

Mechanical Design Technology

PROGRAM CODE: 10-606-1



Associate Degree



Location: Downtown Milwaukee Campus

Start Dates: August

Admission Requirement: High school diploma or GED and one year of high school-level algebra or equivalent

Transfer: Will transfer to one or more four-year institutions

Financial Aid Eligible: Yes.

Apply at fafsa.gov. Use School Code 003866.

Program Description

Get involved in the engineering design process — design and analyze mechanical components and assemblies. Create 3D solid models and 2D detailed drawings for parts or assemblies of mechanical and electromechanical systems using the latest computer-aided design/drafting (CADD) systems.

Career Outlook

The employment outlook is favorable for mechanical drafters/designers having current training involving CADD systems.

Program Learning Outcomes

- Prepare detail and assembly drawings for documentation of mechanical components and products.
- Create CAD geometry, parts and assemblies.
- Design mechanical components and products.
- Analyze mechanical engineering problems.
- Select purchased parts.



Complete Program Details

QUESTIONS? 414-297-6319 or stempathway@matc.edu

COURSE	CREDITS
CIVIL-102 Introduction to AutoCAD ^	2
CIVIL-105 Computer Applications ^	2
MATH-115 College Technical Mathematics 1 ‡ ^	5
(or) MATH-201 College Algebra (4 credits) ‡	
MCDESG-102 Technical Drafting 1 ‡ ^	3
MCDESG-162 Engineering Materials ^	2
MATH-116 College Technical Mathematics 2 ‡	4
(or) MATH-202 Trigonometry (3 credits)	
MCDESG-104 Technical Drafting 2 With CAD ‡ ^	3
MCDESG-114 SolidWorks 1 ^	2
MCDESG-160 Statics ‡	3
SOCSCI-197 Contemporary American Society	3
(or) Any 200-level SOCSCI or HIST course	
ENG-195 Written Communication ‡	3
(or) ENG-201 English 1 ‡	
MCDESG-106 Advanced Engineering Graphics ‡ ^	3
MCDESG-118 Kinematics ‡	3
MCDESG-124 SolidWorks 2 ‡ ^	2
MCDESG-130 Strength of Materials ‡	3
MCDESG-163 Machining Processes ‡ ^	2
ELECTIVES (Two credits)	2
ENG-196 Oral/Interpersonal Communication ‡	3
(or) Any 200-level ENG or SPEECH course	
MCDESG-112 Tool Design ‡	3
MCDESG-116 Design Elements ‡	3
MCDESG-125 Design Problems ‡	3
MCDESG-135 PTC Creo (Pro/E) 1	2
PSYCH-199 Psychology of Human Relations	3
(or) Any 200-level PSYCH course	

CREDITS

Total credits needed to complete this degree

64

‡ Prerequisite required.

^ Counts toward earning the Mechanical and Computer Drafting technical diploma.

Program curriculum requirements are subject to change.

Current MATC students should consult their Academic Program Plan for specific curriculum requirements.