees to voluntarily serve as a resource for the student. Prerequisite(s) Completion of all Phase I and Phase II courses. Active and unencumbered RN license.

This requirement must be completed through Excelsior University.

Delivery: Online course delivered over 15 weeks.

NUR 651 Systems Development in Healthcare — 4 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

This course focuses on a structured methodology to select, develop, and maintain a system; this approach is called the system development life cycle (SDLC). The course incorporates six modules corresponding to the four phases of the systems life cycle: planning, analysis, design, and implementation. System projects as they move through this life cycle require definition of requirements, business need determination and combine various models to provide a design framework; and the management of projects also will include the integration of organizational behavior concepts.

Delivery: Online course delivered over 15 weeks.

NUR 653 Designing a Learning Environment — 3 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

This course focuses on the creation of teaching-learning environments and the integration of the role of faculty/educator, uniqueness of the learner, the setting and context within which the learning occurs, the teaching learning strategies used to achieve learning outcomes, and evaluation of the effectiveness of this process.

Formerly NUR 650 Designing a Student Learning Environment.

Delivery: Online course delivered over 8 weeks.

NUR 661 Program and Curriculum Development in Nursing Education — 3 credits

Prerequisites: Active and unencumbered RN license, all Nursing Phase I courses

This course focuses on curriculum and syllabus/program development, including theoretical frameworks and design, philosophical foundations, and selection of learning experiences to achieve outcomes.

Delivery: Online course delivered over 8 weeks.

NUR 662 Assessment and Evaluation in Nursing Education — 3 credits

Prerequisite: Active and unencumbered RN license, and all Phase I courses

This course is designed to introduce the student to the evaluation process, including test construction, clinical performance assessment, program evaluation, and strategies for evaluating learning outcomes.

Delivery: Online course delivered over 8 weeks.

NUR 676 The Nursing Education Capstone — 6 credits

Prerequisites: Active and unencumbered RN license. Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

The graduate nursing capstone is a culminating experience designed to provide learners with an opportunity to apply knowledge and skills acquired throughout the program of study focusing on the competencies of the graduate level nurse. This 6-credit course consists of several integrated

components: discussion, reflective journal, scholarly paper, 135 practice experience hours, and project presentation. Assessment of program competencies is built into these components. No additional hours will be awarded beyond the 135 hours. 6.00 Credits. 3 credits allocated to didactic/course work and 3 credits allocated to practice experience.

This requirement must be completed through Excelsior University.

Delivery: Online course delivered over 15 weeks.

NUR 686 The Nursing Informatics Capstone — 6 credits

Prerequisites: Active and unencumbered RN license. Capstone is the last course taken, and all major core courses must be completed prior to beginning the capstone. Students can only take an elective or concentration course with the capstone.

The graduate nursing capstone is a culminating experience designed to provide learners with an opportunity to apply knowledge and skills acquired throughout the program of study focusing on the competencies of the graduate level nurse. This 6-credit course consists of several integrated components: discussion, reflective journal, scholarly paper, 247.5 practice experience hours, and project presentation. Assessment of program competencies is built into these components. No additional hours will be awarded beyond the 247.5 hours. This requirement must be completed through Excelsior University.

This requirement must be completed through Excelsior University.

Delivery: Online course delivered over 15 weeks.

PBH 592 Biostatistics — 3 credits

To succeed in the public health field, the ability to understand and apply basic statistical methods commonly used in the design and analyses of biomedical and public health investigations is essential. The major topics covered in this course include types of data, study designs, probability, hypothesis testing, power, and sample size. Emphasis is placed on applying appropriate statistical methods, interpreting the results across public health environments, and communicating effectively with diverse stakeholders.

Students not in the Public Health Concentration may take HSC 580 Research and Applied Statistics instead of this course.

PBH 603 Behavioral Health and Social Environment — 3 credits

This course provides students an opportunity to examine theories, concepts, and models from the social and behavioral sciences, as they form the basis for health education and public health interventions on a variety of levels. Models of individual and interpersonal health behavior are examined, as well as community and group models of health behavior change. This course also addresses the emerging use of technology and social media in behavioral health interventions.

PBH 604 Epidemiology — 3 credits

Epidemiology has long been an integral part of disease prevention and treatment interventions. Recent pandemics have spurred interest in understanding how disease spreads and how to stop the spread. Epidemiology provides valuable insights into what makes people healthy, chronic disease prevention, and a base of evidence to create and test interventions. In this course, you will develop an understanding of disease etiology and surveillance strategies. You will learn how to use data to identify trends in morbidity and mortality, as well as how this data can inform public health policy and best practices.

PBH 609 Critical Issues in Public Health — 3 credits

This course examines emerging population-based issues, changing public health policies, and contemporary public health concerns. Students explore current public health issues within the context of their impact on regional, national. and global populations. Critical issues discussed include natural and man-made disasters, food and environmental safety, veterans' health, infectious and chronic diseases, human rights violations, and more.

PBH 610 Environmental Health — 3 credits

Where we live, work, and play matters deeply in the health of a community. This course provides you with an opportunity to critically examine environmental health issues, contributing factors, and promising approaches that can be taken to improve the health of environments. You will explore factors that impact on air, water, land, and climate. This course will delve deeply into the intersects of health, environment, and social justice throughout the term. Policies that impact the safety of communities will be explored through a sociopolitical lens. Over this term, you will have several opportunities to identify, research, and propose strategies to address environmental issues of interest to you.

PBH 613 Program Planning and Evaluation for Public Health — 3 credits

This course examines the history and development of health promotion programs as they impact the health of populations. Students hone their skills in applying theory to design, implement, and evaluate programs that competently address cultural, psychological, and behavioral factors impacting public health outcomes.

PBH 647 Vulnerable Populations — 3 credits

In this course, students explore the meanings of health and vulnerability at the community and societal levels as well as the factors that contribute to differential access to health care. Selected theories and models for identifying and addressing underlying causes of vulnerability are explored, using social justice as a guiding ethical framework and the lens for viewing controversies, political debates, and opportunities for policy and practice change.

SUST 601 Environmental Sustainability — 3 credits

Environmental Sustainability covers ecological principles by which life on Earth functions and human life and culture are sustained. The knowledge and skills covered enable students to recommend actions and policies needed to address climate change, planetary boundaries, threats to biodiversity, urban environments, agricultural systems, toxics and non-renewable resources, and related issues. The course experience prepares students for developing interdisciplinary skills and strategies for personal growth as well as leading people, businesses, and organizations through the challenges of the global ecological crisis.

SUST 602 Sustainability Science — 3 credits

This course provides students with a broad introduction to sustainability, including how we got to where we are, current trends, and proven strategies. The course focuses on navigating today's complex problems with interdisciplinary integration of environmental, social, and economic perspectives. Core principles of sustainability presented include justice, equity, diversity, and inclusion (JEDI). Students explore ways to incorporate diverse values, including indigenous wisdom, to create a transformational future that is environmentally sustainable, socially just, and spiritually uplifting. The course focuses on the community level, and students learn about and engage with people and their lived experiences with sustainability issues. The course surveys the ever-expanding field of sustainability science from a variety of perspectives, including government, business, academia, and agriculture. Students investigate the environmental, socioeconomic, and cultural elements that created current conditions and trends, and a range of case studies in sustainable resource management are presented through student field visits and discussions with sustainability practitioners. Topics include sustainability measurement and tracking, application of sustainability technology, resource use, living systems, systems thinking to trace and solve problems, and the interconnectivity of sustainability problems. The course also considers the role of human behavior in overcoming impediments to progress.

SUST 603 Environmental Leadership and Strategic Sustainability — 3 credits

Environmental Leadership and Strategic Sustainability explores the connections between leadership, sustainability, and strategic planning. The knowledge and skills empower leaders to develop and implement strategies with sustainability in mind. Abundant, effective leadership is a key ingredient to sustainability implementation at every scale, from global change to local, project-scale efforts. By the end of the course, students develop the skills to create strategic action plans to lead their organization into its future through ethical operations.

Tuition and Fees

Descriptions of tuition and fees are located on the Excelsior University website at https://www.excelsior.edu/costs-and-financing/.

- **Undergraduate program tuition and fees**
  https://www.excelsior.edu/costs-and- financing/undergraduate/
- **Associate in Nursing tuition and fees**
  https://www.excelsior.edu/costs-and- financing/associate-in-nursing-tuition-and-fees/
- **Graduate program tuition and fee information**
  https://www.excelsior.edu/costs- and-financing/graduate/
- **Tuition and fees for military members**
  https://www.excelsior.edu/costs-and- financing/military/
- **Tuition and fees for military veterans**
  https://www.excelsior.edu/costs-and- financing/veterans/

Financial Aid

Programs and services to help with affordability are presented on the **Tuition and Financial Aid webpage** at https://www.excelsior.edu/costs-and-financing/.

Student policies regarding financial aid are located on the website. The Satisfactory Academic Progress policy provides the minimum grades and standards considered satisfactory, conditions for interruption due to unsatisfactory grades or progress; a description of the probationary period, if applicable; and conditions of re-entrance for those students suspended for unsatisfactory progress.

Academic Support Services

Excelsior University offers many academic support services, most of which are always available to students, from admission to graduation.

- **The Online Writing Lab (OWL):** The Excelsior OWL provides multifaceted support for writers at the college level by providing reference information, exemplars, activities, quizzes, and videos.
- **Tutoring Services:** Students can meet with a live tutor, submit a paper to the Writing Lab for review, ask a question and receive a written reply, receive tutoring in Spanish, and chat with a tutor in their native language.
- **The Excelsior University Library:** All enrolled students have access to the Excelsior library via the MyExcelsior portal and the main navigation menu of all Canvas courses.
- **Accessibility Services:** Excelsior seeks to assure educational access for all students. Excelsior provides reasonable accommodations to individuals with disabilities recognized under the Americans with Disabilities Act of 1990 (ADA). Additionally, Excelsior must abide by the provisions of Section 504 of the Rehabilitation Act of 1973, which protect otherwise qualified individuals from discrimination based on their disability. To be considered otherwise qualified, a student with a disability must be capable, either with or without accommodation, of fulfilling the essential requirements of the educational program.
- **Orientation and Advisement:** Excelsior offers online orientation courses and resources in the MyExcelsior portal as well as personalized, on-demand communication between students and academic advisors or other qualified staff.
- **Counseling and Support Services:** Excelsior partners with ComPsych to use qualified and trained ComPsych staff to provide on-demand, customized student support in potentially serious situations, as well as support for students in non-acute situations, who may need referrals to services for mental-health counseling, life coaching, legal support, financial advisement, etc. Services are provided at no cost to the student.

Excelsior University Board of Trustees

Excelsior University is a not-for-profit higher education corporation governed by a board of trustees.

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Special Assistant to the President for Transformative Partnerships

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Founding Director of the Center for Social Justice and Chief Diversity Officer

LORI WILLIAMS, PhD
Chief of Staff

Academic Leadership

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Provost and Chief Academic Officer

SURESH CHALASANI, PhD
Executive Director, New Program Innovation

SCOTT V. DOLAN, PhD
Executive Dean, College of Liberal Arts and Sciences

ROBIN GOODRICH, EdD, RN
Executive Dean, College of Nursing and Health Sciences

STEPHANIE POCZOS, EdD
Vice Provost, Academic Operations and Quality

BENJAMIN SAXON, BA
Executive Director, Instructional Design and Development

Excelsior University College of Liberal Arts and Sciences Faculty

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Excelsior University College of Nursing and Allied Health Faculty

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Full-time Faculty, School of Nursing, College of Nursing and Health Sciences, Excelsior University, Albany, NY

TAMMY ZYBELL, DNP, MBA, RN
(Healthcare Systems Leadership, Chamberlain University)
Dean, School of Nursing, College of Nursing and Health Sciences, Excelsior University, Albany, NY

Advisory Committee to the Excelsior University College of Nursing and Health Sciences

Addendum for Florida Students

Excelsior University is a not-for-profit higher education corporation governed by a board of trustees. The names and titles of the trustees, as well as the administrative and academic leadership of the institution, is included in each catalog.

Licensed by the Commission for Independent Education, Florida Department of Education. Additional information regarding this institution may be obtained by contacting the Commission at 325 West Gaines Street, Suite 1414, Tallahassee, FL 323099-0400, toll-free telephone number: (888) 224-6684.

Excelsior University Florida Degree Programs

Program Title	Credential	Degree Type	Credit Hours	S/Q
Administrative & Management Studies	Associate in Applied Science	AAS	60	S
Business Administration	Master's	MBA	33	S
Business Management	Bachelor's	BS	120	S
Cybersecurity	Bachelor's	BS	120	S
Cybersecurity	Master's	MS	30	S
Electrical Engineering Technology	Bachelor's	BS	124	S
Health Care Management	Bachelor's	BS	120	S
Healthcare Administration	Master's	MS	36	S
Management	Master's	MS	30	S
Nursing	Bachelor's	BS	120	S
Nursing Education	Master's	MS	38	S
Nursing Informatics	Master's	MS	36	S
Nursing Leadership Administration of Healthcare Systems	Master's	MS	38	S
Organizational Leadership	Master's	MS	30	S

The names and titles of all full-time and part-time administrators can be found in the Excelsior University catalog in the section Excelsior University Leadership Staff. In addition to this list of institutional and academic leadership, administrators include:

- Toni-Ann Funk, Executive Director of Admission
- Chris Johnson, Executive Director of Student Affairs
- Kat McGrath, University Registrar
- Christine Morris, Executive Director of Student Financial Services
- Tammy Spenziero, Director of Student Success

The following is a listing of all faculty indicating degrees held and institutions or agencies awarding the credentials:

Full-time Excelsior University Faculty

Name	Area	Title	Degree	Major	Institution
Ackerman, Kylie K.	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	MSN	Nursing Education	Excelsior University
Bhatt, Ami	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	PhD	Nursing	Barry University
Boyd, Tonya	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	DNP	Nursing	Aspen University
Campbell, Tracy	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	DNP	Nursing	Wake Forest University
Cole, Richard	College of Liberal Arts and Sciences	Full-Time Faculty, Engineering Technology	EdD	Adult and Career Education	Valdosta State University
Entrikin, Shawn	College of Liberal Arts and Sciences	Full-Time Faculty, Management HR	Doctorate	Organizational Leadership	Argosy University

Name	Area	Title	Degree	Major	Institution
Eyler, Carl	College of Liberal Arts and Sciences	Full-Time Faculty, Cybersecurity Operations Management and Director of NCI	MSc	Cybersecurity	University of Maryland-Global Campus
Gappy, Ivan	College of Liberal Arts and Sciences	Full-Time Faculty, IT Computer Programming and Coding	MBA	Business Administration	Wayne State University
Garcia, Mary Ann R.	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	DNP	Healthcare Management	Chamberlin University
Giarda, Lisa	College of Nursing and Health Sciences	Full-time Faculty, School of Allied Health	PhD-ABD	Higher Education Administration	University of Phoenix
Gibbs, Antonnette	College of Liberal Arts and Sciences	Full-Time Faculty, Mathematics and Statistics	PhD	Mathematics Education	Florida Institute of Technology
Knight, Kaitlin	College of Nursing and Health Sciences	Nursing Skills Lab Instructor	MSN	Nursing	Sacred Heart University
McCall, Kristina	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	PhD	Nursing	Walden University
McCray, Yolande	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	DNP	Nursing Practice	Chamberlain University
Morford, Elizabeth B.	College of Liberal Arts and Sciences	Full-Time Faculty, Psychology and Clinical Mental Health	PhD	Clinical Psychology	Argosy University
Palmieri, Patrick	College of Nursing and Health Science	Full-Time Faculty, School of Nursing	DHSc	Health Science	A.T. Still University
Ricks, Antony N.	College of Liberal Arts and Sciences	Full-Time Faculty, English and Composition	PhD	English	Florida State University

Name	Area	Title	Degree	Major	Institution
Ruffin, Jennifer	College of Liberal Arts and Sciences	Full-Time Faculty, Biology and Science	MSc	Medical Technology	SUNY Upstate Medical University
Rupp, Kathleen	College of Nursing and Health Sciences	Full-time Faculty, School of Nursing	PhD	Nursing	University of Phoenix
Shurts, Leslie	College of Nursing and Health Sciences	Full-Time Faculty, School of Nursing	PhD	Nursing	New Mexico State University

Department Chairs

Name	Area	Title	Degree	Major	Institution
Bateh, Dena	College of Liberal Arts and Sciences	Dept. Chair, Undergraduate Business	PhD	International Economics	Columbia University
Beasley, Danielle	College of Nursing and Health Sciences	Dept. Chair, School of Nursing	PhD	Nursing	University of Florida
Berkery, Mary	College of Liberal Arts and Sciences	Dept. Chair, Degree Completion & Liberal Arts	PhD	History	State University of New York at Binghamton
Brown, Santarvis	College of Liberal Arts and Sciences	Dept. Chair, Graduate Business	Doctorate	Educational Leadership	California Coast University
Donahue, Donald	College of Nursing and Health Sciences	Dept. Chair, School of Allied Health	DHEd	Health Education	A.T. Still University
Koneru, Anveeksh	College of Liberal Arts and Sciences	Dept. Chair, Engineering Technology	PhD	Mechanical Engineering	West Virginia University

Name	Area	Title	Degree	Major	Institution
Pearson, Benjamin C.	College of Liberal Arts and Sciences	Dept. Chair, General Education & Social Sciences	PhD	History	University of North Carolina at Chapel Hill
Pervis, Brian	College of Nursing and Health Sciences	Dept. Chair, School of Nursing	DNP	Nursing Practice	Capella University
Rowley, Kristy	College of Nursing and Health Sciences	Dept. Chair, School of Nursing	DNP	Nursing	Western Carolina University
Tippey Jr., James E.	College of Liberal Arts and Sciences	Dept. Chair, Information Technology & Cybersecurity	Doctorate	Computer Science	Colorado Technical University

- The Excelsior University academic calendar is available on our website at https://www.excelsior.edu/calendars/academic/.
- Admissions requirements, policies, and procedures are available at:
  - https://www.excelsior.edu/admissions/requirements/
  - https://www.excelsior.edu/policy/enrollment-and-matriculation/
  - and https://www.excelsior.edu/policy/language-proficiency/.
- The Transfer Credit Sources policy governs the granting of credit for prior learning or by examination, including the maximum amount of credit which can be obtained in this manner.
- Please note that the transferability of credit from Excelsior University is at the discretion of the accepting institution, and that it is the student's responsibility to confirm whether or not credits will be accepted by another institution of the student's choice.
- The Excelsior University Course Numbering System is as follows:
  - **0–99** Remedial/Developmental
  - **100–299** Lower-level undergraduate credit
  - **300–499** Upper-level undergraduate credit
  - **500 and above** Graduate credit

- Excelsior University uses the following grading system:

A	= 4.0	I	= Incomplete
B	= 3.0	P	= Pass
C	= 2.0	W	= Withdrawal
D	= 1.0	AW	= Administratively Withdrawn
F	= 0.0	MW	= Military Withdrawal
		R	= Repeated
		O	= Repeated at Another Institution

  Letter grades are assigned for Excelsior University courses that are based on percentage equivalents. The course grade equivalents are as follows:

  A = 90–100%
  B = 80–89%
  C = 70–79%
  D = 60–69%
  F = 59% or below

- The Grade Scale, GPA, and Credit Application policy defines Excelsior's unit of credit. Also see the Credit Hour policy.
- The Satisfactory Academic Progress policy provides the minimum grades and standards considered satisfactory, conditions for interruption due to unsatisfactory grades or progress; a description of the probationary period, if applicable; and conditions of re-entrance for those students suspended for unsatisfactory progress.
- Descriptions of tuition and fees are located on the website at https://www.excelsior.edu/costs-and-financing/.
  - Undergraduate program tuition and fees: https://www.excelsior.edu/costs-and- financing/undergraduate/
  - Associate in Nursing tuition and fees: https://www.excelsior.edu/costs-and-financing/associate-in-nursing-tuition-and-fees/
  - Graduate program tuition and fee information: https://www.excelsior.edu/costs-and-financing/graduate/
  - Tuition and fees for military members: https://www.excelsior.edu/costs-and-financing/military/
  - Tuition and fees for military veterans: https://www.excelsior.edu/costs-and-financing/veterans/
- Programs and services to help with affordability are presented on the Tuition and Financial Aid webpage at https://www.excelsior.edu/costs-and-financing/.

- The Add Drop, Cancel, Withdrawal, and Refunds for Excelsior University Courses policy addresses refunds and related topics.
- Excelsior University has multiple corporate office buildings comprising our on-campus property located at 3, 5, and 7 Columbia Circle, Albany, NY 12203.
- In addition the Cornerstone course for undergraduate students, Excelsior University offers many academic support services, most of which are available to students at all times, from enrollment to graduation.
  - **The Online Writing Lab (OWL):** The Excelsior OWL provides multifaceted support for writers at the college level by providing reference information, exemplars, activities, quizzes, and videos.
  - **Tutoring Services:** Students can meet with a live tutor, submit a paper to the Writing Lab for review, ask a question and receive a written reply, receive tutoring in Spanish, and chat with a tutor in their native language.
  - **The Excelsior University Library:** All enrolled students have access to the Excelsior library via the MyExcelsior portal and the main navigation menu of all Canvas courses.
  - **Accessibility Services:** Excelsior seeks to assure educational access for all students. Excelsior provides reasonable accommodations to individuals with disabilities recognized under the Americans with Disabilities Act of 1990 (ADA). Additionally, Excelsior must abide by the provisions of Section 504 of the Rehabilitation Act of 1973, which protect otherwise qualified individuals from discrimination based on their disability. To be considered otherwise qualified, a student with a disability must be capable, either with or without accommodation, of fulfilling the essential requirements of the educational program.
  - **Orientation and Advisement:** Excelsior offers online orientation courses and resources in the MyExcelsior portal as well as personalized, on-demand communication between students and academic advisors or other qualified staff.
  - **Counseling and Support Services:** Excelsior partners with ComPsych to use qualified and trained ComPsych staff to provide on-demand, customized student support in potentially serious situations, as well as support for students in non-acute situations, who may need referrals to services for mental-health counseling, life coaching, legal support, financial advisement, etc. Services are provided at no cost to the student.
- The Student Conduct policy presents Excelsior's expectations for student conduct.
- The Student Complaints, Appeals, and Exceptions policy informs students of the procedures to appeal academic or disciplinary actions.
- The Student Complaints, Appeals, and Exceptions policy informs students of the procedures Excelsior University will follow to consider and address student complaints.
- The Transfer Credit Sources policy governs the granting of credit for prior learning or by examination, including the maximum amount of credit which can be obtained in this manner.
- **Refund Policy:** Students who wish to withdraw from a course may be eligible for a refund of tuition in accordance with the conditions outlined in this policy. The Excelsior University refund policy for students from the State of Florida is administered by the Student Payment Office.

Questions related to the refund conditions contained in the refund policy for students from the State of Florida or questions related to a specific refund should be addressed by contacting the Student Payment Office. The Student Payment Office can be reached by telephone by calling 1-888-647-2388.

In the event a student withdraws from an Excelsior University course, then the following refund provisions apply:

Florida Refund Policy

Florida 8-Week Course (Refund up to day 15)

Days 1–7	100% Refund
Days 8–11	80% Refund
Days 12–15	50% Refund
Day 16 and on	No Refund

Florida 15-Week Course (Refund up to day 21)

Days 1–11	100% Refund
Day 12–19	90% Refund
Day 10–21	80% Refund
Day 22 and on	No Refund

In the event the University cancels a course, the student will be refunded 100% of the tuition paid for the course. All refunds will be made within 30 days of withdrawal from the course or cancellation of the course.

These refund provisions apply to students from the State of Florida admitted/enrolled in the following Excelsior University programs:

- Associate in Applied Science in Administrative and Management Studies
- Bachelor of Science in Business Management
- Bachelor of Science in Cybersecurity
- Bachelor of Science in Electrical Engineering Technology
- Bachelor of Science in Health Care Management
- Bachelor of Science in Nursing
- Master of Science in Business Administration
- Master of Science in Cybersecurity
- Master of Science in Health Care Administration
- Master of Science in Management

- Master of Science in Nursing Education
- Master of Science in Nursing Informatics
- Master of Science in Nursing Leadership Administration of Healthcare Systems
- Master of Science in Organizational Leadership

- Excelsior University is located at 9400 4th Street North in St. Petersburg, Florida. The St. Petersburg site is designed as a training facility for nursing students and houses teaching and learning facilities. The facility is 8000 sq. ft., housing one large classroom, one computer laboratory and one large clinical laboratory, several smaller training rooms, general meeting areas, administrative offices, and abundant storage.

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