

Mechanical Engineering Technology A.A.S. (MEC)

This program prepares students to transfer to a four-year college or university offering a bachelor's degree in technology or to obtain entry-level employment in industry. The program provides students with knowledge and experiences in the areas of computer-aided drafting (CAD), robotics, and computer-aided manufacturing (CAM).

A student wishing to transfer should confer with the four-year college or university to ensure that the necessary transfer requirements are being met. Students who wish to obtain employment directly upon graduation are expected to be qualified for jobs as a detail and design draftsman, product designer, machine designer, tool designer, as well as to be involved in industrial planning, manufacturing, and sales.

Upon successful completion of this program, graduates will be able to:

- use common standards and symbols to make detail and assembly drawings according to accepted industrial practice.
- adapt to the various special areas of drafting, such as drafting of electronic schematics, piping, welding, and structural.
- understand the differences between various common manufacturing materials and possess the knowledge of the processes available to transform these materials into finished products.
- understand and apply the basic principles of fluid power.
- operate a typical computer drafting system.
- organize and write a technical report indicating the data that was determined for the selection of a machine component.
- determine by calculation the various operational values related to machine components, such as force, speed, and power.

First Semester		Credits
ENG 105	Research and Composition	3
MET 101	Mechanical Print Reading	3
MET 104	Manufacturing	3
Elective*	Mathematics	3-4
Elective	Social Science/Humanities	3
		15-16

Second Semester		Credits
BGT 103	Fluid Power	3
ENG 106	Introduction to Literature	
or ENG 107	Writing in the Workplace	3
MET 111	Computer-Aided Drafting	4
MET 115	Computer-Aided Manufacturing	3
Elective*	Mathematics	3-4
		16-17

Third Semester		Credits
BGT 101	Basic Statics	3
MET 106	Mechanical Drafting	4
MTD 201	Basic Mechanisms	4
PHY 201	Introduction to Physics I	4
ENG 111	Speech	3
		18

Fourth Semester		Credits
BGT 102	Strength of Materials	3
MTD 206	Machine Design	4
MTD 208	Tool Design	4
PHY 202	Introduction to Physics II	4
Elective	Social Science/Humanities	3
		18
Credit Total		67

Students enrolling in this program must have completed high school Algebra III or its equivalent (MAT 160).

*Mathematics electives are MAT 165, MAT 191 or higher.

Prior Learning Assessment: Previous job training, certificates and work experience that may qualify for college credit (*see academic advisor*).

Gateway Courses: Based on placement testing in reading, writing and math, these prerequisite courses may have to be taken before placement in College English or Mathematics beginning the first semester and concurrently.

RSS 099	Basic Skills Reading	3
RSS 100	Critical Reading	3
ENG 099	Basic Skills Writing	3
ENG 100	Fundamentals of Writing	3
MAT 090	Mathematical Literacy	6
ESL 251	English for Academic Purpose	6
		(Required for ESL students only.)

Please note, taking gateway courses will increase your time for completion.

