

# LIBERAL ARTS

All programs must meet certain minimum requirements in both the major and in the liberal arts. Course requirements for each program are listed in each curriculum along with liberal arts selections. Courses listed as "Core Electives" in a curriculum can be chosen by students from one of the several core areas listed below. Each core area provides a variety of courses for student choice. Students must take a minimum of 32 credits in core electives for the associate degree and an additional minimum of 28 credits for the bachelor's degree. Individual majors have specific requirements and may require more than the minimum number of liberal arts credits or may specify certain courses in a particular core area. All liberal arts core elective courses are 4 credits. Please refer to the curriculum of the major for specific requirements.

## Liberal Arts Core Electives (AS)

### Associate Degree Core Elective Areas <sup>1</sup>

To obtain a minimum of 8 courses (32 credits), students may choose from the following course selections:

- 2 courses (minimum) from the Communications Core
- 2 courses (minimum) from the Math/Science Core
- 1-2 courses from the Humanities Core or
  - 1 course from the Humanities Core and/or
  - 1 course from the Arts/Foreign Language Core
- 2 courses from the Social Sciences Core

<sup>1</sup> Subject to Change

### Associate Degree Courses by Core <sup>1</sup>

#### Communications Core Electives (Minimum 8 Credits)

Code	Title	Quarter Credit Hours
EN 100	Introduction to College Writing	4
EN 106	Service Industry Communications	5
EN 110	Health Science Communications	4
EN 200	Workplace Communications	4
EN 211	Oral Communications	4

#### Math/Science Core Electives (Minimum 8 Credits)

Code	Title	Quarter Credit Hours
CHM 101	Life Science Chemistry	4
CHM 300	Chemistry I and Lab	4
MA 100	Introduction to College Math with Lab	4
MA 105	Basic College Math with Lab	5
MA 109	Math for Life Science	4
MA 110	Introduction to College Math	4
MA 121	Business Math	4
MA 125	Technical Math I	4
MA 200	Applied Math for Business	4
MA 210	Technical Math II	4
PHY 126	Applied Physics & Lab	4
PHY 200	Physics I & Lab	4

PHY 300	Physics II & Lab	4
SCI 110	Environmental Science	4

#### Arts/Foreign Language Core Electives (Maximum of 4 Credits in Place of a Humanities Course)

Code	Title	Quarter Credit Hours
AR 203	Introduction to Drawing	4
AR 206	3D Sculpture: An Adventure in the Third Dimension	4
AR 207	Introduction to Applied Music	4
AR 209	The Art of Collage	4
FL 200	Introduction to Japanese	4
FL 201	Introduction to Spanish	4
FL 202	Spanish for Healthcare Workers	4

#### Humanities Core Electives (Minimum 4 Credits)

Code	Title	Quarter Credit Hours
HU 208	Rap/Rock and Poetry	4
HU 211	Introduction to Film	4
HU 215	Popular Culture	4
HU 216	Music and the Media	4
HU 240	Graphic Design in the 20th Century	4
HU 242	The Automobile and American Culture	4
HU 244	Science Fiction	4
HU 289	Racing Through Film	4
HU 291	Critical Thinking and Chess	4

#### Social Sciences Core Electives (Minimum 4 Credits)

Code	Title	Quarter Credit Hours
SS 140	Criminal Investigations	4
SS 170	Life-Span Development	4
SS 201	American Government in Action	4
SS 204	Juvenile Justice System in America	4
SS 210	Personal Financial Planning for Wealth and Success	4
SS 211	Principles of Economics	4
SS 222	Mindful Living	4
SS 236	Small Business and the Law	4
SS 260	American History	4
SS 261	A History of Video Games and Esports	4
SS 262	Contemporary History	4
SS 263	Architectural History	4
SS 264	The Holocaust	4
SS 271	Introduction to Psychology	4
SS 272	Psychology of Healthcare	4
SS 273	Psychology of Happiness	4
SS 274	Human Relations in the Workplace	4
SS 291	Social Problems	4

SS 292	Internet and Society	4
SS 293	Crime and Deviance	4

<sup>1</sup> Subject to Change

## Liberal Arts Core Electives (BS)

Please refer to the curriculum for each program for specific requirements as some curricula require more than the minimum number of liberal arts core courses. Only the associate-level core electives in the list below can be used to satisfy bachelor's degree core requirements.

### Bachelor's Degree Core Elective Areas <sup>1</sup>

To obtain a minimum of 7 courses (28 credits), students may choose from the following course selections:

- 2 courses from the Communications Core
- 2 courses from the Math/Science Core
- 1 course from the Humanities Core
- 1 course from the Social Sciences Core
- 1 course from either the Humanities Core
  - or from the Arts/Foreign Language Core
- or from the Social Sciences Core

<sup>1</sup> Subject to Change

### Bachelor's Degree Courses by Core <sup>1</sup>

#### Communications Core Electives (Minimum 8 Credits)

Code	Title	Quarter Credit Hours
EN 322	Argumentative Research Writing	4
EN 331	Research Writing in the Social Sciences	4
EN 421	Technical Communications	4
EN 422	Advanced Writing in the Health Sciences	4

#### Math/Science Core Electives (Minimum 8 Credits)

Code	Title	Quarter Credit Hours
BIO 374	Pathophysiology: A Clinical Approach	4
CHM 300	Chemistry I and Lab	4
CHM 400	Chemistry II	4
MA 300	Statistics	4
MA 301	Math for Management Studies	4
MA 310	Calculus I	4
MA 315	Math for Game Developers	4
MA 320	Calculus II	4
MA 330	Engineering Calculus I	6
MA 340	Engineering Calculus II	6
MA 350	Engineering Calculus III	6
MA 355	Discrete Math	4
MA 356	Linear Algebra	4
MA 360	Advanced Engineering Math	6
MA 370	Eng. Probability & Statistics	4
PHY 300	Physics II & Lab	4

PHY 340	Engineering Physics II w Lab	6
SCI 300	Public Health by Numbers	4
SCI 304	Development of Western Science	4
SCI 307	Understanding Science Through Photography	4
SCI 320	Understanding Flight	4
SCI 330	Our History and Future in Space	4
SCI 350	Introduction to Genetics and Evolution	4
SCI 360	Wellness for Life	4

#### Arts/Foreign Language Core Electives (Maximum of 4 Credits in Place of a Humanities Course)

Course	Title	Quarter Credit Hours
AR 312	The Art of Hands-On Animation	4
FL 200	Introduction to Japanese	4
FL 201	Introduction to Spanish	4
FL 202	Spanish for Healthcare Workers	4

#### Humanities Core Electives (Minimum 4 Credits)

Course	Title	Quarter Credit Hours
HU 311	The Art of Film	4
HU 315	Cultural Competence in the Workplace	4
HU 320	Multicultural Voices	4
HU 321	Representations of Gender	4
HU 331	Ethics and Technology	4
HU 334	Engineering Ethics	2
HU 341	World Religions	4
HU 350	Literature and Health	4
HU 352	History of Rock and Roll	4
HU 432	History of Western Art	4
HU 433	Encountering 20th Century Art	4
HU 441	World Literature	4

#### Social Sciences Core Electives (Minimum 4 Credits)

Course	Title	Quarter Credit Hours
SCI 360	Wellness for Life	4
SS 303	Communication in the Global Workplace	4
SS 304	Digital Media & The Law	4
SS 311	The Global Economy	4
SS 320	Health Equity and Diversity	4
SS 330	Contemporary Social Issues	4
SS 350	Everything is a Negotiation	4
SS 370	Marriage and the Family	4
SS 371	Forensic Psychology	4
SS 470	Applied Research Statistics	4
SS 471	Developmental Psychology	4

## Humanities and Social Sciences

### General Description

The Humanities and Social Sciences Department is an integral part of the curriculum in every major offered at NEIT. There are three primary core disciplines within the department: Communications, Humanities and Social Sciences.

The Communications Core focuses on writing, oral communication, and critical thinking skills, in the Humanities Core, students may choose from electives relating to film, philosophy, literature, music and the arts. Social Sciences Core offerings include psychology, sociology, history and economics. Underlying both the Humanities and Social Sciences courses is a concern with issues of human values, and with social problems and responsibilities of our global community.

Specific degree requirements in Communications, the Humanities, and Social Sciences can be found in the descriptions of curriculum requirements.

### Program Objectives (revised 2/14/24)

As described above, the HU/SS program goals indicate that all graduates from NEIT who experience the general education core will:

1. Demonstrate proficiency in various modes of communication including written, spoken, and visual.
2. Demonstrate proficiency in active reading, information literacy, and research skills.
3. Demonstrate proficiency in critical thinking, problem-solving, logical reasoning, and ethical reasoning.
4. Demonstrate knowledge and appreciation of the arts, human values, cultures, and societies that define the human experience.
5. Develop self-knowledge, interpersonal skills, and effective teamwork.
6. Demonstrate multicultural collaboration, social responsibility, and civic participation.
7. Demonstrate knowledge of social, political, economic, and historical perspectives.

## Mathematics and Sciences

### General Description

The Mathematics and Sciences Department has no majors but plays a crucial role for all of the technical majors in the university, giving students the background knowledge they need to better understand their technologies.

The mathematics portion of the curriculum includes courses ranging from basic algebra to applied calculus and statistics. Science courses are offered in chemistry, physics, and environmental science.

Courses in the Mathematics and Sciences Department have two principal objectives. The first is to provide students with the mathematical tools necessary to function successfully in their technical fields. Math/science courses required in each technology have been chosen for their relevance to that particular field.

The second objective is to help instill in students a progressive, linear thought processing capability to help with problem solving in situations for which they have not been specifically trained. The study of science provides an understanding of the physical and natural laws governing technical applications, while mathematics offers a problem-solving

approach to thinking. These skills are crucial for success in a constantly changing technical environment.

Complete details about curriculum requirements in mathematics and science can be found in the descriptions of curriculum requirements.

### Program Outcomes

1. Provide students with the mathematical tools necessary to function successfully in their technical fields.
2. Demonstrate ample knowledge to deal with mathematical problems encountered in entry level positions.
3. Demonstrate mathematical background required for technical education.
4. Compare solutions with estimates for reasonableness.
5. Utilize hands-on experiments as applications of concepts.
6. Experience cooperative learning to demonstrate applications of concepts.
7. Develop problem solving abilities and linear thought processing capability sufficiently to handle more advanced questions.
8. Work in laboratory groups and document experimental results.
9. Develop a deeper mathematical background to continue their technical education.