

Electronics Technology, AAS

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, troubleshoot and maintain highly technical systems such as communications systems, computers and computer networks, industrial process control systems, and photonics 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 excellent facilities and some of 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.

(Major Code 2690; State CIP Code 47.0101)

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

Associate of Applied Science Degree

First Semester

| | | |
|--------------------|--------------------------------------|-----------|
| ELEC 120 | Introduction to Electronics | 3 |
| ELEC 125 | Digital Electronics I | 4 |
| ELEC 186 | CompTIA A+ Essentials | 3 |
| MATH 130 | Technical Mathematics I* (or higher) | 3 |
| ENGL 121 | Composition I* | 3 |
| Total Hours | | 16 |

Second Semester

| | | |
|------------------------------------|---------------------------------------|-----------|
| ELEC 134 | DC Circuits* | 4 |
| ELEC 225 | Digital Electronics II* | 3 |
| MATH 131 | Technical Mathematics II* (or higher) | 3 |
| CS 134 | Programming Fundamentals | 4 |
| Social Science/Economics Elective^ | | 3 |
| Total Hours | | 17 |

^ See all AAS general education electives (<http://catalog.jccc.edu/degree requirements/associate-applied-science>)

Third Semester

| | | |
|--------------------------------|------------------------|-----------|
| Technical Elective (see below) | | 3 |
| ELEC 234 | AC Circuits* | 4 |
| ELEC 236 | Semiconductor Devices* | 4 |
| ELEC 235 | Microprocessors* | 4 |
| INDT 155 | Workplace Skills | 1 |
| Total Hours | | 16 |

Fourth Semester

| | | |
|--------------------------------|-----------------------------------|-----------|
| Technical Elective (see below) | | 6 |
| HPER 200 | First Aid and CPR | 2 |
| ELEC 240 | Electronic Communication Systems* | 4 |
| Humanities Elective^ | | 3 |
| Total Hours | | 15 |

^ See all AAS general education electives (<http://catalog.jccc.edu/degree requirements/associate-applied-science>)

Technical Electives

| | | |
|---------|-----------------------------------|---|
| AET 140 | Actuator and Sensor Systems* | 3 |
| AET 160 | Programmable Logic Controllers I* | 3 |
| AET 240 | Industrial Robotics* | 3 |

| | | |
|----------|--|---|
| AET 260 | Programmable Logic Controllers II* | 3 |
| ELEC 127 | Robots for Humans | 4 |
| ELEC 185 | LAN Cabling and Installation | 3 |
| ELEC 212 | Fundamentals of Light and Lasers* | 3 |
| ELEC 250 | Microcomputer Maintenance* | 3 |
| ELEC 251 | Laser Systems and Applications* | 3 |
| ELEC 252 | Specialized Lasers and System Integration* | 3 |
| ELEC 271 | Electronics Internship I* | 1 |

Total Program Hours: 64