

# ADVANCED MANUFACTURING TECHNOLOGY, A.A.S.

The **Associate of Applied Science in Advanced Manufacturing Technology (AAS AMT)** prepares graduates for careers in the manufacturing sector. Advanced manufacturing technology graduates repair, troubleshoot and maintain a variety of manufacturing equipment including commercial electrical and mechanical systems. Hands-on courses give our graduates practical experience in automation, instrumentation and process control systems, as well as basic machining skills in order to facilitate working with modern equipment.

## Milestone Course

These courses are the keys to graduation and certification. Courses should be taken in the recommended semesters to stay on time for completion. You will see the milestone course(s) on each academic map for appropriate program(s).

## Career Planning

With the AAS in AMT, some potential careers are Multi-craft Technician, Electrical and Instrumentation Technician, Pipefitter, Millwright, Industrial Maintenance Technician and more. The average wage with these careers is: \$15.74 - \$26.15/hour.

When planning your classes with the academic map, students should average 15 credit hours per semester, or 30 per year, to graduate on time.

### Total Degree Credits: 60

Course	Title	Hours
<b>Semester 1</b>		
COLL 101	ORIENTATION TO COLLEGE <sup>7</sup>	0
ELEC 101	ELECTRICITY & ELECTRONICS FUND	3
ELEC 102	ELECTRICAL & INSTRUMENTATION 1	3
ELEC 103	ELECTRICAL & INSTRUMENTATION 2	3
ELEC 104	ELECTRICAL & INSTRUMENTATION 3	3
Quantitative Reasoning ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#qr">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#qr</a> ) Elective: (MATH 125 is preferred)		3
<b>Hours</b>		<b>15</b>
<b>Semester 2</b>		
Writing and Rhetoric ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#wr">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#wr</a> ) Elective: (ENGL 107 is preferred)		3
MTEC 102	INTRODUCTORY CRAFT SKILLS <sup>1,2</sup>	2
ELEC 202	ELECTRICAL & INSTRUMENTATION 4 <sup>1,3</sup>	3
ELEC 203	ELECTRICAL & INSTRUMENTATION 5	3
ELEC 204	ELECTRICAL & INSTRUMENTATION 6 <sup>1,4</sup>	3
<b>Hours</b>		<b>14</b>
<b>Semester 3</b>		
IM 101	INDUSTRIAL MAINTENANCE 1	3
IM 102	INDUSTRIAL MAINTENANCE 2 <sup>1,5</sup>	3
IM 103	INDUSTRIAL MAINTENANCE 3	3
Scientific Inquiry ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#si">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#si</a> ) Elective		4
Select one of the following:		3
Aesthetics, Creativity, and Appreciation ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca</a> )		
Human Communication and Interaction ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci</a> )		
People and Their Worlds ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw</a> )		
<b>Hours</b>		<b>16</b>
<b>Semester 4</b>		
Select one of the following:		3
Aesthetics, Creativity, and Appreciation ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca</a> )		
Human Communication and Interaction ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci</a> )		
People and Their Worlds ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw</a> )		
IM 225	ROBOTICS 1 <sup>1</sup>	3
IM 201	INDUSTRIAL MAINTENANCE 4 <sup>1,6</sup>	3
IDIT 202	ADVANCED INSTRUMENTATION 4	3
IM 254	CNC MACHINING 1	3
<b>Hours</b>		<b>15</b>
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Milestone Course

<sup>2</sup> NCCER Core

<sup>3</sup> EL NCCER Level 3

4 EL NCCER Level 4

5 IM NCCER Level 2

6 IM NCCER Level 3

7 Required 1-credit hour course, but is not counted in the degree total.

**Degree requires a total of 60 credit hours. [ Core Course Credit Hours : 16 ]**

Code	Title	Hours
<b>Core Courses</b>		
COLL 101	ORIENTATION TO COLLEGE <sup>1</sup>	0
	Writing and Rhetoric ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#wr">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#wr</a> )	3
	Quantitative Reasoning ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#qr">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#qr</a> )	3
	Scientific Inquiry ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#si">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#si</a> )	4
	Select two of the following:	6
	Aesthetics, Creativity, and Appreciation ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#aca</a> )	
	Human Communication and Interaction ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#hci</a> )	
	People and Their Worlds ( <a href="https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw">https://wvup-public.courseleaf.com/programs-study/general-education-mission/#ptw</a> )	
<b>Program Courses</b>		
IM 101	INDUSTRIAL MAINTENANCE 1	3
IM 102	INDUSTRIAL MAINTENANCE 2	3
IM 103	INDUSTRIAL MAINTENANCE 3	3
IM 201	INDUSTRIAL MAINTENANCE 4	3
IM 254	CNC MACHINING 1	3
IM 225	ROBOTICS 1	3
	Select one of the following:	3
	ELEC 101 ELECTRICITY & ELECTRONICS FUND	
	MTEC 103 INTRO TO MAINTENANCE TECH	
ELEC 102	ELECTRICAL & INSTRUMENTATION 1	3
ELEC 103	ELECTRICAL & INSTRUMENTATION 2	3
ELEC 104	ELECTRICAL & INSTRUMENTATION 3	3
ELEC 202	ELECTRICAL & INSTRUMENTATION 4	3
ELEC 203	ELECTRICAL & INSTRUMENTATION 5	3
ELEC 204	ELECTRICAL & INSTRUMENTATION 6	3
MTEC 102	INTRODUCTORY CRAFT SKILLS	2
IDIT 202	ADVANCED INSTRUMENTATION 4	3
<b>Total Hours</b>		<b>60</b>

<sup>1</sup> Institutional Graduation Requirement, but does not count in the degree total.