

ASSOCIATE OF APPLIED SCIENCE IN ELECTRICAL ENGINEERING TECHNOLOGY

Graduates of the two-year electrical engineering technology program generally function as assistants to electrical engineers in the design, analysis, and laboratory testing of electrical and electronic systems and of rotating machinery. Most graduates are employed by electrical and electronic equipment manufacturers, utility companies, the aerospace industry, and manufacturing companies in general.

Students in the electrical engineering technology (EET) program may choose to complete two years of study and earn an Associate in Applied Science (AAS) degree. The AAS provides early access to employment in engineering support positions. Upon completion of the AAS degree, the student may continue on for the Bachelor of Science in Applied Science (BSAS) degree. This program provides additional coursework, continuing the student's growth to that of an engineering technologist or designer. Exceptional students may be eligible for enrollment in a Master of Engineering or Master of Business Administration program.

Curriculum Sheet

COURSE	TITLE	S.H.
FIRST YEAR REQUIREMENT -STUDENT SUCCESS		
YSU 1500	Success Seminar	1-2
or SS 1500	Strong Start Success Seminar	
or HONR 1500	Intro to Honors	
General Education Courses:		
MATH 1513	Algebra and Transcendental Function	5
ENGL 1550	Writing 1	3-4
or ENGL 1549	Writing 1 with Support	
ENGL 1551	Writing 2	3
CMST 1545	Communication Foundations	3
ECON 2610	Principles 1: Microeconomics	3
PHIL 2626	Engineering Ethics	3
or PHIL 2625	Introduction to Professional Ethics	
PHYS 1501	Fundamentals of Physics 1	4
CHEM 1515 & 1515L	General Chemistry 1 and General Chemistry 1 Laboratory	4
Courses in Major:		
MATH 1570	Applied Calculus 1	4
ENTC 1505	Engineering Technology Concepts	4
EET 1501	Circuit Theory 1	3
EET 1501L	Circuit Theory 1 Lab	1
EET 1502	Circuit Theory 2	3
EET 1502L	Circuit Theory 2 Lab	1
EET 2605	Electronics 1	3
EET 2605L	Electronics 1 Laboratory	1
EET 2620	Digital Electronics	2
EET 2620L	Digital Electronics Lab	1
EET 3710	Electrical Machines	3
EET 3710L	Electrical Machines Lab	1
EET 3715	Industrial Instrumentation and Control	3
EET 3712	Programmable Logic Controllers	3
EET 3712L	PLC Laboratory	1
CCET 1503	CAD Technology	2

CCET 1504	Drafting and Plan Reading	2
Total Semester Hours		67-69

First Year - Fall Semester

COURSE	TITLE	S.H.
YSU 1500	Success Seminar	1
MATH 1513	Algebra and Transcendental Function	5
ENTC 1505	Engineering Technology Concepts	4
EET 1501	Circuit Theory 1	3
EET 1501L	Circuit Theory 1 Lab	1
CCET 1503	CAD Technology	2
CCET 1504	Drafting and Plan Reading	2

First Year - Spring Semester

COURSE	TITLE	S.H.
EET 1502	Circuit Theory 2	3
EET 1502L	Circuit Theory 2 Lab	1
EET 2620	Digital Electronics	2
EET 2620L	Digital Electronics Lab	1
MATH 1570	Applied Calculus 1	4
PHYS 1501	Fundamentals of Physics 1	4
ENGL 1550	Writing 1	3

Second Year - Fall Semester

COURSE	TITLE	S.H.
EET 2605	Electronics 1	3
EET 2605L	Electronics 1 Laboratory	1
EET 3710	Electrical Machines	3
EET 3710L	Electrical Machines Lab	1
ENGL 1551	Writing 2	3
CHEM 1515	General Chemistry 1	3
CHEM 1515L	General Chemistry 1 Laboratory	1

Second Year - Spring Semester

COURSE	TITLE	S.H.
EET 3715	Industrial Instrumentation and Control	3.0
EET 3712	Programmable Logic Controllers	3
EET 3712L	PLC Laboratory	1
ECON 2610	Principles 1: Microeconomics	3
PHIL 2626	Engineering Ethics	3
CMST 1545	Communication Foundations	3

Program Educational Objectives

Educational objectives for the electrical engineering technology programs have been developed by faculty and the program industrial advisory committee to support the university, college, and School of Engineering Technology missions. Graduates of the EET associate degree program generally function as assistants to electrical engineers in the design, analysis, and laboratory testing of electrical and electronic systems and of rotating machinery. Bachelor degree graduates are prepared to assist in the design and testing of electrical systems and may function independently in some areas.

During their first few years after earning the electrical engineering technology degree at YSU, graduates will have demonstrated the ability to:

- Secure employment in a technical career related to their Electrical Engineering Technology degree.
- Communicate effectively in a professional environment.

- Continue growth in professional knowledge and skills.
- Achieve recognition consistent with their educational achievements.

Program Learning Outcomes:

Graduates of the Associate Degree in Electrical Engineering Technology will possess the following competencies upon graduation:

Learning Outcome 1: be able to apply principles of mathematics and applied science, to perform technical calculations and solve technical problems of the types commonly encountered in electrical engineering technology careers

Learning Outcome 2: demonstrate the ability to identify, formulate, and present creative solutions to technical problems in a variety of specialty areas within the broad fields of electrical engineering technology

Learning Outcome 3: be able to function competently in a laboratory setting, making measurements, operating technical equipment, critically examining experimental results, and properly reporting on experimental results, including their potential for improvement.

Learning Outcome 4: be able to use modern computational tools for technical problem solving, including scientific calculators, computers, and appropriate software.

Learning Outcome 5: demonstrate a broad education and knowledge of contemporary issues in a global and societal context, as necessary to develop professional and ethical responsibility, including responsibility to employers and to society at large

Learning Outcome 6: recognize the need for life-long learning and possess the skills to maintain and improve technical and non-technical abilities

Learning Outcome 7: demonstrate an ability to communicate and function effectively with members of multi-disciplinary teams from a variety of backgrounds.

Learning Outcome 8: demonstrate an ability to utilize computer software applications used in electrical engineering technology such as CAD, spreadsheets, word processing, and basic programming