JOHNSON COUNTY COMMUNITY COLLEGE®

Electrical Technology Certificate

The Johnson County Community College Electrical Technology program is in alignment with the National Center for Education Statistics (NCES) CIP code 46.0302: Electrician. This program prepares individuals to apply technical knowledge and skills to install, operate, maintain, and repair electric apparatus and systems such as residential, commercial, and industrial electric-power wiring; and DC and AC motors, controls, and electrical distribution panels. This program includes instruction in the principles of electronics and electrical systems, wiring, power transmission, safety, industrial and household appliances, job estimation, electrical testing and inspection, and applicable codes and standards.

The use of electrical technology in residential, commercial and industrial applications continues to grow rapidly. Electricians install and maintain electrical systems for a variety of purposes, including lighting, appliances, industrial control, security and communications.

The Electrical Technology Certificate is a 30 credit-hour program that is completed in two semesters. Designed to give students the basic skills to gain entry-level employment as a residential or commercial electrician, the curriculum emphasizes hands-on training integrated with knowledge of theory and study of the National Electrical Code. As a requirement for completion, students will sit for their local licensure exam.

After attainment of the certificate, students can complete advanced studies toward the Electrical Technology Associate of Applied Science (https://catalog.jccc.edu/degreecertificates/electricaltechnology/electrical-technology-aas/) which prepares students to work in the electrical trade in estimating, industrial power and control, and solar photovoltaic installation.

(Major Code 5110; CIP Code 46.0302)

Electrical Technology Program web page (http://www.jccc.edu/academics/credit/electrical-technology/)

Program Learning Outcomes

Johnson County Community College (JCCC) is committed to offering high-quality affordable programs that focus on developing knowledge and skills conducive to life-long learning. Both the General Education Student Learning Outcomes (https://www.jccc.edu/about/leadership-governance/administration/institutional-effectiveness-branch/outcomes-assessment/learning-outcomes.html) and Institutional Learning Outcomes (https://www.jccc.edu/about/leadership-governance/administration/institutional-effectiveness-branch/outcomes-assessment/institutional-learning-outcomes.html) convey JCCC's approach to programmatic outcomes. Additionally, students who successfully complete the Electrical Technology program from JCCC will be able to:

- Pass the Journeyman Electrician licensing exam.
- Utilize electrical test equipment to measure electrical values.
- Install branch circuits in residential applications to applicable standards.
- Successfully perform a conduit bend within required tolerances.
- Successfully terminate a network cabling.

Certificate Requirements

Fall Semester

Code	Title	Hours
COMS 155	Workplace Skills	1
ELTE 111	AC/DC Circuits	4
ELTE 115	Print Reading	2
ELTE 122	National Electrical Code I	4
ELTE 125	Residential Wiring*	4
Total Hours		**15**

Spring Semester

Code	Title	Hours
CMGT 100	Industrial Safety/OSHA-30	3
ELTE 175	Low Voltage Wiring*	3
ELTE 200	Commercial Wiring*	4
ELTE 222	National Electrical Code II*	4

ELTE 223	Electrical Certification Review*	1
Total Hours		**15**

Total Program Hours: 30

*   This course has registration requirements.