

Electrical Technology, AAS

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

The Electrical Technology Certificate (<https://catalog.jccc.edu/archives/2024-25/degreecertificates/electricaltechnology/electrical-technology-cert/>) is a 30-credit-hour program that can be 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. Totalling 60 credit hours, this program prepares students to work in the electrical trade in estimating, industrial power and control, and solar photovoltaic installation.

(Major Code 2260; CIP Code 46.0302)

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

Associate of Applied Science Degree

Fall Semester

Code	Title	Hours
COMS 155	Workplace Skills	1
ELTE 110	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

Note: Students are eligible for the Electrical Technology Certificate upon completion of the first two semesters.

Fall Semester

Code	Title	Hours
ELTE 202	Electrical Estimating*	3
ELTE 220	Heavy Commercial Wiring*	3
ENGL 121	Composition I*	3
MATH 130	Technical Mathematics I* (or higher)	3
Humanities Elective ^		3
Total Hours		15

Spring Semester

Code	Title	Hours
Program Elective (see below)		3
ELTE 230	Industrial Wiring*	3
ELTE 250	Industrial Motor Applications*	3
MATH 131	Technical Mathematics II* (or higher)	3

Social and Behavioral and Sciences Elective ^	3
Total Hours	15

Total Program Hours: 60

Program Electives

Code	Title	Hours
AET 160	Programmable Logic Controllers I*	3
CMGT 105	Construction Methods	3
DRAF 120	Introduction to Drafting	2
DRAF 130	Introduction to CAD Concepts - AutoCAD*	3
DRAF 132	Exploring AutoCAD	3
DRAF 230	Intermediate CAD: AutoCAD*	3
ELTE 211	Solar Electric Systems*	3
ELTE 270	Electrical Internship*	1-3

* This course has registration requirements.
^ See all AAS general education electives (<https://catalog.jccc.edu/archives/2024-25/degree requirements/associate-applied-science/>)