



## 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 environments 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 will be a computer network specialist, but broadly versed in mathematics, physics, computer science, and business fundamentals. Failure to maintain an overall GPA of at least a 2.0 in all coursework is sufficient cause for being dropped from the program.

<b>GENERAL EDUCATION (34)</b>	<b>COMPLETED</b>	<b>Planned Timeline (By Semester)</b>
<b><u>Communications (9)</u></b>		
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>	_____	_____
<b><u>Mathematics (11)</u></b>		
MATH 145 Introduction to Probability & Statistics (3) <i>Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation</i>	_____	_____
MATH 162 Calculus I (4) <i>Pre-requisites: MATH 150 and MATH 155 or MATH 160</i>	_____	_____
MATH 163 Calculus II (4) <i>Pre-requisite: MATH 162</i>	_____	_____
<b><u>Laboratory Science (8)</u></b>		
PHYS 215/L Engineering Physics I with lab (4) <i>Pre-requisite: MATH 162</i>	_____	_____
PHYS 216/L Engineering Physics II with lab (4) <i>Pre-requisite: PHYS 215/L</i>	_____	_____
<b><u>Social/Behavioral Sciences (3)</u></b>		
ECON 201 Microeconomics (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b><u>Humanities and Fine Arts (3)</u></b>		
PHIL 220 Ethics (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>	_____	_____
<b>HEALTH, PHYSICAL EDUCATION &amp; RECREATION (1)</b>		
Electives (1) _____	_____	_____
<b>PROGRAM REQUIREMENTS (31)</b>		
<b><u>Business (3)</u></b>		
BA Lower division elective (3) _____	_____	_____
<b><u>Computer Science (3)</u></b>		
CS 241L Data Organization (3) (Fall) <i>Pre-requisite: EECE 152L</i>	_____	_____

**Electrical, Electronic and Computer Engineering (22)**

EECE 105L Microcomputer Systems (4)  
*Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation*

EECE 132 Computer Networks I (3)  
*Pre-requisite: EECE 152L*

EECE 152L Computer Programming I (4)  
*Pre-requisite: CS 102*

EECE 220 Network and Server Software (4)  
*Pre-requisite: IT 130*

EECE 231 Intermediate Programming I (3)  
*Pre-requisite: EECE 152L*

EECE 238L Computer Logic Design (4)  
*Pre-requisite: MATH 130 and PHYS 216L*

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**Information Technology (3)**

IT 210 IT Systems (3)

**TOTAL CREDITS 66**

**SUGGESTED SEQUENCE OF COURSES**

**FIRST SEMESTER (14 crs)**

ENG 111 English Composition I (3)

MATH 162 Calculus I (4)

MATH 145 Introduction to Probability and Statistics (3)

PHIL 220 Ethics(3)

HPER Elective (1)

**SECOND SEMESTER (19 crs)**

ENG 116 Technical Writing (3)

MATH 162 Calculus II (4)

PHYS 215/L Engineering Physics I with Lab (4)

EECE 105/L Microcomputer Systems I (4)

EECE 152/L Computer Programming I (4)

**THIRD SEMESTER (16 crs)**

SPCH 130 Public Speaking (3)

PHYS 216/L Engineering Physics II with Lab (4)

EECE 231 Intermediate Programming I (3)

CS 241 Data Organization (3)

EECE 132 Computer Networks I (3)

**FOURTH SEMESTER (17 crs)**

ECON 201 Microeconomics (3)

EECE 238/L Computer Logic Design (4)

ENGR/BA Elective (3)

EECE 220 Network and Server Software (4)

IT 210 IT Systems (3)

## Educational Planning Form (Semester)

<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
<b>Fall Semester</b>	<b>Spring Semester</b>	<b>Summer</b>
<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>

Advisor's Signature \_\_\_\_\_

Student Signature \_\_\_\_\_