

ASSOCIATE OF APPLIED SCIENCE - MANUFACTURING TECHNOLOGIES - PRODUCTION SYSTEMS EMPHASIS

The manufacturing technologies production systems emphasis AAS degree program is a two-year program designed to provide training and technical job skills to students seeking employment and/or skill upgrades as a manufacturing, assembly, fabrication, or distribution manager or technician. The program utilizes an advanced automated systems lab in which students demonstrate and manipulate production system controls and techniques at both the technician and managerial levels.

Degree Outcomes

Students completing the degree will:

- Fulfill the requirements of the Associate of Applied Science.
- Demonstrate competency in their specified emphasis.

Emphasis Outcomes

Students completing the emphasis will:

- Read and interpret technical prints for inspection of manufactured and/or assembled products.
- Manage complex production systems, equipment, and controls.
- Apply quality and statistical process control techniques to complex production and distribution systems.

AAS degrees are generally non-transfer degrees that are designed for students to enter the workforce.

To earn an AAS degree, students must:

1. Maintain a minimum cumulative GPA of 2.0 (see requirements for graduation.)
2. Complete a minimum of 15 units within the college.
3. Satisfy General Education requirements for the AAS (<http://catalog.tmcc.edu/degrees-certificates/general-education/aas>).
4. Have no financial or library obligation to the college.

General Education Requirements

*Diversity*¹ [3]

Recommended:

AAD 201 History of the Built Environment

Communications/English 6

Required:

ENG 102 Composition II
or ENG 114 Composition II For International Students

Human Relations 3

Recommended:

MGT 171 Supervision (If planning on completing the BAS in Logistics Operations Management)

Mathematics [3]

Required:		
MATH 120	Fundamentals of College Mathematics (or higher)	3
<i>Science</i> 3		

Recommended:		
PHYS 100	Introductory Physics	
<i>Fine Arts/Humanities/Social Science</i> 3		

Recommended:		
AAD 201	History of the Built Environment	
<i>U.S. and Nevada Constitutions</i> 3		

Recommended:		
CH 203	American Experiences and Constitutional Change	
or PSC 101	Introduction to American Politics	

Degree Requirements

DFT 110	Print Reading for Industry	3
MPT 140	Quality Control	3
OSH 222	General Industry Safety	1

Emphasis Requirements

ECON 102	Principles of Microeconomics	3
LGM 201	Essentials of Logistics Management	3
LGM 208	Logistics and Quality Management Tools I	3
MPT 110	Automated Production Concepts I	3
MPT 135	Material Handling	2
BUS 225	Business Operations Applied Statistics	3

Elective Requirements

Select 15 units from the following: 15

BUS 101	Introduction to Business	
CADD 100	Introduction to Computer-Aided Drafting	
CE 290	Work Experience	
ELM 110	Electrical/Electronic Circuits	
ELM 233	Introduction to Instrumentation	
MPT 120	Automated Production Concepts II	
MPT 130	Automated Production Concepts III	
Any other MTT, LGM, or ELM course		

Total Units 60

¹ Course may also count toward degree requirements. Please consult with Academic Advisement.

Course	Title	Units
1st semester		
Humanities/Diversity ³		3
DFT 110	Print Reading for Industry	3
LGM 201	Essentials of Logistics Management	3
MATH 120	Fundamentals of College Mathematics (or higher)	3
MPT 140	Quality Control	3
OSH 222	General Industry Safety	1
Semester Total		16

2nd semester		
ENG 102	Composition II	3
Elective ³		3
ECON 102	Principles of Microeconomics	3
MPT 110	Automated Production Concepts I	3

Science ³		3
Semester Total		15
3rd semester		
Elective ³		6
Communications/English ²		3
BUS 225	Business Operations Applied Statistics	3
LGM 208	Logistics and Quality Management Tools I	3
Semester Total		15
4th semester		
Electives ³		6
Human Relations ³		3
MPT 135	Material Handling	2
U.S. and Nevada Constitutions ³		3
Semester Total		14
Total Units		60

² See approved General Education list for the AAS Degree. (<http://catalog.tmcc.edu/degrees-certificates/general-education/aas>)

³ See program recommendations or requirements.