

Electronics Technology, A.A.S.

Electronics technology influences almost every aspect of modern life. Skilled electronics technicians are needed to support growth in this industry. These technicians must be able to fabricate, test, install, operate and maintain highly technical systems such as communications systems, computers and computer networks, and industrial process control systems. The program focuses on the underlying principles of electronic devices, circuit analysis and digital electronics and will provide a broad systems view of electronics.

Students in the electronics program will work with outstanding facilities and the latest laboratory equipment. Graduates of the program will have the opportunity for employment in one of today's most challenging and exciting career fields.

Program graduates also have the opportunity to pursue a baccalaureate degree (B.S.E.E.T.) in electronics engineering technology through the transfer of JCCC electronics technology and other courses to participating four-year institutions. Students contemplating this option should seek early counseling and prepare a program plan with specific course selections in anticipation of four-year institution requirements. Students should be prepared to enroll in higher-level math and physics courses when compared with current electronics technology program requirements.

Students who are transferring to JCCC with significant numbers of electronic technology credits should be aware that at least 9 credit hours of approved electronic technology courses must be completed at JCCC before the A.A.S. degree will be awarded. In addition, because of changes in technology, students who desire to graduate using electronics technology courses completed more than seven years ago should seek counseling regarding the current relevance of those courses.

(Major Code 2690; State CIP Code 47.0101)

- Electronics Technology (<http://www.jccc.edu/electronics>)

Associate of Applied Science Degree

First Semester

| | | |
|-------------|--------------------------------------|----|
| ELEC 120 | Introduction to Electronics | 3 |
| ELEC 126 | Microcomputer A+ Preparation | 4 |
| ELEC 125 | Digital Electronics I | 4 |
| MATH 130 | Technical Mathematics I* (or higher) | 3 |
| ENGL 121 | Composition I* | 3 |
| Total Hours | | 17 |

Second Semester

| | | |
|----------------------------------|---------------------------------------|----|
| ELEC 122 | Circuit Analysis I* | 3 |
| ELEC 225 | Digital Electronics II* | 3 |
| MATH 131 | Technical Mathematics II* (or higher) | 3 |
| SPD 125 | Personal Communication | 3 |
| Humanities Elective [^] | | 3 |
| Total Hours | | 15 |

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

Third Semester

| | | |
|--|-----------------------|----|
| Technical Elective (see below) | | 3 |
| ELEC 130 | Electronic Devices I* | 4 |
| ELEC 140 | Circuit Analysis II* | 3 |
| ENGL 123 | Technical Writing I* | 3 |
| Social Science/Economics Elective [^] | | 3 |
| Total Hours | | 16 |

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

Fourth Semester

| | | |
|--------------------------------|------------------------|---|
| Technical Elective (see below) | | 3 |
| ELEC 230 | Electronic Devices II* | 3 |

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|---|-----------------------------------|----|
| ELEC 240 | Electronic Communication Systems* | 4 |
| PHYS 133 | Applied Physics* (or higher) | 5 |
| Health and/or Physical Education Elective ^ | | 1 |
| <hr/> | | |
| Total Hours | | 16 |

^ Health and/or Physical Education Elective (<http://catalog.jccc.edu/fall/degrecertificates/electives/health-and-or-physical-ed-aas>)

Technical Electives

| | | |
|----------|---------------------------------------|---|
| ELEC 118 | Mobile Auto Electronics Installation | 3 |
| ELEC 127 | Robots for Humans | 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 |
| ELEC 245 | Microprocessors* | 3 |
| ELEC 250 | Microcomputer Maintenance* | 3 |
| ELEC 271 | Electronics Internship I* | 1 |

Total Program Hours: 64