

# AUTOMATION AND INDUSTRIAL TECHNOLOGY - AAS

Offered at: Madisonville Community College

Program Plan Number: 1504997019

## Curriculum Effective Spring Semester

Course	Title	Credits
<b>Required General Education</b>		
Select one of the following three math options:		3
MAT 126	Technical Algebra and Trigonometry	
MAT 150	College Algebra	
Higher MAT course		
PHY 151 & PHY 161 or PHY 171	Introductory Physics I and Introductory Physics I Laboratory Applied Physics	4
ENG 101 or ENG 105	Writing I Writing: An Accelerated Course	3
Social/Behavioral Science course		3
Heritage/Humanities course		3
Subtotal		16
<b>Technical Core</b>		
AIT 1001	Basic Electrical Knowledge	2
AIT 1002	Power Development	1
AIT 1101	Electrical Power Distribution	1
AIT 1201	Electrical Installation	1
AIT 1301	Principles of Instrumentation	2
AIT 1302	Integrated Process Control	2
AIT 1401	Basic Electrical Controls	2
AIT 1501	Intermediate Electrical Controls	2
AIT 2710	Introduction to Programmable Logic Controllers	2
AIT 2711	Introduction to Robotics	2
Digital Literacy		0-3
Subtotal		17-20
<b>Total Credits</b>		<b>33-36</b>

## Automation Technician Track

Offered at: Madisonville Community College

Program Plan Number: 150499711

Course	Title	Credits
General Education and Technical Core Subtotal		33-36
AIT 2001	Integrated Process Management	2
AIT 2002	Quality Control and SPC	2
AIT 273	Intermediate Robotics	3
AIT 275	Intermediate Programmable Logic Controllers	4

AIT 277	Advanced Programmable Logic Controllers	4
AIT 280	Automation Capstone	3
CAD 100	Introduction to Computer Aided Design	3
Automation and Industrial Technology Elective Courses <sup>1</sup>		6
<b>Total Credits</b>		<b>60-63</b>

## Multi-Skilled Maintenance Technician Track

Offered at: Madisonville Community College

Program Plan Number: 150499712

Course	Title	Credits
General Education and Technical Core Subtotal		33-36
AIT 1003	Hydraulic/Pneumatic Fundamentals	1
AIT 1102	Fluid Power Distribution	2
AIT 1202	Piping & Pneumatic Installation	1
AIT 1203	Mechanical Installation	1
AIT 1402	Basic Pneumatic Controls	1
AIT 1403	Basic Hydraulic Controls	1
AIT 1502	Intermediate Pneumatic Controls	1
AIT 1503	Intermediate Hydraulic Controls	1
AIT 2101	Predictive/Preventive Maintenance and Lubrication	1
AIT 2102	Power Transmission Systems	1
AIT 2103	Advanced Mechanical	2
Automation and Industrial Technology Elective Courses <sup>1</sup>		14
<b>Total Credits</b>		<b>60-63</b>

<sup>1</sup> Automation and Industrial Technology approved elective list (<https://catalog.kctcs.edu/programs-of-study/aas/advanced-integrated-technology/#technicalelectivestext>). The courses on this list are approved as technical electives but may not be duplicated from the technical core listing in the Automation and Industrial Technology program. Students may select other courses as approved by the Automation and Industrial Technology Program Coordinator.