



# Mechanical Design Technology

**ASSOCIATE DEGREE**

Program Code: 10-606-1

## Downtown Milwaukee Campus

Get involved in the engineering design process – design and analyze mechanical components and assemblies; and 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

### Admission Requirements

- A high school diploma or GED
- One year of high school-level algebra or equivalent



[matc.edu/academic\\_programs/pathways](http://matc.edu/academic_programs/pathways)

You can earn the Mechanical and Computer Drafting technical diploma on your way to completing this associate degree.

 **MILWAUKEE AREA *Technical College***  
School of **TECHNOLOGY** and **APPLIED SCIENCES**

## TECHNICAL STUDIES

## Credits

(1) CIVIL-102	Introduction to AutoCAD ^	2
(1) CIVIL-105	Computer Applications ^	2
(1) MCDESG-162	Engineering Materials ^	2
(1) MCDESG-102	Technical Drafting 1 ‡ ^	3
(2) MCDESG-104	Technical Drafting 2 With CAD ‡ ^	3
(2) MCDESG-114	SolidWorks 1 ‡ ^	2
(2) MCDESG-160	Statics ‡	3
(3) MCDESG-106	Advanced Engineering Graphics ‡ ^	3
(3) MCDESG-118	Kinematics ‡	3
(3) MCDESG-130	Strength of Materials ‡	3
(3) MCDESG-163	Machining Processes ‡ ^	2
(3) MCDESG-124	SolidWorks 2 ‡ ^	2
(4) MCDESG-112	Tool Design ‡	3
(4) MCDESG-116	Design Elements ‡	3
(4) MCDESG-125	Design Problems ‡	3
(4) MCDESG-135	PTC Creo (Pro/E) 1 ‡	2

## GENERAL STUDIES

ENG-151	Communication Skills 1 ‡	3
(&) ENG-152	Communication Skills 2 ‡	3
	(or) ENG-201‡ and any 200-series ENG or SPEECH course	
MATH-115	College Technical Mathematics 1 ‡ ^	5
	(or) MATH-201 College Algebra ‡	
MATH-116	College Technical Mathematics 2 ‡	4
	(or) MATH-202 Trigonometry ‡	
PSYCH-199	Psychology of Human Relations	3
	(or) Any 200-series PSYCH course	
SOCSCI-197	Contemporary American Society	3
	(or) Any 200-series HIST or SOCSCI course	
ELECTIVES	(Two credits needed)	2

**TOTAL CREDITS: 64**

( ) Semester order for full-time students.

‡ Prerequisite required.

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

Program curriculum requirements are subject to change.

This Associate in Applied Science program will transfer to one or more four-year institutions.

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



**For complete information, go to [matc.edu/tas](http://matc.edu/tas)**

To apply for financial aid, visit [fafsa.gov](http://fafsa.gov)  
School Code: 003866

## Possible Careers

- Design/Drafting
- Design Engineer
- Mechanical Designer
- Mechanical Drafter

## Related Programs

- Mechanical and Computer Drafting
- Architectural Technology
- Civil Engineering Technology
- Advanced Manufacturing Technology



[matc.edu](http://matc.edu) or 414-297-MATC  
Wisconsin Relay System 711

### Downtown Milwaukee Campus

700 West State Street

### Mequon Campus

5555 West Highland Road

### Oak Creek Campus

6665 South Howell Avenue

### West Allis Campus

1200 South 71st Street

### MATC Education Center at Walker's Square

816 West National Avenue, Milwaukee