



**Bachelor of Engineering (BEng)
Information Engineering Technology**

The curriculum of the BEng in Information Engineering 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-orientated 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 versed in mathematics, physics, computer science, and business fundamentals.

Students are advised to not attempt upper division coursework (300 and 400-level classes) until you have earned a GPA of 2.50 or better in all IT, CS, and CT coursework taken at the 100 and 200-level. Failure to maintain an overall GPA of 2.00 or better in all coursework will be sufficient cause for being dropped from the program.

GENERAL EDUCATION REQUIREMENTS (43 crs)

**COMPLETED PLANNED TIMELINE
(By Semester)**

Communications (9 crs)

- ENG 111 English Composition I (3)
Prerequisite: ENG 109 or adequate score on the Course Placement Evaluation
- SPCH 130 Public Speaking (3)
Prerequisite: ENG 109 or adequate score on the Course Placement Evaluation
- Choose **one** of the following courses:
- ENG 116 Technical Writing (3)
Pre-requisite: ENG 111

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Mathematics (11 crs)

- MATH 145 Introduction to Probability and Statistics (3)
Pre-requisite: MATH 130 or adequate score on the Course Placement Evaluation
- MATH 162 Calculus I (4)
Pre-requisite: MATH 150 and MATH 155 or MATH 160
- MATH 163 Calculus II (4)
Pre-requisite: MATH 155 and MATH 162

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Laboratory Sciences (8 crs)

- PHYS 215 Engineering Physics I (3)
Pre-requisite: MATH 162; Co-requisite: PHYS 215L
- PHYS 215L Engineering Physics Lab (1)
Co-requisite: PHYS 215
- PHYS 216 Engineering Physics II (3)
Prerequisite: PHYS 161/L; Pre-requisite: MATH 162 Co-requisite: PHYS 216L
- PHYS 216L Engineering Physics II Lab (1)
Co-requisite: PHYS 216

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Social/Behavioral Sciences (6 crs)

- Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation*
- ECON 201 Microeconomics (3)
- Elective (3) _____

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Humanities and Fine Arts (9 crs)

- PHIL 220 Ethics (3)
- Elective (3) _____

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HEALTH, PHYSICAL EDUCATION & RECREATION (1 crs)

- Elective (1) _____

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MAJOR REQUIREMENTS (84 crs)

Computer Science (23 crs)

CS 152	Computer Programming I (4)	_____	_____
<i>Pre-requisite: Knowledge of UNIX</i>			
CS 201	Math Foundations of Computer Science (3)	_____	_____
<i>Pre-requisite: CS 152</i>			
CS 238L	Computer Logic Design (4)	_____	_____
<i>Pre-requisite: CS 152</i>			
CS 241	Data Organization (3)	_____	_____
<i>Pre-requisite: CS 152</i>			
CS 251	Intermediate Programming (3)	_____	_____
<i>Pre-requisite: CS 152</i>			
CS 341	Computer Architecture (3)	_____	_____
<i>Pre-requisite: CS 238L and 241</i>			
CS 352	Software Development (3)	_____	_____
<i>Pre-requisite: CS 251</i>			

Information Technology (40 crs)

IT 105L	Microcomputer Systems (4)	_____	_____
<i>Pre-requisite: ENG 109N</i>			
IT 130	Networking (3)	_____	_____
<i>Pre-requisite: CS 132</i>			
IT 210	IT Systems (3)	_____	_____
<i>Pre-requisite: CS 152</i>			
IT 220	Network/Server SW (4)	_____	_____
<i>Pre-requisite: IT 130</i>			
IT 250	Introduction to Databases (3)	_____	_____
<i>Pre-requisite: ?</i>			
IT 330	Networking (3)	_____	_____
<i>Pre-requisite: IT 130</i>			
IT 342	Wireless and Mobile Comp (3)	_____	_____
<i>Pre-requisite: IT 330 and 350</i>			
IT 350	Database Management (3)	_____	_____
<i>Pre-requisite: CS 241L</i>			
IT 410	Information Assurance/Security (3)	_____	_____
<i>Pre-requisite: IT 330 and 350</i>			
IT 447	Routing and Switching (3)	_____	_____
<i>Pre-requisite: IT 330</i>			
IT 490	Capstone I (4)	_____	_____
<i>Pre-requisite: Senior Standing</i>			
IT 491	Capstone II (4)	_____	_____
<i>Pre-requisite: IT 490</i>			

Business (9 crs)

BA 220	Introduction to Business (3)	_____	_____
<i>Pre-requisite: ENG 109N</i>			
BA 242	Business Information Systems (3)	_____	_____
BA 435	Project Contracting and Supply Chain Management (3)	_____	_____

Technical Electives (12 crs)

Upper-division electives from CS, and IT courses.

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TOTAL CREDIT HOURS 128

Educational Planning Form (Semester)

Name _____ Date _____

Major _____ Student ID _____

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 _____