



## ELECTRICAL CERTIFICATE

### PROGRAM THE CERTIFICATE IS A PART OF

Electrical Major

### JOB OPPORTUNITIES FOR GRADUATES

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

According to the DOL Bureau of Labor Statistics the job outlook thru 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

### ABOUT THE DANA CENTER

Owens Community College continues to fulfill its mission as the region's workforce education leader by responding to labor market needs and expanding opportunities with the creation of the Dana Advanced Manufacturing Training Center, the renovated 59,000-square-foot, \$9.6 million facility focused on producing job-ready, skilled workers for in-demand careers in skilled trades and advanced manufacturing. The Dana Center's design provides highly technical and integrated training in a modernized setting with amenities including natural lighting, glass walls and polished floors - a clean and safe environment conducive to learning.

### 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.*

*\*\*Technical courses may be selected from but are not limited to the classes listed, based on department approval.*

MTH 143	Applied Industrial Mathematics	Credits: 3(Lec: 3)
SKT 131	Electrical Prints	Credits: 3(Lec: 3)
SKT 171	Electricity: DC Principles	Credits: 3(Lec: 3)
SKT 132	Electrical Prints: Controls	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 175	Electricity: Electric Applicat	Credits: 3(Lec: 3)
SKT 184	National Electrical Code	Credits: 3(Lec: 3)
SKT 133	Electrical Prints: Industrial	Credits: 3(Lec: 3)
SKT 182	Motor Control Systems: II	Credits: 2(Lec: 1.50 Lab: 1.50)
EET 165	Automation Control: PLC I	Credits: 2(Lec: 1.50 Lab: 1.50)
EET 166	Automation Control: PLC II	Credits: 2(Lec: 1.50 Lab: 1.50)

### COURSE ELECTIVES

*Choose one course from the Course Listing:*

SKT 172	Electricity: Mag/DC Motors/Gen	Credits: 2(Lec: 2)
SKT 281	Electronics: Princ/Applicat	Credits: 3(Lec: 2 Lab: 3)
SKT 254	Motor Control/Syst: Adv	Credits: 2(Lec: 2)

**OWENS.EDU**

#### Office of Admissions

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

#### School of Science, Technology, Engineering and Mathematics

(567) 661-7169



**OWENS**  
COMMUNITY COLLEGE