

# Electrical Technology, A.A.S.

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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, climate control, security and communications.

JCCC offers a 64-credit-hour associate of applied science degree program and a 29-credit-hour vocational certificate program. Both programs emphasize hands-on training integrated with a knowledge of theory and study of the National Electrical Code that prepares students to take a national licensure exam.

The associate of applied science degree program prepares students to enter the electrical trade in four types of electrical occupations: residential, commercial, industrial and maintenance. The program also prepares students for continued education in electrical contracting/management, electrical design and industrial/electronic controls.

(Major Code 2260; State CIP Code 46.0302)

- Electrical Technology (<http://www.jccc.edu/electrical-tech>)

## Associate of Applied Science Degree

### First Semester

ELTE 122	National Electrical Code I	4
ELTE 125	Residential Wiring Methods*	4
ELTE 123	Electromechanical Systems	4
INDT 125	Industrial Safety/OSHA 30	3
INDT 155	Workplace Skills	1
Total Hours		16

### Second Semester

Technical Electives (see below)		4
ELTE 200	Commercial Wiring Methods*	4
ENGL 121	Composition I*	3
MATH 130	Technical Mathematics I*	3
CPCA 105	Introduction to Personal Computers: Windows	1
Total Hours		15

### Third Semester

DRAF 129	Interpreting Architectural Drawings	2
ELTE 205	Industrial Electrical Wiring*	4
ELTE 210	Code Certification Review*	3
ELTE 271	Electrical Internship I*	3
HPER 200	First Aid and CPR	2
Social Science and/or Economics Elective ^		3
Total Hours		17

^ Social Science and/or Economics Elective (<http://catalog.jccc.edu/fall/degreecertificates/electives/social-sci-econ-aas>)

### Fourth Semester

Technical Electives (see below)		3
ENGL 123	Technical Writing I*	3
ELTE 215	Generators, Transformers and Motors*	4
CET 105	Construction Methods	3
Humanities Elective ^		3
Total Hours		16

^ Humanities Elective (<http://catalog.jccc.edu/fall/degreecertificates/electives/humanities-aas>)

**Technical Electives**

BUS 140	Principles of Supervision	3
BUS 145	Small Business Management	3
CPCA 128	PC Applications: MS Office	3
DRAF 120	Introduction to Drafting	2
DRAF 130	Introduction to CAD Concepts - AutoCAD*	3
DRAF 250	Electrical Drafting*	3
ELEC 120	Introduction to Electronics	3
ELEC 125	Digital Electronics I	4
ELEC 131	Introduction to Sensors and Actuators	3
ELEC 133	Programmable Controllers	3
ELEC 165	Advanced Programmable Controllers*	3
ELEC 185	LAN Cabling and Installation	3
ELTE 202	Electrical Estimating*	3
EPRM 252	Solar Electric Systems*	3
EPRM 256	Solar Electric Systems Lab*	1
HVAC 121	Basic Principles of HVAC*	4
RRT 165	Railroad Safety, Quality and Environment	3

**Total Program Hours: 64**