



What Does a Mechanical Engineering Technologist Do?

By Indeed Editorial Team

21 December 2021

Mechanical engineering technologists construct, install and test new and already in-use equipment as per industry standards. It's a highly technical profession, where **they** plan efficient, cost-effective assembly line operations and upgraded machinery components using three-dimensional computer-aided design (CAD) software. Learning more about the roles and responsibilities of a mechanical engineering technologist can help you decide if you want to build a career in the field. In this article, we discuss what a mechanical engineering technologist does, highlight how to become one and list the required skills.

What does a mechanical engineering technologist do?

The answer to the question, 'What does a mechanical engineering technologist do?' is that they have the responsibility of repairing, installing and maintaining mechanical systems. **They** collaborate with mechanical engineers on action plans for the design and operation of mechanical equipment. Mechanical engineering technologists execute **their** work by reading and interpreting design plans for proposed equipment manufacturing to prepare the layout for the assembly of components.

Here are some of the duties of a mechanical engineering technologist:

- conduct a review of project instructions and blueprints to ensure that engineers follow test standards and procedures
- develop, manufacture and assemble new or modified mechanical components for industrial equipment.
- establish and conduct tests on complete units and their components and document the findings
- compare test findings to design specifications and test objectives and make recommendations for the product or test method modifications
- calculate labour expenses, equipment life and available space in a plant
- evaluate design drawings for new or modified tools by measuring and comparing their measurements with the original specifications
- create layouts and drawings of the components and **their** assembly process, usually using a three-dimensional design software

How to become a mechanical engineering technologist

Here are the steps to become a mechanical engineering technologist:

Match the headlines with the paragraphs (1-4)

Get an internship

Continue your education

Look for a job

Earn your diploma in mechanical engineering technology

1. -----

Companies often seek candidates **who** have completed post-secondary education, which may include an associate degree in mechanical engineering technology. Mathematics disciplines, such as algebra and calculus, and mechanical-related courses, such as fluid dynamics and mechanical engineering design, are typically a requirement for this career. An associate degree programme in mechanical engineering technology typically takes two years to complete. Also, graduates may require to be capable of installing, maintaining and testing mechanical systems.

2. -----

Students majoring in mechanical engineering technology can obtain hands-on experience by doing internships through their school's MET programme. This internship enables technologists to begin applying what they've learned in the classroom to real-world situations. Interns can also assist an experienced mechanical engineering technician who can help **them** develop the essential abilities to achieve professional employment.

3. -----

Mechanical technology graduates can find employment as mechanical technologists in a variety of industries, including research and development, testing laboratories and manufacturing. As a future mechanical engineering technologist, it's beneficial to take precautionary measures at your workspace, as you may be working with various heavy machinery. Working as a mechanical engineering technologist may also require you to obtain several soft skills, such as communication and teamwork.

4. -----

Mechanical technologists who wish to advance their careers or seek employment in advanced mechanical engineering fields may consider doing further studies. They can do a bachelor's of science in mechanical engineering technology, which primarily consists of advanced subjects and additional laboratory time courses. Among the advanced courses offered in **this** program are 3D modelling, manufacturing procedures and project engineering.

Skills required to become a mechanical engineering technologist

Here are some basic skills necessary to succeed as a mechanical technologist:

Match the headlines with the paragraphs below (1-11)

Project management Analytical thinking Problem-solving
Composure Attention to detail
Computer proficiency Drafting skills
Teamwork Mathematical capabilities
Creativity Communication skills

1.....

Mechanical engineering technologists require strong written and spoken communication abilities to communicate **their** concepts and designs to clients unfamiliar with engineering jargon and systems. **They** also want to be precise in their explanations to ensure that their clients and colleagues understand the design or concept and have confidence in its execution. They prepare technical reports from time to time and may feel comfortable expressing their ideas in the standard format.

2.....

As a mechanical engineer, it's important that you be able to generate innovative concepts and designs that outperform existing models to address existing challenges. This is critical when designing new and more efficient machinery. It also frequently requires innovative methods of maintaining old systems. It's vital for you to be able to see errors and other factors that impede productivity and creativity. **These** are the kinds of issues that mechanical engineering technologists are quick to address. Thus, creativity is necessary for developing superior mechanical systems and achieving success in this career field.

3.....

Proficiency in mathematics is a critical skill in mechanical engineering technology. You can gain and hone this knowledge at any stage of the educational process. Mechanical engineering technologists utilize mathematical abilities to obtain precise scales for designing and measuring prototypes and implementing them. The capacity to identify and remedy such errors is often proportional to the extent of your mathematical expertise.

4.....

Mechanical technologists use computer software to design, perform technical calculations and draft prototypes for building industrialized machines. This is why good computer skills are a requirement for technologists. It's vital for you to be able to manipulate numbers, as this can aid in the development of accurate devices. These skills can enable you to rapidly acquire proficiency in widely used software tools, such as AutoCAD. Additionally, **they** prepare you to keep up with emerging technologies.

You can highlight your computer skills on your resume by including a list of software packages that you're familiar with. This enables hiring managers to determine whether you're capable of using the same software as the organization.

5.....

Mechanical engineering technologists can benefit from meticulous attention to detail to verify that all mechanical system components function correctly. This ability is also necessary for *them* to design systems that adhere to standards, are safe and fulfil the purpose intended. Mechanical engineering technologists require to be very precise while conducting quality inspections to identify potential problems or opportunities for improvement.

6.....

Mechanical engineering technologists often work under pressure. They may frequently face tight deadlines, and as a result, it's vital for them to maintain their composure to do their work efficiently. Additionally, they may be under pressure to meet the requirements and expectations of their clients and employers. Controlling their emotions enables mechanical engineers to overcome difficulties, stay focused on their duties and keep confident.

7.....

Mechanical engineering technologists can also use their problem-solving skills to produce innovative products. This is because the majority of their job entails resolving issues for clients or employers. It may be beneficial for them to be able to find out ways to improve operations. Typically, they test prototypes to identify flaws and develop solutions. By analyzing challenges, mechanical engineering technologists can develop strategies for improving performance and achieving the desired outcome.

8.....

Mechanical engineering technologists frequently collaborate in interdisciplinary teams with other engineers. They may also collaborate with engineers from different specialties, such as scientists and architects, during their work. This is why the ability to work in a team setting to finish projects may aid them in succeeding in this role. Additionally, it's vital that they are able to collaborate with a broad group of individuals outside their teams, such as stakeholders and plant operators, to reach project deadlines.

9.....

It's vital for mechanical engineer technologists to have strong drafting abilities. Digital drafting is a novel technology that has become the industry standard for all mechanical engineering organization and job roles. Manual drafting and sketching abilities can be exceptionally helpful for innovation. On a digital device, digital skills enable you to build, create, test and maintain machines and are more efficient than drafting by hand. Candidates can acquire technical skills through academic training and then hone them through practice and work experience.

10.....

Mechanical engineer technologists can make good decisions through the use of critical thinking. When creating, they prioritize the company's needs and seek out the most cost-effective solutions. Mechanical

