



## DEGREE SHEET / 2019-2020 CATALOG

Student name:

Eagle ID:

Eagle Email:

Phone:

### BACHELOR OF ENGINEERING (BEng) INFORMATION ENGINEERING TECHNOLOGY

The curriculum of the Bachelor of Engineering in Information Engineering Technology (BEng IET) 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 (32 Credits)	SEMESTER	GRADE
<b>AREA I: COMMUNICATIONS (6 Credits)</b>		
ENGL 1110 Composition I (3) <i>Pre-requisites: ENG 109 or adequate score on the Course Placement Evaluation</i>		
ENGL 1210 Technical Communications (3) <i>Pre-requisite: ENGL 1110</i>		
<b>AREA II: MATHEMATICS (4 Credits)</b>		
ENGR 121L and ENGR 122L Introduction to Math for Engineering Applications I and II (2 credits each for engineering majors) <i>Pre-Requisite: Math 1215</i>		
<b>AREA III: LABORATORY SCIENCES (4 Credits)</b> <i>You must select one science course with a lab</i>		
ENGR 101/L Computer Science for All (4)		
<b>AREA IV: SOCIAL/BEHAVIORAL SCIENCES (3 Credits)</b> <i>Pre-requisite: ENGL 109 or adequate score on the Course Placement Evaluation</i> <i>You must select one Area IV course.</i>		

Area IV Course (3)		
<b>AREA V: HUMANITIES (3 Credits)</b> <i>Pre-requisite: ENGL 109 or adequate score on the Course Placement Evaluation</i> <i>You must select one Area V course.</i>		
Area V Course (3)		
<b>AREA VI: FINE ARTS (3 Credits)</b> <i>You must select one Area VI course</i>		
Area VI Course (3)		
<b>ADDITIONAL NINE CREDIT HOURS (9 Credits)</b>		
COMM 1130 Public Speaking (3) <i>Pre-requisite: ENG 109</i>		
<b>Choose one of the following Civics Courses (3)</b>		
POLS 1100 Introduction to Political Science (3)		
POLS 1120 American National Government (3)		
CJUS 1110 Introduction to Criminal Justice (3)		
HIST 1110 United States History I (3)		
HIST 1120 United States History II (3)		
<b>Choose one of the following STEMH recommended Courses (3)</b>		
ENVS 2130 Critical Thinking in Science (3)		
PSYC 2120 Developmental Psychology (3)		
<b>SUPPORT COURSES (16 Credits)</b>		
MATH 1350 Introduction to Statistics (3) <i>Pre-Requisite: Math 1215</i>		
MATH 1510 Calculus I (4) <i>Pre-requisites: MATH 1250 or adequate score on the Course Placement Evaluation</i>		
MATH 1520 Calculus II (4) <i>Pre-requisites: MATH 1510</i>		
ENGR 215 Physics for Engineers I (2) <i>Pre-requisite: ENGR 121L</i>		
ENGR 217L Physics for Engineers III (3) <i>Pre-requisite: ENGR 215</i>		
<b>PROGRAM REQUIREMENTS (72 Credits)</b>		
<b>Computer Science (3 Credits)</b>		
CS 201 Math Foundations of Computer Science (3) <i>Pre-requisite: EECE 152L</i>		
<b>Electrical, Electronic, and Computer Engineering (32 Credits)</b>		
EECE 105L Microcomputer Systems (3) <i>Pre-requisite: ENG 109 or adequate score on the Course Placement Evaluation</i>		
EECE 132 Computer Networks I (3) <i>Prerequisite: None</i>		

EECE 152L Computer Programming I (3) <i>Pre-requisite: None</i>		
EET 201L Digital Systems (2) <i>Pre-requisite: ENGR 121L</i>		
EECE 230 Introduction to Routing and Switching (3) <i>Pre-requisite: EECE 132</i>		
EECE 231L Intermediate Programming (3) <i>Pre-requisite: EECE 152L</i>		
EECE 329 Human Computer Interaction (3) <i>Pre-requisite: EECE 231L</i>		
EECE 330 Computer Networks II (3) <i>Pre-requisite: EECE 132</i>		
EECE 351 Advanced Programming (3) <i>Pre-requisite: EECE 231L</i>		
EECE 355 Web Engineering (3) <i>Pre-requisite: EECE 231L and IT 250</i>		
EECE 440 Advanced Computer Networks (3) <i>Pre-requisite: EECE 330</i>		
<b>Information Technology (15 Credits)</b>		
IT 250 Introduction to Databases (3) <i>Pre-requisite: EECE 152L</i>		
IT 350 Database Management (3) <i>Pre-requisite: IT 250</i>		
IT 410 Information Assurance/Security (3) <i>Pre-requisite: EECE 230 and EECE 330</i>		
IT 490 Capstone I (3) <i>Pre-requisite: EECE 231L, IT 250 and EECE 230</i>		
IT 491 Capstone II (3) <i>Pre-requisite: IT 490</i>		
<b>Business (4 Credits)</b>		
ENGR 480 Engineering Management and Project Management (4) <i>Pre-requisite: Permission of Academic Advisor</i>		
<b>Support Technologies (18 Credits)</b>		
EECE 110L Introduction to Engineering (2) <i>Pre-requisites: None</i>		
Electives from EECE/CS/IT/MATH/ENGR (16 CR). At least 10 upper division credits		
Elective (3)		
Elective (3)		
Elective (3)		
Elective (3)		
Elective (3)		
Elective (1)		
<b>TOTAL CREDITS 120</b>		

<b>ADVISOR APPROVAL</b>	<b>DATE</b>	
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## SUGGESTED SEQUENCE OF COURSES

### **FIRST SEMESTER (16)**

Elective Fine Arts (3)  
ENGR 110L Introduction to Engineering (2)  
ENGR 121L Introductory Math for Engineering Applications I (2) (First 8 weeks)  
EECE 132 Computer Networks I (3)  
ENGR 215 Physics for Engineers I (2) (second 8 weeks)  
Elective Laboratory Science (4)

### **SECOND SEMESTER (15)**

ENGL 1110 Composition I (3)  
EECE 152L Computer Programming I (3)  
ENGR 122L Introductory Math for Engineering Applications II (2)  
EECE 230 Introduction to Routing and Switching (3)  
Elective EECE/CS/IT/MATH/ENGR Elective (4)

### **THIRD SEMESTER (15)**

EECE 105L Microcomputer Systems (3)  
ENGL 1210 Technical Communications (3)  
PHYS 217L Physics for Engineers III (3)  
MATH 1350 Introduction to Statistics (3)  
IT 250 Introduction to Databases (3)

### **FOURTH SEMESTER (15)**

COMM 1130 Public Speaking (3)  
Elective Social/Behavioral Sciences (3)  
EECE 231 Intermediate Programming (3)  
Elective EECE/CS/IT/MATH/ENGR Elective (3)  
Elective Humanities (3)

### **FIFTH SEMESTER (16)**

MATH 1510 Calculus I (4)  
CS 201 Math Foundations of Computer Science (3)  
EECE 329 Human Computer Interaction (3)  
EECE 330 Computer Networks II (3)  
IT 350 Database Management (3)

### **SIXTH SEMESTER (16)**

MATH 1520 Calculus II (4)  
EET 201L Digital Systems (2)  
EECE 355 Web Engineering (3)  
ENGR 480 Engineering Management and Project Management (4)  
Elective EECE/CS/IT/MATH/ENGR Elective (3)

### **SEVENTH SEMESTER (12)**

EECE 440 Advanced Computer Networks (3)  
IT 490 Capstone I (3)  
Elective Additional 9 Credit Hours (3)  
Elective EECE/CS/IT/MATH/ENGR Elective (3)

### **EIGHTH SEMESTER (15)**

EECE 351 Advanced Programming (3)  
IT 410 Information Assurance/Security (3)  
IT 491 Capstone II (3)  
Elective Additional 9 Credit Hours (3)  
Elective EECE/CS/IT/MATH/ENGR Elective (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>
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<b>Total Units</b>	<b>Total Units</b>	<b>Total Units</b>
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