

Advanced Automation & Robotics Technology - Certificates, Diploma and AAS

The Advanced Automation and Robotics Technology program is designed to prepare technicians to troubleshoot, service and fix computerized control systems and robotic devices in manufacturing environments. Students will gain knowledge and apply skills in advanced electrical, electronic, and robotics systems. Students will apply networking skills, integral to working with automated equipment, encompassing robotic components, sensors, controllers, and computers to support autonomous work.

The [Electrical Maintenance Technology certificate](#) is awarded after successful completion of first semester courses.

The [Mechanical Maintenance Technology certificate](#) is awarded after successful completion of second semester courses.

The [Industrial Maintenance Technology diploma](#) is awarded after successful completion of the first and second semesters.

Where will this take me?

Robotics Technician
Robotics Engineer
Computer Controlled Machine Tool Operator
Electro-Mechanical Technician

Instructor and Staff

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Instructor
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AAS- Biomedical Electronics, Southeastern Community College
RS Logix 5000 and Control Logix Certified

Southeastern Community College values diversity in all its forms. Please visit http://www.scciowa.edu/_resources/docs/scc-nondiscrimination-statement.pdf to view our nondiscrimination statement.

For more information about our graduation rates, the median debt of students who completed the program, and other important information, please visit SCC's financial aid website at <http://www.scciowa.edu/admissions/costaid/finaid/gainemp.aspx>

Keokuk Campus

Program Requirements

Fall Semester I		Credit
BUS-121	BUSINESS COMMUNICATIONS	3
ELE-195	MOTOR CONTROLS	3
ELE-310	INDUSTRIAL ELECTRICITY	2
ELT-250	PROGRAMMABLE LOGIC CONTROLLERS	3
ELT-295	AC/DC FUNDAMENTALS	2
MAT-702	INTRODUCTION TO MATH APPLICATIONS	3

Spring Semester I		Credit
EGT-142	FLUID POWER 1	2
EGT-143	FLUID POWER 2	2
ELE-116	BLUEPRINT READING	1
IND-104	INDUSTRIAL PUMPS	1
IND-141	POWER TRANSMISSION	2
MFG-209	MACHINE SHOP PRACTICES	3
MFG-520	PREDICTIVE MAINTENANCE	2
PSY-102	HUMAN AND WORK RELATIONS <u>or</u>	3
PSY-111	INTRODUCTION TO PSYCHOLOGY <u>or</u>	3
SOC-110	INTRODUCTION TO SOCIOLOGY	3

Fall Semester II		Credit
ELE-218	MOTION CONTROL	2
ELT-132	MOTOR DRIVES	1
ELT-262	ADVANCED PLC AND SYSTEM INTEGRATION (MECHATRONICS)	6
ENG-105	COMPOSITION I	3
HIS-151	US HISTORY TO 1877 <u>or</u>	3
HIS-152	US HISTORY SINCE 1877 <u>or</u>	3
PHI-101	INTRODUCTION TO PHILOSOPHY <u>or</u>	3
PHI-105	INTRODUCTION TO ETHICS	3

Spring Semester II		Credit
ATR-118	AUTOMATION SYSTEMS	3
ATR-135	ADVANCED AUTOMATION AND ROBOTICS	3
CAD-101	INTRODUCTION TO CAD	3
ELE-127	TROUBLESHOOTING	1
ELE-219	SUPERVISORY CONTROL AND DATA ACQUISITION	3
ELT-176	INSTRUMENTATION	3
BIO-105	INTRODUCTORY BIOLOGY <u>or</u>	4
ENV-111	ENVIRONMENTAL SCIENCE <u>or</u>	4
PHS-151	INTRODUCTION TO ASTRONOMY	3

Program Total..... 66-67