

Automation Engineer Technology, AAS

The Automation Engineer Technology program prepares individuals to develop, install and maintain automated systems used in an industrial setting. Topics of study include electrical systems, instrumentation and process control, programmable logic controllers (PLCs), fluid power systems, industrial robotics and preventative maintenance.

(Major Code 2050; CIP Code 15.0406)

Automation Engineer Technology Program web page (<http://www.jccc.edu/academics/credit/automation-engineer-technology/>)

Associate of Applied Science Degree

Fall Semester

Code	Title	Hours
AET 110	Industrial Maintenance	3
AET 122	Industrial Code	3
ELTE 110	AC/DC Circuits	4
MATH 130	Technical Mathematics I* (or higher)	3
Humanities Elective^		3
Total Hours		16

Spring Semester

Code	Title	Hours
AET 120	Industrial Fluid Power	3
AET 185	LAN Cabling and Installation	3
CMGT 100	Industrial Safety/OSHA-30	3
COMS 155	Workplace Skills	1
MATH 131	Technical Mathematics II* (or higher)	3
MFAB 124	Introduction to Welding	3
Total Hours		16

Fall Semester

Code	Title	Hours
Program Elective (see below)		3
AET 140	Actuator and Sensor Systems*	3
AET 240	Industrial Robotics*	3
AET 255	Motor Controls and Variable Frequency Drives*	3
ENGL 121	Composition I*	3
Total Hours		15

Spring Semester

Code	Title	Hours
Program Elective (see below)		6
AET 160	Programmable Logic Controllers I*	3
AET 260	Programmable Logic Controllers II*	3
Social and Behavioral and Sciences Elective		3
Total Hours		15

Total Program Hours: 62

Program Electives

Code	Title	Hours
DRAF 129	Interpreting Architectural Drawings	2
DRAF 130	Introduction to CAD Concepts - AutoCAD*	3

ELEC 125	Digital Electronics I	4
IT 141	Introduction to Networks	3
IT 150	Switching, Routing, and Wireless Essentials*	3
MFAB 128	Basic Machine Tool Technology	3
MFAB 255	Advanced Machine Tool Technology*	3

* This course has registration requirements.

^ See all AAS general education electives (<https://catalog.jccc.edu/archives/2024-25/degree requirements/associate-applied-science/>).