



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)
		<i>Elective Laboratory Science (4)</i>

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)

EECE	231	Intermediate Programming (3)
CS/EECE/IT		Elective (3)
HFA		Elective (3)