



Wayne
County
Community
College
District

Electrical Electronics Engineering Technology

ABOUT THE PROGRAM

Today's workforce needs to be responsive to the increasing request from more and more employers that are seeking individuals with diverse skill sets. Oftentimes, the jobs that lead to a high skill, high wage, high demand career require postsecondary education and training.

Wayne County Community College District offers an Associate of Applied Science in Electrical Electronics Engineering Technology as well as four Certificate Degree options. These programs prepare our students for a wide range of job opportunities including; installation and maintenance of electronic equipment in manufacturing, research, development, medicine and communications, while preparing students for International Society of Certified Technician (IS CET) certification exams.



WHAT DO ELECTRICAL ELECTRONICS TECHNICIANS DO?

The Industrial Electronics and Control Technology Concentration, Associate of Applied Science degree program is ideal for students interested in pursuing careers working with the latest electronic, computer and industrial control technologies. This challenging program provides an exceptionally strong foundation in electronics theory supported by extensive hands-on experience through accompanying labs. Topics include amplifier and digital circuitry, programmable logic, robotics, microprocessors, instrumentation, simulation, troubleshooting and industrial automation. Real world theory and applications are emphasized throughout the program.

WHERE DO THEY WORK?

Electrical and electronics installers and repairers install, repair, or replace a variety of electrical equipment in telecommunications, transportation, utilities, and other industries. Industrial Electronics Technology graduates are employed in the design, testing, installation, and troubleshooting of industrial process control systems, robotics devices, communications systems and sophisticated instrumentation throughout the world.

PAY

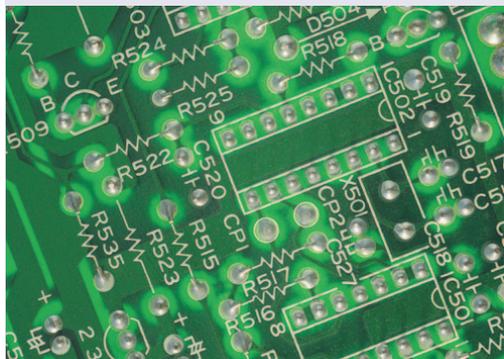
The median annual wage for electrical and electronics installers and repairers was \$59,080 in May 2019.

JOB OUTLOOK

Overall employment for electrical and electronics installers and repairers is projected to show little or no change from 2018 to 2028. However, growth rates will vary by specialty. Job opportunities should be excellent for qualified workers with an associate's degree in electronics along with certification.

Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, April 2020, Electrical and Electronics Installers and Repairers, on the Internet at <http://www.bls.gov/ooh/installation-maintenance-and-repair/electrical-and-electronics-installers-and-repairers.htm>

Approved by the Federal Aviation Administration (FAA) as a Technical Operations Collegiate Training Initiative (CTI) Program.



Recommended Sequence of Courses

Electrical Electronics Engineering Technology: College Certificate

CR. No.	COURSE TITLE	CREDITS
SEMESTER 1		
CT 203	Digital Logic I	4
EE 101	Circuit Analysis I	4
EE 105	Electronics Fabrication and Design . .2	
EE 107	Mathematics for Electrical/ Electronics I	4
ENG 119	English I	3
SEMESTER TOTAL		17

SEMESTER 2

CT 205	Introduction to Microprocessors . .4	
EE 102	Circuit Analysis II	4
EE 111	Solid State Fundamentals	3
EE 115	Mathematics for Electrical/ Electronics II	4
SEMESTER TOTAL		15

EEE TECHNOLOGY

CERTIFICATE TOTAL32

Note: Certificate total hours may not include prerequisites.

Electrical Electronics Engineering Technology: Associate of Applied Science Degree (A.A.S.)

CR. No.	COURSE TITLE	CREDITS
SEMESTER 1		
CT 203	Digital Logic I	4
EE 101	Circuit Analysis I	4
EE 105	Electronics Fabrication and Design	2
EE 107	Mathematics for Electrical/ Electronics I	4
ENG 119	English I	3
SEMESTER TOTAL		17

SEMESTER 2

CT 205	Introduction to Microprocessors . .4	
EE 102	Circuit Analysis II	4
EE 111	Solid State Fundamentals	3
EE 115	Mathematics for Electrical/ Electronics II	4
SEMESTER TOTAL		15

SEMESTER 3

EE 205	Linear Integrated Circuits	2
Elective:	Natural Science	3
MCT 203	Electrical Machinery and Controls	3
EE 203	Communications I	3
MCT 208	Programmable Logic Controllers . .3	
CAD 101	Fundamentals of Computer Aided Design	4
SEMESTER TOTAL		18

SEMESTER 4

MCT 202	Introduction to Robotics	3
EE 103	Residential Wiring	3
Elective:	Humanities	3
ENG 120	English II	3
PHY 235	General Physics I	4
PS 101	American Government	3
SEMESTER TOTAL		19

EEE TECHNOLOGY

A.A.S. PROGRAM TOTAL69

Note: Program total hours may not include prerequisites.

It is recommended that the Electronics Electives be taken in EE, CT, or MCT disciplines.

Students may substitute MAT 155 and MAT 156 for EE107 and EE 115.

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