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 fabricate, test, install, operate, troubleshoot, and maintain highly technical systems such as communications systems, computers and computer networks, industrial process control systems, avionics, biomedical electronics, 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 work with excellent facilities that include 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; CIP Code 47.0101)

Electronics Technology Program web page (http://www.jccc.edu/academics/credit/electronics-technology/)

Associate of Applied Science Degree

First Semester

Code	Title	Hours
COMS 155	Workplace Skills	1
ELEC 120	Introduction to Electronics	3
ELEC 125	Digital Electronics I	4
ELEC 134	DC Circuits*	4
MATH 130	Technical Mathematics I*	3
Total Hours		**15**

Second Semester

Code	Title	Hours
CS 134	Programming Fundamentals	4
ELEC 186	CompTIA A+ Core 1	3
ELEC 227	Digital Electronics II*	4
ELEC 234	AC Circuits*	4
MATH 131	Technical Mathematics II*	3
Total Hours		**18**

Third Semester

Code	Title	Hours
Program Elective (see below)		3
ELEC 235	Digital Systems and Applications*	4
ELEC 236	Semiconductor Devices*	4
ENGL 121	Composition I*	3
Social and Behavioral and Sciences Elective ^		3
Total Hours		**17**

Fourth Semester

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

Total Program Hours: 65

Program Electives

Code	Title	Hours
AET 140	Actuator and Sensor Systems*	3
AET 160	Programmable Logic Controllers I*	3
AET 185	LAN Cabling and Installation	3
AET 240	Industrial Robotics*	3
BIOL 144	Human Anatomy and Physiology*	5
COLL 150	Job Search Skills	1
CS 200	Concepts of Programming Algorithms Using C++*	4
CS 201	Concepts of Programming Algorithms using C#*	4
CS 205	Concepts of Programming Algorithms using Java*	4
ELEC 212	Fundamentals of Light and Lasers*	3
ELEC 251	Laser Systems and Applications*	3
ELEC 252	Specialized Lasers and System Integration*	3
ELEC 271	Electronics Internship*	1
ENGL 123	Technical Writing I*	3
HC 130	Medical Terminology for Healthcare Professions	3
IT 120	CompTIA A+ Core 2	3
IT 141	Introduction to Networks	3

*   This course has registration requirements.
^   See all AAS general education electives (https://catalog.jccc.edu/archives/2024-25/degreerequirements/associate-applied-science/).