Electronic Engineering Technology Major, BS

Advisors
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The technologists graduating from this program are applications oriented, building upon a background of mathematics, science, and technology. They interface with engineers at the product level and produce practical, workable results quickly, install and operate technical systems, devise hardware and software from proven concepts, develop and produce products, service machines, programs, and systems, manage production facilities and work groups, and provide support for technical systems’ hardware and software.

The core of the major’s coursework is electronics, digital principles, programming, mathematics, and science.

Students interested in engineering courses after graduation should complete PHYS 181-183 and MATH through differential equations (MATH 376 and 377).

Students pursuing this degree should work with the departmental advisors to ensure that they have met the prerequisites for the upper-division electives. Due to the number of hours required, some students may find that this program requires additional time to complete.

Required Core Courses – Credits: 66

- CS 110 - Programming Fundamentals I Credits: (4)
- EET 221 - Basic Electricity Credits: (4)
- EET 312 - Basic Electronics Credits: (4)
- EET 313 - Electrical Networks Credits: (4)
- EET 323 - Active Linear Circuits Credits: (4)
- EET 324 - Advanced Electrical Networks Credits: (4)
- EET 370 - Programming Applications in Technology Credits: (4)
- EET 371 - Digital Circuits Credits: (4)
- EET 372 - Advanced Digital Circuits Credits: (4)
- EET 375 - Microprocessors Credits: (4)
- EET 376 - Microprocessors and Instrumentation Credits: (4)
- IET 301 - Engineering Project Cost Analysis Credits: (4)
- IET 380 - Quality Control Credits: (4)
- IET 455 - Engineering Project Management Credits: (4)
- MATH 172 - Calculus I Credits: (5)
- MATH 173 - Calculus II Credits: (5)

Elective Sequence (Choose 2 of 3) – Credits: 24

- CS 111 - Programming Fundamentals II Credits: (4)
- CS 301 - Data Structures Credits: (4)
- *EET 452 - Computer Networks Credits: (4)

Or

- IET 242 - Instrumentation Credits: (4)
- EET 343 - Process Control Credits: (4)
- IET 373 - Programmable Logic Controller Applications Credits: (4)

Or

- IET 160 - Computer-aided Design and Drafting Credits: (4)
- EET 332 - Generation of Electrical Power Credits: (4)
- EET 432 - Transmission and Distribution of Electrical Power Credits: (4)

*CS 351: Computer Networks may be substituted for EET 452
Capstone Sequence (Choose 1) – Credits: 6
- EET 478 - Senior Project I Credits: (2)
- EET 479 - Senior Project II Credits: (2)
OR
- EET 490 - Cooperative Education Credits: (4)
AND
- EET 489 - Senior Technical Presentations Credits: (2)

Mathematics elective - Credits: 3-5
- MATH 260 - Sets and Logic Credits: (5)
- MATH 265 - Linear Algebra I Credits: (4)
- MATH 272 - Multivariable Calculus I Credits: (5)
- MATH 311 - Statistical Concepts and Methods Credits: (5)
- MATH 330 - Discrete Mathematics Credits: (5)
- MATH 376 - Differential Equations I Credits: (3)

Physics elective - Credits: 15
- PHYS 111 - Introductory Physics Credits: (4)
- PHYS 111LAB - Introductory Physics Laboratory Credits: (1)
- *PHYS 112 - Introductory Physics II Credits: (4)
- *PHYS 112LAB – Introductory Physics Laboratory II Credits: (1)
- PHYS 113 - Introductory Physics III Credits: (4)
- PHYS 113LAB - Introductory Physics Laboratory III Credits: (1)
OR
- PHYS 181 - General Physics Credits: (4)
- PHYS 181LAB - General Physics Laboratory Credits: (1)
- *PHYS 182 - General Physics II Credits: (4)
- *PHYS 182LAB - General Physics Laboratory II Credits: (1)
- PHYS 183 - General Physics III Credits: (4)
- PHYS 183LAB - General Physics Laboratory III Credits: (1)

*CHEM181/181LAB may be substituted for PHYS112/112LAB or PHYS182/182LAB

Written communications elective - Credits: 3-5
- ADMG 385 - Business Communications and Report Writing Credits: (5)
- CS 325 - Technical Writing in Computer Science Credits: (3)
- ENG 310 - Technical Writing Credits: (4)
- ENST 310 – Energy and Society Credits: (5)

Speech elective - Credits: 3-4
- COM 207 - Introduction to Communication Studies Credits: (4)
- COM 345 - Business and Professional Speaking Credits: (4)
- IET 389 - Technical Presentations Credits: (3)

EET Core Total Credits: 120 - 125

Department-approved electives Credits: 9 to 14

Total Credits: 134