

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)

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/archives/2018-2019/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/archives/2018-2019/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