ELECTRONIC ENGINEERING TECHNOLOGY - APPLIED ELECTRONICS, ASSOCIATE OF APPLIED SCIENCE

Curriculum Code #6310

Effective May 2024

Division of Engineering, Business and Information Technologies (http://catalog.loraincccc.edu/academic-programs/engineering-business-information-technologies/)

The applied electronics program is structured to provide a student with an application-oriented, electronic/electrical background, extensive hands-on laboratory experience, and the use of standard and specialized test equipment. The relevant knowledge, the skills that industry needs today, and the competencies that are integrated into the curriculum are intended to prepare the graduate to be job-ready in the high-tech workplace at the end of two years, and enter into a rewarding career in one of the electronics fields. Typical job titles include: engineering assistant, electronic test technician, instrumentation technician, field service representative, communication specialist and sales engineer. Lorain County Community College has articulation agreements with colleges and universities including programs offered by Lorain County Community College's University Partnership.

First Year		
Fall Semester		**Hours**
ELCT 111	ELECTRICAL CIRCUITS I	3
ELCT 115	FABRICATION PROCESS FOR ELECTRONICS	2
ENGL 161	COLLEGE COMPOSITION I	3
MTHM 155	TECHNICAL MATHEMATICS I	4
SDEV 101	INTRODUCTION TO THE LCCC COMMUNITY [2]	1
TECN 111	TECHNICAL PROBLEM SOLVING	3
	Hours	**16**
Spring Semester		
ELCT 112	ELECTRICAL CIRCUITS II [1]	4
ELCT 121	DIGITAL ELECTRONICS [1]	4
ENGL 164	COLLEGE COMPOSITION II WITH TECHNICAL TOPICS [1]	3
MTHM 156	TECHNICAL MATHEMATICS II [1]	4
	Hours	**15**
Second Year		
Fall Semester		
ELCT 221	MICROCONTROLLERS [1]	4
ELCT 233	ELECTRONIC DEVICES I [3]	4
PHYC 150	GENERAL PHYSICS I [1]	4
Arts and Humanities Elective [4]		3
	Hours	**15**
Spring Semester		
ELCT 211	ELECTRICAL POWER AND DEVICES [3]	4
ELCT 234	ELECTRONIC DEVICES II [1]	4
ELCT 241	COMMUNICATIONS ELECTRONICS [1]	4
Social Science Elective [5]		3
	Hours	**15**
	Total Hours	**61**

1

Indicates that this course requires a prerequisite.

2

A student must register for the orientation course when enrolling for more than six credit hours per semester or any course that would result in an accumulation of 13 or more credit hours.

3

Indicates that this course has a prerequisite or may be taken concurrently.

4

Select any Arts and Humanities Ohio Transfer 36 (http://catalog.loraincccc.edu/academic-information/transfer-module-requirements/) course.

5

Select any Social Science Ohio Transfer 36 (http://catalog.loraincccc.edu/academic-information/transfer-module-requirements/) course.

Note: The applied electronics major is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org (http://www.abet.org/).

Program Contact(s):

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For information about admissions, enrollment, transfer, graduation and other general questions, please contact your advising team (https://www.loraincccc.edu/admissions-and-enrollment/advising-and-counseling/).

More program information can be found on our website. (https://www.loraincccc.edu/engineering/electronic-engineering/associate-of-applied-science-in-electronic-engineering-technology-applied-electronics/)

Credit for Prior Learning (PLA) options may be available for your program. For more information, please visit our website: www.loraincccc.edu/PLA (http://www.loraincccc.edu/PLA/)

Program Learning Outcomes

1. An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve well-defined engineering problems appropriate to the discipline.
2. An ability to design solutions for well-defined technical problems and assist with the engineering design of systems, components, or processes appropriate to the discipline;
3. An ability to apply written, oral, and graphical communication in well-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature
4. An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results

5. An ability to function effectively as a member of a technical team.
6. The application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems
7. The application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.