

# Mechanical Technology: Computer-Aided Design A.A.S.

This program is designed to prepare students for employment in the field of mechanical design and drafting, with an in-depth course of study in the technological aspects of the design profession.

## Degree Requirements

Computer-aided design and mechanical design concepts are integrated throughout the curriculum and used for second-year design projects. The curriculum incorporates generally-accepted design/drafting standards as well as subjects related to the construction and manufacturing industries, allowing graduates flexibility in seeking entry-level employment. The program is also appropriate for students who wish to transfer to a four-year institution in mechanical technology. Students wishing to continue studies toward a Mechanical Technology Engineering degree are encouraged to take a higher mathematics sequence (MATH 108-201) and PHYS 103-104.

## Academic Preparation

MATH 102 competency or equivalent strongly recommended.

## Career Possibilities

Architectural/mechanical drafter, engineering technician, mechanical designer, tool design, quality assurance, CNC machining, CAD designer.

## Transfer Information

Students should consult their advisers and/or the transfer counselor in the Student Development Center for information on transfer planning. Early consultation to plan the most appropriate course sequence will optimize transferability.

## Map your degree

Courses	Cr Hrs	Semester Completed	Grade
<b>First Semester</b>			
ENGL 101	Freshman English I	3	_____
ENGR 126	Computer-Aided Design	4	_____
MATH 102	Intermediate Algebra (or higher)*	3	_____
ENGR 103	Manufacturing Materials/Processes	3	_____
	Behavioral/Social Sciences or Humanities**	3	_____
	Health	1	_____
	Physical Education	1	_____
	<b>18</b>		
<b>Second Semester</b>			
ENGL 102	Freshman English II		
or ENGL 270	Technical Writing	3	_____
ENGR 228	CAD III Solid Modeling	3	_____
DRFT 122	Mechanical/Industrial CAD	4	_____
DRFT 125	Architectural Drafting	4	_____
MATH 104	College Algebra and Trigonometry		
or MATH 114	Technical Math (or higher)*	3	_____
	Physical Education	1	_____
	<b>18</b>		
<b>Third Semester</b>			
DRFT 221	Tool and Die Design	4	_____
DRFT 230	Process Piping Design	3	_____
PHYS 103	General Physics I	4	_____
ENGR 207	Quality Assurance	3	_____
	Technology Elective††	3-4	_____
	<b>17-18</b>		
<b>Fourth Semester</b>			
DRFT 220	Machine Design	4	_____
ENGR 203	Applied Statics/Strength of Materials	4	_____
ENGR 208	Computer Numerical Control	4	_____
	Behavioral/Social Sciences†	3	_____
ART 103	Essentials of Art		
or ART 112	Two-Dimensional Design		
or ART 113	Three-Dimensional Design	3	_____
	<b>18</b>		
<b>Total Credit Hours</b>	<b>71-72</b>		

\* Math 112, 115, or 116 will not fulfill the Math requirement.

\*\* Electives in Humanities or Behavioral or Social Sciences will fulfill requirement.

† Electives in Behavioral or Social Sciences will fulfill requirement.

†† The following will fulfill this requirement: BUS 225, BUS 226, C.S. 200 or higher, Drafting, Electronics, Engineering, GIS, Math, Physics.

