



Associate of Engineering in SOFTWARE ENGINEERING

The curriculum in the Associate Degree in Engineering (AEng) in Software Engineering Technology is designed for those who intend to launch a career in the testing, installation, and maintenance of computer software modules and systems. Coursework in the program is practice-oriented and prepares students to work in a variety of computer-intensive environments that involve engineering support: technical organizations, small or large businesses, manufacturing companies, and data-directed services. The breadth of training in hardware, software, troubleshooting equipment, and other computer tools will enable the graduate to work in a variety of roles in such environments as software technician, computer systems technician, data applications or computer technician, or as a test and integration assistant. The graduate of this curriculum will be a software engineering technician versed in mathematics, physics, computer science, software development, and business fundamentals. Failure to maintain an overall GPA of at least a 2.00 in all coursework is sufficient cause for being dropped from the program.

GENERAL EDUCATION REQUIREMENTS (33)

COMPLETED **Planned Timeline
(By Semester)**

Area I Communications (9)

- | | | | | |
|--|-----|---------------------------|-------|-------|
| ENG | 111 | English Composition I (3) | _____ | _____ |
| <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i> | | | | |
| ENG | 116 | Technical Writing (3) | _____ | _____ |
| <i>Pre-requisite: ENG 111</i> | | | | |
| SPCH | 130 | Public Speaking (3) | _____ | _____ |
| <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i> | | | | |

Area II Mathematics (7)

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|---|-----|--|-------|-------|
| MATH | 145 | Introduction to Probability & Statistics (3) | _____ | _____ |
| <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i> | | | | |
| ENGR | 120 | Introductory Math for Engineering Applications (4) | _____ | _____ |
| <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i> | | | | |

Area III Laboratory Science (8)

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|---|-------|------------------------------------|-------|-------|
| PHYS | 215/L | Engineering Physics I with lab (4) | _____ | _____ |
| <i>Pre-requisite: ENGR 120 OR MATH 162; Co-requisite: PHYS 215L</i> | | | | |
| Elective Laboratory Science (4) | | | _____ | _____ |

You must select a course from the following list:

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|------|-------|--|-------|-------|
| ASTR | 110/L | Intro to Astronomy with Lab (4) | _____ | _____ |
| PHYS | 122/L | Applied Physics II with lab (4) | _____ | _____ |
| PHYS | 215/L | Engineering Physics I with lab (4) | _____ | _____ |
| PHYS | 216/L | Engineering Physics II with lab (4) | _____ | _____ |
| CHEM | 121/L | General Chemistry I with Lab (4) | _____ | _____ |
| ES | 112/L | Introduction to Environmental Science with Lab (4) | _____ | _____ |
| GEOL | 110/L | Physical Geology with Lab (4) | _____ | _____ |
| BIOL | 101/L | Current Topics in Biology with Lab (4) | _____ | _____ |

Area IV Social/Behavioral Sciences (3)

- | | | | | |
|--|-----|--------------------|-------|-------|
| ECON | 201 | Microeconomics (3) | _____ | _____ |
| <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i> | | | | |

Area V Humanities and Fine Arts (3)

- | | | | | |
|--|-----|--|-------|-------|
| Elective | (3) | | _____ | _____ |
| You must select courses from the approved list in the Catalog for GenEd | | | | |

Area VI First Year Experience (3)

- | | | | | |
|----------------------------|-----|---------------------------|-------|-------|
| FYE | 100 | First Year Experience (3) | _____ | _____ |
| <i>Pre-requisite: None</i> | | | | |

PROGRAM REQUIREMENTS (29)

Computer Science (6)

CS 201 Mathematical Foundations of Computer Science (3)

Pre-requisite: EECE 152L

IT 250 Introduction to Databases (3)

Pre-requisite: EECE 152L

Electrical, Electronic and Computer Engineering (21)

EECE 105L Microcomputer Systems (3)

Pre-requisite: None

EECE 111 Introduction to Web Programming (3)

Pre-requisite: None

EECE 132 Computer Networks I (3)

Pre-requisite: None

EECE 152L Computer Programming I (3)

Pre-requisite: None

EECE 231L Intermediate Programming (3)

Pre-requisite: EECE 152L

CS/EECE/IT Elective (6)

Support Technologies (2)

ENGR 110 Introduction to Engineering (2)

Pre-requisite: None

TOTAL CREDITS 62

SUGGESTED SEQUENCE OF COURSES

First Semester (15 crs)

FYE 100 First Year Experience (3)

ENGR 110L Introduction to Engineering (2)

EECE 111 Introduction to Web Programming (3)

ENGR 120L Introductory Math for Engineering Applications (4)

EECE 132 Computer Networks I (3)

Second Semester (16 crs)

EECE 105L Microcomputer Systems (3)

ENG 111 English Composition I (3)

EECE 152L Computer Programming I (3)

PHYS 215/LEngineering Physics I with lab (4)

EECE/CS/IT Elective (3)

Third Semester (16 crs)

ENG 116 Technical Writing (3)

MATH 145 Introduction to Probability and Statistics (3)

CS 201 Mathematical Foundations of Computer Science (3)

IT 250 Introduction to Databases (3)

Elective Laboratory Science (4)

Fourth Semester (15 crs)

SPCH 130 Public Speaking (3)

ECON 201 Microeconomics (3)

EECE 231 Intermediate Programming (3)

EECE/CS/IT Elective (3)

HFA Elective (3)

Educational Planning Form (Semester)

Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units
Fall Semester	Spring Semester	Summer
Total Units	Total Units	Total Units

Advisor's Signature _____

Student Signature _____