Electrical Technology, A.A.S.

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

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

Second Semester

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

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

| Humanities Elective [^] | | 3 |
|----------------------------------|--------------------------------------|---|
| CET 105 | Construction Methods | 3 |
| ELTE 215 | Generators, Transformers and Motors* | 4 |
| ENGL 123 | Technical Writing I* | 3 |
| Technical Electives (se | see below) | 3 |

[^] 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 | | 3 |
| EPRM 256 | | 1 |
| RRT 165 | Railroad Safety, Quality and Environment | 3 |

Total Program Hours: 64