

ELECTRICAL MAJOR

Associate of Applied Science

Obtain the knowledge and skill sets used in electrical occupations found in a manufacturing environment. Students will learn to read and interpret electrical schematics/electrical prints, AC and DC electrical principles, motor control systems, PLC's, conduit bending, wiring circuits, National Electric Code, electronic components, and troubleshooting skills.

JOB OPPORTUNITIES FOR GRADUATES

There are a number of skilled positions/careers available to students taking this program. Positions graduates hold are residential electrician, light commercial electrician, industrial electrician, alternative energy technician, power generation, construction electrician, and multicraft technician to name a few.

According to the DOL Bureau of Labor Statistics the job outlook through 2022 is good. Employment of electricians is expected to grow 20% by 2022, faster than the average for all occupations. As homes and businesses require more wiring, electricians will be needed to install the necessary components. Overall growth of the construction industry and the need to maintain older equipment in manufacturing plants also will require more electricians. Alternative power generation, such as solar and wind, is an emerging field that should require more electricians for installation. Increasingly, electricians will be needed to link these alternative power sources to homes and power grids over the coming decade. With greater efficiency and reliability of newer manufacturing plants, demand for electricians in manufacturing should increase as more electricians are needed to install and maintain systems.

SALARY

The median annual wage for electricians is \$49,840. The lowest 10 percent earned less than \$30,420, and the top 10 percent earned more than \$82,930. The starting pay for apprentices is usually between 30 percent and 50 percent of what fully trained electricians make, receiving pay increases as they gain more skill. About 9 percent of electricians were self-employed in 2012. Self-employed electricians often work in residential construction and may have the ability to set their own schedule.

LOCATION

Toledo-area Campus

OWENS.EDU



Toledo-area Campus - (567) 661-7777 Findlay-area Campus - (567) 429-3509





PROGRAM CURRICULUM

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REQUIRED COURSES

*The Age of Coursework for Skilled Trades (SKT) courses is 6 years - chair approval required for courses beyond that. Please refer to College Policy, Chapter 2 - Academic, 3358:11-2-22 Age of Coursework Policy.



ENG 111	Composition I *	Credits: 3(Lec: 3)
or		
ENG 111P	Composition I Plus *	Credits: 4(Lec: 4)
MTH 143	Applied Industrial Mathematics	Credits: 3(Lec: 3)
SKT 171	Electricity: DC Principles	Credits: 3(Lec: 3)
SKT 131	Electrical Prints	Credits: 3(Lec: 3)
IST 131	Computer Concepts and Apps	Credits: 3(Lec: 3)
or		
EET 130	Computer Diagnosis	Credits: 3(Lec: 2 Lab: 3)
STM 105	Technology in Society	Credits: 2(Lec: 2)

2ND SEMESTER

SKT 132	Electrical Prints: Controls	Credits: 3(Lec: 3)
SKT 133	Electrical Prints: Industrial	Credits: 3(Lec: 3)
PHY 143	Applied Industrial Physics	Credits: 3(Lec: 3)
SKT 174	Electricity: AC Principles	Credits: 3(Lec: 3)
SKT 181	Motor Control Systems: I	Credits: 2(Lec: 1.50 Lab: 1.50)
SKT 184	National Electrical Code	Credits: 3(Lec: 3)

3RD SEMESTER

PSY 111	Indust/Organization Psych	Credits: 3(Lec: 3)	
	Speech Elective	Credits: 3(Lec: 3)	
	*Select from: SPE 101, SPE 102 or SPE 210.		
SKT 281	Electronics: Princ/Applicat	Credits: 3(Lec: 2 Lab: 3)	
SKT 182	Motor Control Systems: II Cred	dits: 2(Lec: 1.50 Lab: 1.50)	
EET 165	Automation Control: PLC I Cred	dits: 2(Lec: 1.50 Lab: 1.50)	
	Business (BUS) Elective	Credits: 3(Lec: 3)	
	*Select any Business (BUS) cours	e.	

4TH SEMESTER

EET 166	Automation Control: PLC II Credits	s: 2(Lec: 1.50 Lab: 1.50)
SKT 254	Motor Control/Syst: Adv	Credits: 2(Lec: 2)
SKT 175	Electricity: Electric Applicat	Credits: 3(Lec: 3)
SKT 172	Electricity: Mag/DC Motors/Gen	Credits: 2(Lec: 2)
SKT 286	Electronics: Troubleshooting	Credits: 2(Lec: 2)

*Ohio Transfer Module Course

More information about the Ohio Transfer Module Course can be found at www.ohiohighered.org/transfer/transfermodule

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Office of Admissions

Toledo-area Campus - (567) 661-7777 Findlay-area Campus - (567) 429-3509 School of Science, Technology, Engineering and Mathematics (567) 661-7457

