

# B.S. Electrical Engineering Technology

## Program Admissions Requirements

The Bachelor of Science in Electrical Engineering Technology (BSEET) program is a two-year program intended for graduates with an Associate of Applied Science degree offered by the ISU College of Technology, such as Energy Systems Electrical Engineering Technology, Energy Systems Industrial Cybersecurity Engineering Technology, Energy Systems Instrumentation Engineering Technology, Energy Systems Mechanical Engineering Technology, Energy Systems Nuclear Operation Technology, and Robotics and Communications Systems Engineering. Graduates of these programs may directly enter the BSEET program.

It is expected that graduates of these technology programs will have completed the following courses before entering the program: ENGL 1101, COMM 1101, MATH 1170, a course fulfilling GE Objective 6 and either PHYS 1101/PHYS 1101L or CHEM 1111/CHEM 1111L. Graduates of the BSEET program are required to complete both PHYS 1101/PHYS 1101L and CHEM 1111/CHEM 1111L in fulfillment of GE Objective 5.

## General Education

The listing below includes program requirements that also fulfill General Education requirements.

Code	Title	Credits
Objective 1		6
Objective 2		3
Objective 3		3
Objective 4		6
Objective 5 - PHYS 1101/PHYS 1101L, CHEM 1111/CHEM 1111L		7
Objective 6		6
<b>Students must fulfill Objective 7 or Objective 8</b>		<b>3</b>
Objective 7 - CS 1181		
Objective 8		
Objective 9		3
<b>Total Credits</b>		<b>37</b>

## Major Requirements

Code	Title	Credits
ECE 2250 & 2250L	Introduction to Digital Systems and Introduction to Digital Systems Laboratory	4
ECE 3360	Software Methodology and Tools for Electrical and Computer Engineering	3
ECE 3300	Electrical Circuits II	3
ECE 3310	Signals and Systems	3
ECE 4495	Capstone Design Project I	3
ECE 4496	Capstone Design Project II	3
CS 1181	Computer Science and Programming I (Satisfies General Education Objective 7)	3
ENGL 3307	Professional and Technical Writing	3
MATH 1175	Calculus II	4
MATH 2240	Linear Algebra	3
MATH 3360	Differential Equations	3

PHYS 1101 & 1101L	Elements of Physics and Elements of Physics Laboratory (Partially satisfies General Education Objective 5)	4
or		
CHEM 1111 & 1111L	General Chemistry I and General Chemistry I Lab (Partially satisfies General Education Objective 5)	

**Choose 15 credits from the following list of upper division electives: 15**

The following courses are approved upper division electives for the BSEET degree. Students may with prior approval take upper division courses that are not on the list below.

ACCT 3303	Accounting Concepts
CE 3361	Engineering Economics and Management
CMP 4420	Advanced Leader Communication
CMP 4422	Conflict Management
ECE 3320	Introduction to Electronics
ECE 4411	Applied Engineering Methods
ECE 4412	Communication Systems
ECE 4460	Advanced Computer Architecture
ECE 4451	Embedded Systems Engineering
ECE 4420	Advanced Electronics
ECE 4421	Introduction to VLSI Systems
ECE 4422	Mixed Signal Design and Synthesis
ECE 4400	Advanced Circuit Theory
ECE 4470	Digital Signal Processing
ECE 4424	Semiconductor Devices
ECE 4428	Advanced Semiconductor Devices
ECE 4442	Principles of Power Electronics
FIN 3303	Financial Concepts
MGT 3312	Individual and Organizational Behavior

**Total Credits 54**

## Degree Totals

Code	Title	Credits
	Program Admission Requirements	0
	General Education	37
	Major Requirements (w/o General Education)	47
	Free Electives	36
	Upper Division Free Electives	0
<b>Total Credits</b>		<b>120</b>