

## **General Description**

The Bachelor of Science Degree in Software Engineering builds upon the knowledge of the associate degree to give students a broader exposure to programming languages, especially object-oriented languages, and deeper experience in database, web and mobile design, development and implementation.

A key feature of this program is a senior project and the choice between additional coursework or a cooperative learning experience in the final two terms. In the senior project, each student works with a faculty member to develop and present a project that focuses in depth on a particular topic and allows students to bring together knowledge gained throughout the program.

The cooperative learning experience based on industry demand and with the approval of the IT Department Chair, may be available during the final two terms of the program. These experiences, which may be paid or unpaid, allow students to receive college credit and to work off campus in an organization where they will practice and enhance their technical skills. Typically, and when available, students will work in the same organization for the final two terms of the bachelor's degree program.

Upon completion of this program, graduates will be prepared to apply for positions such as system developer, analyst, programmer, database specialist, software engineer, web programmer, planner or developer. Students may also choose to continue into the NEIT Master of Science in Information Technology degree program.

## **Program Mission, Goals and Outcomes**

### **Bachelor – Software Engineering**

#### **Program Mission:**

The mission of the Bachelor of Science Degree program in Information Technology Software Engineering is to provide students with an opportunity to further their studies in Software Engineering. Graduates of this program are ready to start a career in Software Engineering and are also prepared for lifelong learning.

#### **Program Goals:**

1. Provide various learning experiences with an emphasis on self-learning.
2. Provide students with an opportunity to solve software engineering problems in the areas of server-side web development, database driven web applications, and using advanced programming techniques.
3. Present students with an in-depth look at software design patterns, component-based designs and software architectures.
4. Provide students with opportunities to develop their critical thinking skills and social skills as it applies to software development and programming principles.
5. Provide an environment that encourages self-learning and the continuation of each student's education beyond graduation with the goal of furthering each student's ability to adapt to and incorporate new concepts, ideas, and evolving technologies.

#### **Program Outcomes:**

Students will:

1. Design and implement software solutions based on sound software engineering principles in the areas of mobile, cloud and web development.
2. Develop a software engineering application and be responsible for its management, design and implementation.
3. Analyze and effectively visualize large amounts of data using current data science methodologies.
4. Utilize current software engineering processes to manage software for a variety of different platforms.
5. Demonstrate effective oral and written communications with supervisors, team members and clients. In particular, they should exhibit lucid, clear and concise technical and professional communication as well as be able to communicate complex technical ideas in layman's terms to non-technically trained people.
6. Respect different cultures, customs, and professional technical methods and procedures inherent in an industry with many differences on locality or region.

After T6, depending on course offerings, you will take Sequence A or Sequence B. Evening students who start T7 in the Spring term, take Sequence A. Evening students who start T7 in the Fall term, take Sequence B.

## Sequence A

For evening students who start T7 in the Spring term.

Term VII					
Course No.		Course Title	C	L	T
IT	378	Database Management	2	4	4
SE	385	Java	2	4	4
SE	417	Software Security	2	2	3
<b>CHOOSE ONE</b>					
EN	322	Argumentative Research Writing (COM Core, preferred)	4	0	4
EN	331	Research Writing in the Social Sciences (COM Core)	4	0	4
			<b>10</b>	<b>10</b>	<b>15</b>

Term VIII					
Course No.		Course Title	C	L	T
SE	391	Android Programming	2	4	4
SE	394	Algorithms in Software Engineering	2	4	4
SE	402	Design Patterns	2	4	4
<i>ELECTIVE</i>		300-400 Level Humanities or 200 Level Foreign Language Core	4	0	4
			<b>10</b>	<b>12</b>	<b>16</b>

Term IX					
Course No.		Course Title	C	L	T
IT	374	IT Project Management	3	0	3
SE	398	Advanced SQL	2	2	3
SE	426	Web Services	3	2	4
MA	210	Technical Math II (MA/SCI Core)	4	0	4
EN	421	Technical Communications (COM Core)	4	0	4
			<b>16</b>	<b>4</b>	<b>18</b>

Term X					
Course No.		Course Title	C	L	T
SE	373	Advanced Open Source Web Development	2	4	4
SE	407	Advanced .NET	2	4	4
SE	409	iOS Programming	2	4	4
MA	300	Statistics (MA/SCI Core)	4	0	4
			<b>10</b>	<b>12</b>	<b>16</b>

Term XI					
Course No.		Course Title	C	L	T
SE	414	Introduction to Senior Project	3	0	3
<i>ELECTIVE</i>		<i>300-400 Level Social Sciences Core</i>	4	0	4
<b>Choose One Option</b>					
SE	377	Cloud-Based Application Development	2	4	4
SE	419	Big Data	2	2	3
<b>-or-</b>					
IT	415	Cooperative Learning I	0	18	6
			<b>7/11</b>	<b>6/18</b>	<b>13/14</b>

Term XII					
Course No.		Course Title	C	L	T
SE	425	Senior Project	0	6	3
<i>ELECTIVE</i>		<i>300-400 Level Humanities or 200 Level Foreign Language Core</i>	4	0	4
<b>Choose One Option</b>					
SE	423	Operating Systems	2	4	4
SE	428	Emerging Technologies in Software Engineering and Web Development	3	0	3
<b>-or-</b>					
IT	425	Cooperative Learning II	0	21	7
			<b>4/9</b>	<b>10/27</b>	<b>14</b>
<i>Total Quarter Credit Hours = 92/93</i>					

\*The cooperative learning experience based on industry demand and with the approval of the IT Department Chair, may be available during the final two terms of the program.

**Legend**

C = Number of lecture hours per week

L = Number of laboratory hours per week

T = Total Quarter Credit Hours where each lecture hour per week is one credit, every 2-4 laboratory hours are one credit depending on the expected amount of pre- or post-lab work.

*PLEASE NOTE: All liberal arts core courses are listed in italics.*

All bachelor's degree students are required to take 28 credits of liberal arts and math/science courses as selected from the liberal arts core. See the course descriptions section of this catalog for a list of the core area courses.

*Check with your advisor with any questions.*

Note: If you had MA 210 in your AS program, you will need to take a MA/SCI Core Elective in its place.

Subject to change.

## Sequence B

For evening students who start T7 in the Fall term.

Term VII					
Course No.		Course Title	C	L	T
IT	374	IT Project Management	3	0	3
SE	398	Advanced SQL	2	2	3
SE	426	Web Services	3	2	4
MA	210	Technical Math II (MA/SCI Core)	4	0	4
CHOOSE ONE					
EN	322	Argumentative Research Writing (COM Core, preferred)	4	0	4
EN	331	Research Writing in the Social Sciences (COM Core)	4	0	4
			<b>16</b>	<b>4</b>	<b>18</b>

Term VIII					
Course No.		Course Title	C	L	T
SE	373	Advanced Open Source Web Development	2	4	4
SE	407	Advanced .NET	2	4	4
SE	409	iOS Programming	2	4	4
ELECTIVE		300-400 Level Humanities (or Arts/Foreign Language) Core	4	0	4
			<b>10</b>	<b>12</b>	<b>16</b>

Term IX					
Course No.		Course Title	C	L	T
IT	378	Database Management	2	4	4
SE	385	Java	2	4	4
SE	417	Software Security	2	2	3
EN	421	Technical Communications (COM Core)	4	0	4
			<b>10</b>	<b>10</b>	<b>15</b>

Term X					
Course No.		Course Title	C	L	T
SE	391	Android Programming	2	4	4
SE	394	Algorithms in Software Engineering	2	4	4
SE	402	Design Patterns	2	4	4
MA	300	Statistics (MA/SCI Core)	4	0	4
			<b>10</b>	<b>12</b>	<b>16</b>

Term XI					
Course No.		Course Title	C	L	T
SE	414	Introduction to Senior Project	3	0	3
<i>ELECTIVE</i>		<i>300-400 Level Social Sciences Core</i>	4	0	4
<b>Choose One Option</b>					
SE	377	Cloud-Based Application Development	2	4	4
SE	419	Big Data	2	2	3
<b>-or-</b>					
IT	415	Cooperative Learning I	0	18	6
			<b>7/11</b>	<b>6/18</b>	<b>13/14</b>

Term XII					
Course No.		Course Title	C	L	T
SE	425	Senior Project	0	6	3
<i>ELECTIVE</i>		<i>300-400 Level Humanities (or Arts/Foreign Language) Core</i>	4	0	4
<b>Choose One Option</b>					
SE	423	Operating Systems	2	4	4
SE	428	Emerging Technologies in Software Engineering and Web Development	3	0	3
<b>-or-</b>					
IT	425	Cooperative Learning II	0	21	7
			<b>4/9</b>	<b>10/27</b>	<b>14</b>
<i>Total Quarter Credit Hours = 92/93</i>					

\*The cooperative learning experience based on industry demand and with the approval of the IT Department Chair, may be available during the final two terms of the program.

### Legend

C = Number of lecture hours per week

L = Number of laboratory hours per week

T = Total Quarter Credit Hours where each lecture hour per week is one credit, every 2-4 laboratory hours are one credit depending on the expected amount of pre- or post-lab work.

*PLEASE NOTE: All liberal arts core courses are listed in italics.*

All bachelor's degree students are required to take 28 credits of liberal arts and math/science courses as selected from the liberal arts core. See the course descriptions section of this catalog for a list of the core area courses.

Check with your advisor with any questions.

Note: If you had MA 210 in your AS program, you will need to take a MA/SCI Core Elective in its place.

Subject to change.

### **Liberal Arts Core Electives**

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.

### **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**

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

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

EN 322 Argumentative Research Writing  
EN 331 Research Writing in the Social Sciences  
EN 421 Technical Communications  
EN 422 Writing in the Health Sciences  
SS 303 Communication in the Global Workplace

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

CHM 300 Chemistry I and Lab  
CHM 400 Chemistry II and Lab  
MA 300 Statistics  
MA 301 Math for Management Studies  
MA 310 Calculus I  
MA 315 Math for Game Developers  
MA 320 Calculus II  
PHY 300 Physics II & Lab  
SCI 304 Development of Western Science  
SCI 307 Understanding Science Through Photography  
SCI 310 Perception of Green Living  
SCI 320 Understanding Flight  
SCI 330 Our History and Future in Space  
SCI 333 Sports Performance Metrics  
SCI 340 Introduction to Environmental Health  
SCI 350 Introduction to Genetics and Evolution  
SCI 351 Sustainable Technology

SCI 360 Wellness for Life

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

JP 201 Introduction to Japanese  
SP 201 Introduction to Spanish  
SP 203 Spanish for Healthcare Workers

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

HU 311 The Art of Film  
HU 313 World War II in Film  
HU 315 Cultural Competence in the Workplace  
HU 320 Multicultural Voices  
HU 321 Representations of Gender  
HU 331 Ethics and Technology  
HU 341 World Religions  
HU 350 Literature and Health  
HU 352 History of Rock and Roll  
HU 432 History of Western Art  
HU 433 Encountering 20<sup>th</sup> Century Art  
HU 441 World Literature

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

EC 301 The Global Economy  
PS 330 Marriage and the Family  
PS 350 Forensic Psychology  
PS 410 Applied Research Statistics  
SCI 360 Wellness for Life  
SO 461 Language and Society  
SS 302 The United States Legal System  
SS 303 Communication in the Global Workplace  
SS 304 Digital Media & the Law  
SS 330 Contemporary Social Issues  
SS 350 Everything is a Negotiation

1. Subject to Change



## Sequence A – Spring Evening Starts Degree Progress Checklist

Check off each completed course.

### Program Requirements

T7	IT	378	_____
	SE	385	_____
	SE	417	_____
T8	SE	391	_____
	SE	394	_____
	SE	402	_____
T9	IT	374	_____
	SE	398	_____
	SE	426	_____
T10	SE	373	_____
	SE	407	_____
	SE	409	_____
T11	SE	414	_____
	SE	377	_____
	SE	419	_____
<b>OR</b>			
	IT	415	_____
	SE	414	_____
T12	SE	423	_____
	SE	425	_____
	SE	428	_____
<b>OR</b>			
	IT	425	_____
	SE	425	_____

### Liberal Arts Core Requirements

#### 7 Required Courses

Each course = 4 credits (total of 28 credits)

<b>Communications Core</b>			
#1	EN 322 (pref.) or EN 331	T7	_____
#2	EN 421	T9	_____
<b>Math/Science Core</b>			
#3	MA 210	T9	_____
#4	MA 300	T10	_____
<b>Humanities Core</b>			
#5	300-400 level HU elective	T8, 10, 11, or 12	_____
<b>Social Sciences Core</b>			
#6	300-400 level SS elective	T8, 10, 11, or 12	_____
<b>Arts/Foreign Language*, Humanities, or Social Sciences Core</b>			
#7	300-400 level HU, SS or 200 level AR/FL elective	T8, 10, 11, or 12	_____

\*Only foreign language courses are allowed as AR/FL electives.

Subject to change.

Please see your advisor for any questions.

Students are advised to take courses in the order and in the term in which they appear on this checklist. Any deviation may result in an extended time required to complete your degree as well as additional tuition and fees. Please contact your Student Advisor prior to making any changes to the course sequence.

## Sequence B – Spring Evening Starts Degree Progress Checklist

Check off each completed course.

### Program Requirements

T7	IT	374	_____
	SE	398	_____
	SE	426	_____
T8	SE	373	_____
	SE	407	_____
	SE	409	_____
T9	IT	378	_____
	SE	385	_____
	SE	417	_____
T10	SE	391	_____
	SE	394	_____
	SE	402	_____
T11	SE	414	_____
	SE	377	_____
	SE	419	_____
<b>OR</b>			
	IT	415	_____
	SE	414	_____
T12	SE	423	_____
	SE	425	_____
	SE	429	_____
<b>OR</b>			
	IT	425	_____
	SE	425	_____

### Liberal Arts Core Requirements

#### 7 Required Courses

Each course = 4 credits (total of 28 credits)

<b>Communications Core</b>			
#1	EN 322 (pref.) or EN 331	T7	_____
#2	EN 421	T9	_____
<b>Math/Science Core</b>			
#3	MA 210	T7	_____
#4	MA 300	T10	_____
<b>Humanities Core</b>			
#5	300-400 level HU elective	T8, 10, 11, or 12	_____
<b>Social Sciences Core</b>			
#6	300-400 level SS elective	T8, 10, 11, or 12	_____
<b>Arts/Foreign Language*, Humanities, or Social Sciences Core</b>			
#7	300-400 level HU, SS or 200 level AR/FL elective	T8, 10, 11, or 12	_____

\*Only foreign language courses are allowed as AR/FL electives.

Subject to change.

Please see your advisor for any questions.

Students are advised to take courses in the order and in the term in which they appear on this checklist. Any deviation may result in an extended time required to complete your degree as well as additional tuition and fees. Please contact your Student Advisor prior to making any changes to the course sequence.

## **Course Descriptions**

### **IT 374 IT Project Management**

*3 Class Hours 3 Quarter Credit Hours*

Students will learn what is involved in becoming a successful project manager. The course covers the foundations of IT project management: project integration, scope, time, cost, quality, human resources, communications, risk and procurement and will include case studies of multiple projects, both successful and failed.

### **IT 378 Database Management**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

Students will learn to administer a major DBMS such as Oracle or SQL Server. At the end of the course, students will be able to assume the role of a DBA in performing tasks such as installation of the DBMS, user management, backing up and restoring databases, replication, maintaining high availability, performance monitoring, automating administrative tasks and database security.

### **IT 415 Cooperative Learning I**

*18 Field Hours 6 Quarter Credit Hours*

*Prerequisite: Requires Department Chair Approval*

Students will use the knowledge gained through previous coursework in their program with mostly paid, planned and supervised work experiences in the public or private sector. The course allows students to enhance the practical skills necessary for success by being exposed to the reality of the world of work beyond the boundaries of the campus, enhancing their self-confidence and career direction.

### **IT 425 Cooperative Learning II**

*21 Field Hours 7 Quarter Credit Hours*

*Prerequisites: Requires Department Chair approval and IT 415*

This course allows students to continue and expand on the experiences started in the IT 415 course. Here, hopefully in the same public or private sector organization, students increase the scope and depth of their real-world technical experiences.

### **SE 373 Advanced Open Source Web Development**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisites: SE 251, SE 266*

This course builds on the student's understanding of web applications. This course explores the MEAN stack: Mongo, Express, Angular and Node. Students will create web applications that use Mongo for the data layer, Express and Node for the server-side logic, and AngularJS for the frontends. This course also covers automation using a task-based runner such as Gulp, as well as routing, testing and deploying web applications to a number of different cloud platforms.

### **SE 377 Cloud-Based Application Development**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisites: SE 373, SE 385*

Students will be introduced to cloud-based development. Key areas include storage, security, compute and messaging. Students will learn how to develop applications using serverless technologies. This hands-on course will enable software engineers to develop applications on cloud platforms and compare and contrast services provided by industry-leading cloud service providers.

**SE 385 Java**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 245*

Students will be introduced to the concepts of object-oriented programming using Java. In addition to a further development of programming constructs and concepts, students will be exposed to programming methods unique to object-oriented languages such as classes, inheritance and polymorphism.

**SE 391 Android Programming**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 385*

This course will teach the fundamentals of Android programming. Throughout the course, students will be using Java to create applications demonstrating various aspects of the Android programming environment. Multiple topics will be addressed to prepare students to create useful applications.

**SE 394 Algorithms in Software Engineering**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 385*

This course includes an overview of the algorithms and data structures used in software applications today. Topics include but are not limited to linked lists, queues, stacks and trees. Students will learn to analyze the complexity of different algorithms and gain an appreciation for efficient computing.

**SE 398 Advanced SQL**

*2 Class Hours 2 Lab Hours 3 Quarter Credit Hours*

*Prerequisite: SE 133*

Students will study advanced topics in SQL, including views, triggers, indexes and stored procedures. The course emphasizes SQL dos and don'ts for these topics and students are introduced to a multitude of database standards: Military, ANSI, ISO, and Industry.

**SE 402 Design Patterns**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: GDS 252 or SE 385*

In software engineering, a design pattern is a general repeatable solution to a commonly-occurring problem in software design. Design patterns can speed up the development process by providing tested, proven development paradigms. This course will introduce students to this state-of-the-art software development methodology.

**SE 407 Advanced .NET**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 256*

Students will use the .NET framework to develop highly interactive and robust web applications in teams of two or three students. Robustness of the applications is ensured by utilizing database layers, component-based development and proper use of advanced error handling techniques.

**SE 409 iOS Programming**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 245*

Students will learn how to develop applications for mobile devices such as cell phones, handhelds (PDAs) and tablets. Students will use languages such as C#, Obj-C, C++ or Java to develop applications that will run on a mobile device. Topics include memory management, user interfaces, storage cards, sounds and graphics.

**SE 414 Introduction to Senior Project**

*3 Class Hours 3 Quarter Credit Hours*

*Prerequisites: SE 398, SE 407*

The objective of the senior project is to integrate skills learned during the students' time at New England Tech. Within a team of at least 2 and no more than 4 students, a real-world application is developed over a period of 20 weeks. The Introduction to the Senior Project spans the first 10 weeks of this period and in this course, a proposal, a functional specification and a database design is created and implemented. In addition, Microsoft Project is used to develop and create a Gantt Chart that specifies in detail how the project will be implemented during the last 10 weeks of the senior project. The final project will be presented to the faculty and is evaluated by three faculty members.

**SE 417 Software Security**

*2 Class Hours 2 Lab Hours 3 Quarter Credit Hours*

This course studies known problems in the field of software security. The focus will be on awareness of security risks in software development and students will learn methods to avoid these issues when they write their own applications. Topics include unvalidated input, buffer overflows, injection flaws, insecure storage and improper error handling.

**SE 419 Big Data**

*2 Class Hours 2 Lab Hours 3 Quarter Credit Hours*

*Prerequisite: SE 398*

This course will introduce students to data warehousing and mining concepts by focusing on big data lakes, storage strategies, data queries, data operations and predictive analytics. This course will examine storage solutions and architectures as well as trending technologies necessary to enable organizations to maximize their investment within their business intelligence departments. Students will compare and contrast product offerings from major vendors as well as analyze case studies of organizations using these technologies to drive their business. Students will also gain experience with the latest tools and techniques through a series of hands-on exercises.

**SE 423 Operating Systems**

*2 Class Hours 4 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 385*

This course covers basic operating system concepts and relates them to important tasks and activities in software development. The operating system is a resource manager and its design must be intimately tied to the hardware and software resources that it manages. These resources include processors, memory, secondary storage (such as hard disks), other I/O devices, processes, threads, files, databases and more. This course addresses interactions with the operating system from the perspective of a software engineer to utilize these resources through process management and concurrency, memory management strategies and file system management.

**SE 425 Senior Project**

*6 Lab Hours 3 Quarter Credit Hours*

*Prerequisite: SE 414*

This course provides an opportunity for each student to develop a substantial project in an area of interest as proposed in SE 414. The resulting project, in conjunction with a faculty member, can include work conducted with companies in the area. The culmination of this course is a major presentation of project results.



NEW ENGLAND TECH

**Information Technology  
Software Engineering (Evening)  
Bachelor of Science Degree**  
*(For students entering their program  
October 2018 – 201910 or later)*

**SE 426 Web Services**

*3 Class Hours 2 Lab Hours 4 Quarter Credit Hours*

*Prerequisite: SE 256*

Students will learn how to design and build web services using the .NET framework. The course covers an introduction to web services as well as topics such as XPath, Web Services Description Language (WSDL), JSON and Windows Communication Foundation.

**SE 428 Emerging Technologies in Software Engineering and Web Development**

*3 Class Hours 3 Quarter Credit Hours*

This course is a discussion of emerging and future technologies that are likely to impact the industry. Students will study a variety of emerging technologies, write a paper on a topic of interest and present this paper to their peers.

**Liberal Arts, Math and Science Courses  
Bachelor's Degree**

**Community Enrichment (Social Science Core)**

**CE 301 Community Enrichment**

*1 Quarter Credit Hour*

This online course is offered through the Feinstein Enriching America Program. Weekly assignments include topics such as B Corporations, civic and social responsibility, and Non-Governmental Organizations. A 15-hour community enrichment project is also required. Community engagement six months prior to taking the course may be accepted with proper documentation. Current or prior military service and concurrent clinical experiences are accepted in lieu of the community enrichment project. After successful completion of the course, students are eligible to apply for a Feinstein Scholarship, which is awarded each term.

**Chemistry (Math/Science Core)**

**CHM 300 Chemistry I and Lab**

*3 Class Hours 2 Lab Hours 4 Quarter Credit Hours*

*Prerequisites: MA 125*

Topics covered include atomic structure, the periodic law, and nature of the chemical bond, chemical reactivity, stoichiometry, and acid base reactions.

**CHM 400 Chemistry II and Lab**

*3 Class Hours 2 Lab Hours 4 Quarter Credit Hours*

*Prerequisites: CHM 101 or CHM 300 and MA 125*

This course focuses on chemical reactions and related concepts. Topics include chemical bonds, solution chemistry, acids and bases, chemical equilibria, kinetics, thermodynamics and descriptive chemistry. Lecture and lab.

**Economics (Social Sciences Core)**

**EC 301 The Global Economy**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 322 or EN 331 or its equivalent*

This course is an exploration of the increasingly complex global economy with particular attention to the competing political economies of Europe, the United States, and the Pacific Rim.

**English (Communications Core)**

**EN 322 Argumentative Research Writing**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

In EN 322, "Argumentative Research Writing," students engage in critical thinking, credible research, and persuasive writing. Beginning with the idea that academic and professional arguments result in a collegial exchange of ideas to pursue knowledge, this course prompts students to examine various viewpoints of a debate. The central goal for students is to produce an argument essay based on meaningful dialogue and thoughtful reflection. Students are introduced to different models of argument, persuasive appeals, logical reasoning, and visual rhetoric. The course breaks the writing process down into a series of comprehensible habits of mind and investigative skills: inquiry, active reading, critical analysis, research, communication, and documentation of sources.

**EN 331 Research Writing in the Social Sciences**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

In this advanced research writing course, students will read, research and evaluate social science articles and other materials in order to understand their claims, credibility and conclusions. They will conduct an extensive literature review on a topic of their choice resulting in an APA-formatted research paper including an abstract and reference section. Utilizing writing workshops, students will write coherent and unified texts, including effective introductions, clear thesis statements, supporting details, transitions, and strong conclusions.

**EN 421 Technical Communications**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 322 or EN 331*

EN 421 is an advanced writing course designed to help students achieve mastery in presenting complex content. This course encompasses writing for a broad range of technical and general audiences in virtually all media. Students will reinforce their ability to analyze audience, purpose, and content. Additionally, students will learn how to plan and organize content to meet goals, use graphics effectively, and deliver an oral presentation.

**EN 422 Writing in the Health Sciences**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 322 or EN 331*

EN 422 is an advanced writing course focusing on written communication common in the health science professions. To better prepare students for the challenges of successful professional communication, Writing in the Health Sciences targets the three main audiences of the health provider: other professionals, patients and clients, and the public. For each of these audiences, students will master writing techniques and practices to ensure that their message is being understood and that their professional voices are being heard at all levels of the health care organization.

**Humanities (Humanities Core)**

**HU 311 The Art of Film**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course is a survey of films that have significantly contributed to the development of film as an art and as an industry. Topics of discussion include filmmaking techniques and theories of criticism.

**HU 313 World War II in Film**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

The Second World War has remained a great thematic source for today's filmmakers. This course will examine films made about World War II. After watching each film, students will analyze the way the films address such themes as patriotism, leadership, moral responsibility, heroism, cowardice, survival, comradeship, and readjustment to peacetime conditions. The films will also be analyzed through discussion, reading, research and writing, in terms of the contribution of these films in developing a better understanding of current military conflicts.



**HU 315 Cultural Competence in the Workplace**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

Students of all disciplines must be ready to engage in a globally connected world requiring an understanding of cultural norms, differences, and beliefs which effect the workplace. This course will examine the students' understanding of what culture is and what each citizen of a global world will need to provide knowledge, skills, and an attitude inherent in a culturally responsive manner.

**HU 320 Multicultural Voices**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course will examine literary works that cross the boundaries of national lines and cultures and reflect the experiences that occur in the diverse United States. How do we learn to understand our own and different cultural identities and practices through interactions with others? What role does the experience of immigrants play in how we decide what is American culture? The purpose of this course is for all of us to gain an understanding and appreciation of culture, cultural values, and perspectives by reading various works, in different genres, written by authors of a variety of racial, ethnic, and national backgrounds.

**HU 321 Representations of Gender**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

HU 321 is an advanced course that analyzes portrayals of gender in both written and visual text including literature, film, and television to find patterns of meaning that illuminate human nature and society. Additionally, it will explore how gender intersects with other social constructs like race, ethnicity, and sexual orientation.

**HU 331 Ethics and Technology**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course will explore the basic concepts of ethical theories and ethical values and apply these to technologically-based dilemmas through case studies. These dilemmas will be considered in terms of their implications both for individuals, and for professionals involved in creating and maintaining technology, and mechanisms will be developed to guide ethical discussions and decision-making.

**HU 341 World Religions**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

In this course, students will examine religious practices surrounding life passages (birth, marriage, death), and the food, clothing, sacred calendars, sacred texts, and ethics of several major world religions.

**HU 350 Literature and Health**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100 or its equivalent*

Through the study of fiction and poetry, students broaden their understanding of two important perspectives in healthcare – that of patient and caregiver. With the ultimate goal of engendering empathy for both parties, this course requires students to read a variety of literary texts that address the social, cultural, psychological, familial, institutional, and professional dimensions of healthcare. Course requirements include close reading, lively class discussion, short oral presentations, original research, and thoughtful writing.

**HU 352 History of Rock and Roll**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course will trace the various musical forms and technological advances that have led to the American popular music of today. Particular emphasis will be given to blues and jazz and their influence on early rock and roll. In addition, a substantial portion of the course will be devoted to the technology that has led to today's sophisticated performance and recording techniques. Students will also experience some hands-on musical activities with instruments such as the guitar and keyboard that are vital components of today's music.

**HU 432 History of Western Art**

*4 Class Hours 4 Quarter Credit Hours*

This course offers students the opportunity to explore the visual arts throughout Western history. Students will develop knowledge of artists and artistic development, and increase their ability to critically appreciate a wide range of art across media, styles, and time periods. The course will emphasize painting, and will additionally examine sculpture, architecture and photography, as time permits.

**HU 433 Encountering 20th Century Art**

*4 Class Hours 4 Quarter Credit Hours*

Students will examine art produced in the 20th Century by exploring a variety of factors including: the differences in this art from what had come before; the role of the machine and technology in subject matter, technique and production; the major social movements and political events of the 20th Century and how they were represented in art; and the major movements in art in this century. Important works by major artists of this period will be studied, so that students can recognize these and similar works, and appreciate their place in popular culture. Students will learn to be comfortable with art and be able to "read" art for their own enjoyment. They will come to appreciate the notion that art, in the final analysis, is a creative expression of their world, their lives, what they see and feel and experience every day.

**HU 441 World Literature**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

As a result of globalization, we are interacting more often with people from other cultures. This course uses fiction, poetry, and drama from around the world to learn about other cultures.

**Japanese (Arts/Foreign Language Core)**

**JP 201 Introduction to Japanese**

*4 Class Hours 4 Quarter Credit Hours*

Students will be introduced to the basics of Japanese, (speaking, listening, reading, and writing) with an emphasis on comprehension and speaking. Vocabulary used in everyday communication in the workplace, school, and common social situations will be covered. Contemporary Japanese society will be addressed in class discussions and video presentations including, but not limited to art, education, film (in particular animé), food, literature, music, sports, and technology. Japanese technological invention and know-how, as well as the unique challenges of doing business with the Japanese will be studied. Japanese guest speakers will be invited to share their expertise and experiences.

**Mathematics (Math/Science Core)**

**MA 300 Statistics**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: MA 125 or MA 200 or MA 301*

This introductory course stresses the use of statistics as a management tool for decision-making. The focus is on descriptive statistics, communicating statistical data, concepts of probability distribution, estimation, and hypothesis testing.

**MA 301 Math for Management Studies**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: MA 100/110 or MA 105 or above*

MA 301 is designed to transition students from basic algebra to more advanced business applications. Specific topics include: percent increase and decrease problems; linear and quadratic functions with cost, revenue, profit, supply and demand function applications; descriptive statistics; exponential and logarithmic functions with exponential growth and decay applications; compound interest and annuities. There are video examples of how to do some problems in Excel as an introduction to that program.

**MA 310 Calculus I**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: MA 210*

Limits will be introduced, and the derivatives and integrals of algebraic functions will be studied at length. Applications include rectilinear motion, curve sketching, maxima and minima problems, related rates, and area under a curve.

**MA 315 Math for Game Developers**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: MA 310*

Students will study the essential math necessary to become a successful game developer. Topics include vectors, matrices, transformations, collision detection, random numbers, rendering techniques and optimizations.

**MA 320 Calculus II**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: MA 310*

This continuation of Calculus I begins with derivatives of transcendental functions and proceeds with their integration. Additional topics include integration by parts, partial fractions, and numerical methods. Applications of the integral to area, volume, motion, and work will be stressed.

**Physics Courses (Math/Science Core)**

**PHY 300 Physics II & Lab**

*3 Class Hours 2 Lab Hours 4 Quarter Credit Hours*

*Prerequisites: MA 125 and PHY 200 (or PHY 126)*

This is an algebraic approach to a second course in physics. The topics include: centripetal force, temperature, heat energy, mechanical waves, sound, electrostatics, and basic circuit elements. The laboratory component is designed to give students the opportunity to have hands-on experience with the fundamental concepts of physics studied in the theory portion of the course. Laboratory experiments will be performed to reinforce these concepts.

**Psychology (Social Science Core)**

**PS 330 Marriage and the Family**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100 or its equivalent*

This course is a review of psychological concepts relevant to understanding marital and family functioning. Topics will include mate selection, marital communication, intimacy, conflict resolution, transitioning to parenthood, managing crises, family violence, divorce, and balancing work, leisure and family.

**PS 350 Forensic Psychology**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course addresses the psychological issues of human behavior that surround law enforcement and the legal system. It supplements information provided by physical evidence forensics courses and offers hands-on practice by utilizing psychological techniques implemented in the field. It familiarizes students with new technologies and available databases used in investigations. The course goes beyond criminal profiling popular in today's media and explores the findings of psychological research behind such issues as eyewitness identification (memory retrieval) and interviewing (conformity and obedience). Forensic Psychology also covers newer areas of concern such as psychological assistance in all career aspects of policing from personnel selection to dealing with the demands of the job.

**PS 410 Applied Research Statistics**

*4 Class Hours 4 Quarter Credit Hours*

PS 410 is an intermediate-level course designed to develop in students an expertise in identifying statistical approaches to research problems. Students will examine statistics and the rationale behind them. They will comprehend and interpret statistical results as they apply to their programs. Students will master the APA style of writing by dissecting the results and discussion sections of journal articles in their programs and by writing those sections using statistics learned in the course.

**Science (Math/Science Core)**

**SCI 304 Development of Western Science**

*4 Class Hours 4 Quarter Credit Hours*

This course centers on the interaction of science, scientists, technology and society over the past five hundred years, primarily focusing on the development of Western science. The scientific method will be examined utilizing selected case studies. Underlying principles and methodologies of science will be illustrated by comparing and contrasting both the successes and failures of science. Factors affecting the acceptance and use of science and related technologies will be examined.

**SCI 307 Understanding Science Through Photography**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 322 or EN 331*

This course integrates photography and science. Students will demonstrate their understanding of science concepts through photography and written artifacts. A key to understanding concepts in science is the ability to recognize their applications in everyday use. Problem solving and evaluating discussion board postings are also part of this course. Science concepts such as motion and forces are combined with physical elements of photography such as shutter speed, focal length, and aperture. Students will design and complete a capstone project that focuses on their area of study as it relates to science. Students are expected to have basic knowledge of digital images and have the ability to upload photos. Cameras are not provided by NEIT.

**SCI 310 Perception of Green Living**

*4 Class Hours 4 Quarter Credit Hours*

This project-oriented course explores how our world views affect our perception of green living with the main focus on environmental economics. Students will engage in critical analysis of consumerism and the interaction and interdependence between our lifestyle (consumption rate) and environmental sustainability. Students will examine the shift in economic and environmental perceptions by comparing conventional economics with emerging plenitude economics. Students will apply the knowledge gained in this course to technology development strategy, career planning and personal reflection on sustainable living.

**SCI 320 Understanding Flight**

*4 Class Hours 4 Quarter Credit Hours*

This course explores a variety of real-world examples of objects moving through the air. While not an applied math course, the concepts that help understand the flight of objects are explored. Freefall, gliding, ballistics, and powered flight will be explained and studied. Both the historical development of manned flight as well as examples of flight in nature as exemplified by both birds and seeds will be investigated.

**SCI 330 Our History and Future in Space**

*4 Class Hours 4 Quarter Credit Hours*

A course investigating the history, current programs, and future of space exploration. Topics will focus on our solar system, the current search for water on Mars, and evidence of life on other planets and moons. Current events related to space exploration and Near-Earth Objects will be incorporated whenever possible. Weekly writing assignments pertaining to weekly reading assignments will be required.

**SCI 333 Sports Performance Metrics**

*4 Class Hours 4 Quarter Credit Hours*

This introductory course is intended for any student with an interest in physical fitness, exercise or wellbeing. The course will focus on the foundations of exercise testing and training while exploring the various elements of an individual's fitness profile including strength, flexibility, power, balance, speed, agility, aerobic capacity, body composition and anthropometrics. The course will also help explain how each of those fitness parameters relates to a student's ability to play a sport or participate in a hobby such as hiking, running or gardening. Finally, the course will explore various exercise program variables and designs to maintain and improve health and human performance.

**SCI 340 Introduction to Environmental Health**

*4 Class Hours 4 Quarter Credit Hours*

Environmental health is the study of the interactions between humankind and our environment. This course will explore health issues arising from exposure to environmental hazards which are the direct result of human activity – such as energy production, industry, and agribusiness. Within the framework of environmental health and sustainability, students will explore core principles of toxicology, epidemiology and risk assessment; and will apply these concepts to the analysis of emerging environmental health problems in a rapidly growing and increasingly industrialized world.

**SCI 350 Introduction to Genetics and Evolution**

*4 Class Hours 4 Quarter Credit Hours*

No prior coursework in the subject is assumed. This course begins by looking at cells and what they are. Concepts such as mitosis and meiosis will be explored. What a gene is, how it functions, and how it may be mutated will be covered. The basic principles of genetics, including patterns of inheritance (Mendelian genetics) will be studied. Additional topics include the genetic basis of genotype and phenotype, natural selection, evolution, and speciation. Students will explore recombinant DNA and genetic engineering (genetically modified foods and livestock) and the future of genetics.

### **SCI 351 Sustainable Technology**

4 Class Hours 4 Quarter Credit Hours

Prerequisite: EN 100

What do climate changes and carbon emissions have in common? The carbon cycle. In this course students will engage in critical analysis of science components of economic and environmental sustainability. Students will analyze case study scenarios from current events and other sources and propose comprehensive steps for sustainable technology development in the context of their subject specialty. Through various projects, student will apply the knowledge gained in this course to technology development strategy, career planning and personal reflection on sustainable living.

### **SCI 360 Wellness for Life**

4 Class Hours 4 Quarter Credit Hours

Core Fulfillment: Both Math/Science Core and Social Sciences Core

Lifestyle-related diseases are at epidemic proportions in this country. There is scientific evidence that links physical activity and positive habits to improved quality of life. This course will explore topics of health promotion, wellness, risk screening, and behavior change. Students will evaluate how lifestyle-related health problems can be impacted by positive lifestyle choices. Since optimal wellness goes beyond physical fitness and the absence of disease, students will examine the eight dimensions of wellness and design a personal wellness program to attain their health goals.

### **Sociology (Social Sciences Core)**

#### **SO 461 Language and Society**

4 Class Hours 4 Quarter Credit Hours

Prerequisite: EN 100

This course provides students with knowledge about the role that language plays in our cognitive and social development in order to give us greater power over our interactions with others at home, at work, and elsewhere. Topics covered include: how we speak and why; is language biological or cultural; do men and women speak differently; and what is the connection between language and thought.

### **Spanish (Arts/Foreign Language Core)**

#### **SP 201 Introduction to Spanish**

4 Class Hours 4 Quarter Credit Hours

This course will introduce students to the Spanish language with an emphasis on the use of Spanish in the workplace. Students will learn to communicate with customers and other employees in Spanish with a focus on basic vocabulary words used in everyday interactions at the workplace. While each class will emphasize conversational skills, the course will also cover some key principles of Spanish grammar and provide some exposure to a variety of cultural traditions in Spanish-speaking countries. The course is designed for students with no prior knowledge of Spanish. **Students who speak Spanish fluently or who grew up in a home where Spanish was the primary language spoken will not be eligible to take the course.**

#### **SP 203 Spanish for Healthcare Workers**

4 Class Hours 4 Quarter Credit Hours

This course will introduce students to the Spanish language with an emphasis on the use of Spanish in the workplace. Students will learn to communicate with Spanish speaking patient and family and other employees in Spanish with a focus on basic vocabulary words used in everyday interactions at the workplace. While each class will emphasize conversational skills, the course will also cover some key principles of Spanish grammar and provide some exposure to a variety of cultural traditions in Spanish-speaking countries. **The course is designed for students with no prior knowledge of Spanish.**

**Social Sciences (Social Sciences Core)**

**SS 302 The United States Legal System**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

This course will critically analyze whether the American legal system is truly providing equal justice for all members of our society. We will examine how legal disputes are handled and the influences that shape the structure, process and personnel of the legal system.

**SS 303 Communication in the Global Workplace**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

*Core Fulfillment: Both Communications Core and Social Sciences Core*

This course is designed to acquaint students with intercultural communication issues that arise in the workplace, culminating in a final project: making a business/occupational presentation to an audience from another culture.

**SS 304 Digital Media & The Law**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 322 or EN 331*

In this course, students will examine how the existing legal structure within digital and social media operates and understand how the global shift to digital media has profoundly affected the production and control of information from a global and domestic perspective. The course is designed to introduce students to legal issues that are most relevant to careers in digital media and to individuals using digital and social media for personal interests. These topics include information access and protection, intellectual property, defamation, invasion of privacy, commercial speech, jurisdiction, internet regulations, and, of course, freedom of expression.

**SS 330 Contemporary Social Issues**

*4 Class Hours 4 Quarter Credit Hours*

This course will examine contemporary social issues from multiple perspectives. Attempts to see the ethics, the arguments and the policy outcomes involved in problems such as drug abuse, crime, poverty and the global environment.

**SS 350 Everything is a Negotiation**

*4 Class Hours 4 Quarter Credit Hours*

*Prerequisite: EN 100*

***Program Restriction: This course not open to students in the Business Management program.***

This course is intended to help students develop the skills they need to successfully negotiate their way through their work situations. Students will practice both face-to-face negotiations and negotiations carried on electronically.

## **Questions & Answers**

### **1. When do my classes meet?**

Day Classes: Technical classes normally meet for at least three hours a day for up to five days a week. Classes normally begin in the early morning (7:45 a.m.), late morning (usually 11:25 a.m.), or mid-afternoon. The time slot for your program may vary from term to term.

Evening Classes: Technical classes meet on the average of three nights a week, although there may be times when they will meet four nights a week. Classes normally begin at 5:45 p.m.

In addition, to achieve your bachelor's degree, you will take a total of approximately seven liberal arts courses, which will be scheduled around your program schedule over the course of your entire program. Each liberal arts course meets approximately four hours per week. Liberal arts courses are offered days, evenings, and Saturdays.

At the beginning of each term you will receive a detailed schedule giving the exact time and location of all your classes. The College requires that all students be prepared to take classes and receive services at any of NEIT's locations where the appropriate classes and services are offered.

When a regularly scheduled class falls on a day which is an NEIT observed holiday (Columbus Day, Veterans Day, Martin Luther King, Jr. Day, and Memorial Day), an alternate class will be scheduled as a make up for that class. The make up class may fall on a Friday. It is the student's responsibility to take note of when and where classes are offered.

### **2. How large will my classes be?**

The average size for a class is about 20 to 25 students; however, larger and smaller classes occur from time to time.

### **3. How much time will I spend in lab?**

Almost half of your technical courses consist of laboratory work. In order for you to get the most out of your laboratory experiences, you will first receive a thorough explanation of the theory behind your lab work.

### **4. Where do my classes meet?**

Students should be prepared to attend classes at any of NEIT's classroom facilities: either at the Post Road, Access Road, or East Greenwich campus.

### **5. How long should it take me to complete my program?**

To complete your degree requirements in the shortest possible time, you should take the courses outlined in the prescribed curriculum. For a typical six-term curriculum, a student may complete the requirements in as little as 18 months.

To complete all your degree requirements in the shortest time, you should take at least one liberal arts course each term. Students who need more time to complete their curriculum may postpone some of the liberal arts courses until after the completion of the technical requirements. Students are provided up to two additional terms of study to complete the liberal arts requirements without any additional tuition assessment fee. During these additional terms of study, students are required to pay all applicable fees.

Students may also elect to complete some of their liberal arts requirements during Intersession, a five-week term scheduled between Spring and Summer Quarters. Students will not be assessed any additional tuition for liberal arts courses taken during the Intersession but may be assessed applicable fees.



Students wishing to extend the number of terms needed to complete the required technical courses in their curriculum will be assessed additional tuition and fees.

**6. Is NEIT accredited?**

NEIT is accredited by the New England Commission of Higher Education (formerly the Commission on Institutions of Higher Education of the New England Association of Schools and Colleges, Inc.). Accreditation by NECHE is recognized by the federal government and entitles NEIT to participate in federal financial aid programs. Some academic departments have specialized professional accreditations in addition to accreditation by NECHE. For more information on accreditation, see NEIT's catalog.

**7. Can I transfer the credits that I earn at NEIT to another college?**

The transferability of a course is always up to the institution to which the student is transferring. Students interested in the transferability of their credits should contact the Office of Teaching and Learning for further information.

**8. Can I transfer credits earned at another college to NEIT?**

Transfer credit for appropriate courses taken at an accredited institution will be considered for courses in which the student has earned a "C" or above. An official transcript from the other institution must be received before the end of the first week of the term for transfer credit to be granted for courses to be taken during that term. Students will receive a tuition reduction for the approved technical courses based on the program rate and will be applied against the final technical term of the curriculum's tuition amount. No tuition credit is provided for courses which are not a part of the technical curriculum.

**9. What is the "Feinstein Enriching America" Program?**

New England Institute of Technology is the proud recipient of a grant from the Feinstein Foundation. To satisfy the terms of the grant, the College has developed a one-credit community enrichment course which includes hands-on community enrichment projects. The course can be taken for a few hours per term, spread over several terms. Students who are already engaged in community enrichment on their own may be able to count that service towards course credit.

**10. How many credits do I need to acquire my Financial Aid?**

In order to be eligible for the maximum financial aid award, you need to maintain at least 12 credits per academic term.

**11. What does my program cost?**

The cost of your program will be as outlined in your enrollment agreement, along with your cost for books and other course materials. Students who decide to take more terms than the enrollment agreement describes to complete the technical courses in their curriculum will be subject to additional fees and possible additional tuition costs. Students who elect to take the technical portion of the degree requirements at a rate faster than the rate prescribed in the curriculum and the enrollment agreement will be assessed additional tuition.

Students who require prerequisite courses will incur additional tuition and fees above those outlined in their enrollment agreement.

If a student elects to take a course(s) outside of the prescribed curriculum, additional tuition and fees will be assessed.

Remember, students who withdraw and re-enter, one time only, pay the tuition rate that was in effect for them at the time of their last day of attendance for up to one year from their last day of attendance. Second re-entries and beyond pay the tuition rate in effect at the time they re-enter. The most

economical way for you to complete your college degree is to begin your program now and continue your studies straight through for the six terms necessary to complete your degree requirements.

**12. What kind of employment assistance does NEIT offer?**

The Career Services Office assists NEIT students and graduates in all aspects of the job search, including resume writing, interviewing skills, and developing a job search strategy. Upon completion of their program, graduates may submit a resume to the Career Services Office to be circulated to employers for employment opportunities in their fields. Employers regularly contact us about our graduates. In addition, our Career Services Office contacts employers to develop job leads. A strong relationship with employers exists as a result of our training students to meet the needs of industry for over fifty years. No school can, and NEIT does not, guarantee to its graduates employment or a specific starting salary.

**13. Where will job opportunities exist?**

Graduates have obtained employment in the local area. However, one of the most exciting aspects of this program is the ability to look nationally for employment opportunities.

**14. What kind of jobs will I be qualified to look for?**

Generally, jobs will exist in the entry-level positions in the computer industry. System developer, analyst, entry-level programmer, database specialist, computer technician, computer librarian, web developer, network security specialist, LAN manager, network administrator, network engineer or network analyst are just some of the job choices available to a graduate with an associate degree. Upon completion of a bachelor's degree at NEIT, positions on the management level become attainable.

**15. What is NEAP?**

NEIT is proud to be a NEAP, Novell Education Academic Partner. We are honored to be an approved training center for Novell. This agreement allows NEIT to offer authorized Novell training courses to our matriculating students.

**16. What is Novell?**

Novell, Inc. is a company responsible for NetWare, the most popular networking software on the market today. Many local area networks internationally are Novell networks. Networks allow computers to "talk" to one another. They become the "roads" of the Information Highway.

**17. What is a CNA?**

Novell offers training courses to maintain and administer their local area networks. These courses are offered to NEIT Information Technology Associate Degree students. The objective of these courses is to acquire the mastery of DOS commands, the Windows environment to maintain the PC hardware and software (NetWare) required of the Novell network. A student completing these courses is eligible to take the required tests for Novell certification as a Certified NetWare Administrator (CNA).

**18. Am I automatically a CNA when I complete the coursework at NEIT?**

No. Upon completion of the coursework, students are eligible to pursue certification as a CNA. Tests for certification are given locally. However, a student may apply for positions as a computer network administrator without the CNA certification.

**19. Am I automatically a CNE when I complete the coursework at NEIT?**

No. Upon completion of the coursework, students are eligible to pursue certification as a CNE. Tests for certification are given locally. However, a student may apply for positions as a network engineer without the CNE certification.

**20. What is an MCP?**

Microsoft offers training courses to maintain and administer Microsoft local area networks. These courses are offered to NEIT Information Technology Associate Degree students. The objective of these courses is to acquire the mastery of DOS commands, the Windows environment to maintain the PC hardware and software (Microsoft) required of the Windows 2000 network. A student completing these courses is eligible to take the required tests for Microsoft certification as a Microsoft Certified Professional (MCP).

**21. Am I automatically an MCP when I complete the coursework at NEIT?**

No. Upon completion of the coursework, students are eligible to pursue certification as an MCP. Tests for certification are given locally. However, a student may apply for positions as a computer network administrator without the MCP certification.

**22. What is a MCSA?**

Microsoft offers courses to install, configure, service, and support Microsoft networks. These courses are offered to IT Bachelor's Degree students who have successfully completed NET 120, Introduction to Workstation Software and NET 244, Installing, Configuring and Administering Servers courses. The objective of these courses is to demonstrate the skills needed to install, maintain, and update a Microsoft Windows 2000 network. A student completing these courses is eligible to take the required tests for Microsoft certification as a Microsoft Certified System Administrator (MCSA).

**23. Am I automatically an MCSA when I complete the coursework at NEIT?**

No. Upon completion of the coursework, students are eligible to pursue certification as an MCSA. Tests for certification are given locally. However, a student may apply for positions as a network administrator without the MCSA certification.

## **Technical Standards**

These technical standards set forth by the IT department establish the essential qualifications considered necessary for students admitted to the program. The successful student must possess the following skills and abilities or be able to demonstrate they can complete the requirements of the program with or without reasonable accommodation, using some other combination of skills and abilities.

### **Cognitive Ability**

- Good reasoning and critical thinking skills.
- Ability to learn, remember and recall detailed information and to use it for problem solving.
- Ability to deal with materials and problems such as organizing or reorganizing information.
- Ability to use abstractions in specific concrete situations.
- Ability to separate complex information into its component parts.
- Ability to perform tasks by observing demonstrations.
- Ability to perform tasks by following written instructions.
- Ability to perform tasks following verbal instructions.
- Possession of basic keyboarding skills and knowledge of computer programs.

### **Communications Skills**

- Ability to speak in understandable English in a classroom situation on a one-on-one basis as well as before a group.
- Ability to communicate effectively with faculty and other students.
- Ability to demonstrate and use the knowledge acquired during the classroom training process.
- Ability to verbally express technical concepts clearly and distinctly.
- Ability to express thoughts clearly.

### **Adaptive Ability**

- Ability to remain calm in the face of computer lab equipment and/or software failure.
- Ability to maintain emotional stability and the maturity necessary to interact with members of the faculty and students in a responsible manner.
- Ability to tolerate the differences in all students, faculty, and administration.
- Ability to follow instructions and complete tasks under stressful and demanding conditions.
- Ability to adapt in a positive manner to new and changing situations with an open mind and flexibility.
- Ability to think clearly and act quickly and appropriately in stressful situations.

### **Physical Ability**

- Ability to sit continuously at a personal computer for long periods of time in order to learn and become proficient in computer programming and networking.
- Ability to perform learned skills independently, with accuracy and completeness within reasonable time frames in accordance with classroom and business procedures.

### **Manual Ability**

- Sufficient motor function and sensory abilities to participate effectively in the classroom laboratory.
- Sufficient manual dexterity and motor coordination to coordinate hands, eyes and fingers in the operation of computers and business equipment.

### **Sensory Ability**

#### Visual

- Acute enough to see clearly and interpret the contents on the computer screen.