

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 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/academics/industrial-technology/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

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

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

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

Fourth Semester

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

ELEC 240	Electronic Communication Systems*	4
PHYS 133	Applied Physics* (or higher)	5
Health and/or Physical Education Elective ^		1

Total Hours **16**

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

Technical Electives

ELEC 127	Robots for Humans	4
ELEC 185	LAN Cabling and Installation	3
ELEC 250	Microcomputer Maintenance*	3
ELEC 271	Electronics Internship I*	1
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

Total Program Hours: 64