Associate in Engineering in
INFORMATION ENGINEERING TECHNOLOGY

The curriculum for the Associate in Engineering (AEng) in Information Technology is designed for those engineering students who intend to launch a career in the design, installation, maintenance, and repair of computer networks used for critical data entry, transfer, retrieval, and management.

Coursework in the program is practice-oriented and prepares students to work in a variety of computer-intensive environments, such as technical organizations, small or large businesses, product design or 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 occupations as network designer, network support and administrator, project manager, data applications or computer communications engineer, test and integration manager or technologist in business applications.

The graduate of this curriculum could be a computer network specialist, and will be broadly versed in mathematics, physics, computer science, and business fundamentals.

The program objectives are the following:
1. Graduates will be situated in growing entry-level careers involving support of Information Technology Systems.
2. Graduates will have demonstrated involvement in high-level technical roles.

Completion of this program should result in the following student outcomes:
1. An ability to apply knowledge of mathematics, science, and engineering
2. An ability to function on multidisciplinary teams
3. An ability to communicate effectively
4. Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
5. A knowledge of contemporary issues
6. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

GENERAL EDUCATION (33 CR)

Area I. Communications (9 cr)
- ENG 111 English Composition I (3)
- ENG 116 Technical Writing (3)
- SPCH 130 Public Speaking (3)

Area II. Mathematics (7 cr)
- MATH 145 Introduction to Probability & Statistics (3)
- ENGR 120 Introductory Math for Engineering Applications (4)

Area III. Laboratory Sciences (8 cr)
- PHYS 215/L Engineering Physics I with lab (4)
- Elective Laboratory Science (4)

You must select a course from the following list:
- 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)
- BIOL 110/L Current Topics in Biology with Lab (4)
GEOL 101/L  Physical Geology with Lab (4)

Area IV. Social/Behavioral Sciences (3 cr)
ECON 201  Microeconomics (3)

Area V. Humanities and Fine Arts (3 cr)
Elective (3)
Choose elective from Gen Ed Area IV on page 28.

Area VI. First Year Experience (3 cr)
FYE 101  First Year Experience (3)

PROGRAM REQUIREMENTS (29 CR)

Electrical, Electronic, and Computer Engineering (24 cr)
EECE 105L  Microcomputer Systems (3)
EECE 111  Introduction to Web Programming (3)
EECE 132  Computer Networks I (3)
EECE 152L  Computer Programming I (3)
EECE 230  Introduction to Routing and Switching (3)
EECE 231L  Intermediate Programming I (3)
CS/EECE/IT  Elective (6)

Information Technology (3 cr)
IT 250  Introduction to Databases (3)

Support Technologies (2 cr)
ENGR 110L  Introduction to Engineering (2)

TOTAL CREDITS: 62

SUGGESTED SEQUENCE OF COURSES

First Semester (15 crs)
FYE 101  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)
ENG 111  English Composition I (3)
EECE 152L  Computer Programming I (3)
PHYS 215/L  Engineering Physics I with Lab (4)
EECE 230  Introduction to Routing and Switching (3)
EECE/CS/IT  Elective (3)

Third Semester (16 crs)
EECE 105L  Microcomputer Systems (3)
ENG 116  Technical Writing (3)
MATH 145  Introduction to Probability and Statistics (3)
IT 250  Introduction to Databases (3)
Elective  Laboratory Science (4)

Fourth Semester (15 crs)
SPCH 130  Public Speaking (3)
ECON 201  Microeconomics (3)
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EECE 231</td>
<td>Intermediate Programming</td>
<td>3</td>
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<tr>
<td>CS/EECE/IT</td>
<td>Elective</td>
<td>3</td>
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<td>HFA</td>
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