



## Choose Your Career Path . . .

There are 16 Career Clusters in the National Career Clusters Framework, representing more than 79 Career Pathways to help students navigate their way to greater success in college and career! With so many options to consider, where do you start?

First, take a career assessment at your school, to help narrow down the choices that could be a great fit for you. Then start learning about those careers. What are the opportunities? The work environments?

Next, look at what kind of training you need to prepare for that career. Some positions offer on-the-job training. Others require some type of industry credential. Still others may require a post-secondary certificate or degree. What training do you need **to get the career you want?**

## Related Occupations

[Aerospace Engineering and Operations Technicians](#)

[Automotive Engineering Technicians](#) 🌟 🌱

[Drafters, All Other](#)

[Electrical Engineering Technologists](#) 🌟 🌱

[Electromechanical Engineering Technologists](#) 🌟 🌱

## Common Tasks

- Develop detailed design drawings and specifications for mechanical equipment, dies, tools, and controls, using computer-assisted drafting (CAD) equipment.
- Produce three-dimensional models, using computer-aided design (CAD) software.
- Lay out and draw schematic, orthographic, or angle views to depict functional relationships of components, assemblies, systems, and machines.
- Modify and revise designs to correct operating deficiencies or to reduce production problems.
- Review and analyze specifications, sketches, drawings, ideas, and related data to assess factors affecting component designs and the procedures and instructions to be followed.
- Check dimensions of materials to be used and assign numbers to the materials.
- Design scale or full-size blueprints of specialty items such as furniture and automobile body or chassis components.
- Compute mathematical formulas to develop and design detailed specifications for components or machinery, using computer-assisted equipment.

# Find Your Future!



The Engineering Technology curriculum provides the learner with working knowledge of engineering technology, including basic and advanced drafting and design principles using various 2D and 3D CAD systems, integrating Lean principles in the design process and knowledge of working with various measurement devices used in determining Quality Assurance of prototypes and finished goods.

## Engineering Technology - Mechanical Design

Triton College has several options for Degree and Certificate programs in the Engineering Technology field.

### Available 2-Year Degrees include:

- ➡ • Engineering Technology – Mechanical Design
- Engineering Technology—Mechatronics

### Triton Certificates include:

- ➡ • Engineering Technology—CAD Advanced
- ➡ • Engineering Technology—Design
- ➡ • Engineering Technology—Electrical
- ➡ • Engineering Technology—Fabrication
- Engineering Technology— Mechatronics
- Engineering Technology—Welding

# Can I See Myself Doing This?



Am I good with Things and Ideas?

Start your 2 Year Triton Degree Engineering Technology/Mechanical Design

	Course 1	Course 2	Course 3	Course 4
Course	ENT 110 Engineering Design Graphics/CAD	ENT 111 Metrology with Geo- metric Dimensioning	ENT 116 Fabrication Processes	ENT 280 Solid works Design & Rendering
Triton Credential	Engineering Tech / Fabrication Certificate	Engineering Tech / Fabrication Certificate	Engineering Tech / Fabrication Certificate	
	Engineering Tech / Mechanical Design Certificate	Engineering Tech / Mechanical Design Certificate		Engineering Tech / Mechanical Design Certificate
	Engineering Tech / Me- chanical Design Degree	Engineering Tech / Me- chanical Design Degree		

Get started in Engineering Technology with these courses that apply to the 2 year Engineering Technology/Mechanical Design Degree at Triton College. All four of the above listed courses qualify for dual credit!

Q: How does that help me?

A: This means you can request electives at Triton College that will:

- 1. Earn elective credit at your high school, AND
- 2. Earn college transcript credit at Triton, AND
- 3. Complete 3 courses towards a Certificate in Engineering Technology/Mechanical Design, AND 3 courses to an Engineering Technology/Fabrication Certificate, AND
- 4. Complete 2 courses towards this A.A.S. program—while you are in high school!

Ask your counselor about making space in your schedule to take dual credit classes that can help move you closer to your career goals!!

Are you ready to commit to building your future?

## JOB ZONE

**Education**— Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.

**Experience**— Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.

**Training**— Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

## Mechanical Drafter

EARNINGS—	Entry	Median Annual	Experienced
	\$39,553.	\$55,243.	\$66,221.
Hourly	\$ 19.02	\$ 26.56	\$ 31.84

Source: This information is based on O\*NET data. O\*NET is a trademark registered to the US Department of Labor, Employment and Training Administration.

## Technology

### Computer aided design CAD software

- Autodesk AutoCAD
- Autodesk AutoCAD Civil 3D
- Autodesk Inventor
- Autodesk Mechanical
- Autodesk Revit
- Bentley Microstation
- Bentley Navigator
- Computer aided design and drafting CADD software
- Computer aided design and drafting software CADD
- Dassault Systemes CATIA
- Dassault Systemes SOLIDWORKS
- Piping and instrumentation design PID software
- PTC Creo Parametric
- PTC Pro/Cable
- Reverse engineering software

## Credits

<https://careertech.org/manufacturing>

<https://illinois.virtuallmi.com/vosnet/lmi/profiles/profileSummary.aspx?>

session=occdetail&valueName=occupation&cbooccupation=17301300&cbooccupationTYPES=12

# What Will Your Story Be?

“Find something that captures your attention and go for it.”

“I just took a course in high school and I really enjoyed the work, so I decided to keep on going with it. I am going for my Associate’s Degree.”

# Get Paid To Do What You Love!