

Virtual Learning Unmanned Flight Safety and Operations

Career Exploration - Engineering Technician

May 22, 2020



Unmanned Flight Safety and Operations Lesson: May 22, 2020

Objective/Learning Target:

Students will learn about the career of an engineering technician and what requirements are needed to become an one.



Bell Work:

What do you think are the requirements for someone to become an engineering technician?



Let's Get Started:

Watch Videos:

- Engineering Technician or Engineer Which Is Better For You in 2020?
- What is an ENGINEERING TECHNICIAN?



Engineering Technology Career Info

Engineering Technicians help mechanical engineers design, develop, test, and manufacture mechanical devices, including tools, engines, and machines. They may make sketches and rough layouts, record and analyze data, make calculations and estimates, and report their findings.



Engineering technicians typically do the following:

- Evaluate design drawings for new or changed tools by measuring dimensions on the drawings and comparing them with the original specifications
- Prepare layouts and drawings of parts to be made and of the process for putting the parts together, often using three -dimensional design software
- Discuss changes with coworkers—for example, in the design of a part and in the way it will be made and assembled
- Review instructions and blueprints for projects in order to ensure that test specifications and procedures are followed and objectives are met



Engineering technicians typically do the following:

- Plan, produce, and assemble new or changed mechanical parts for products, such as industrial machinery or equipment
- Set up and conduct tests of complete units and their components, and record results
- Compare test results with design specifications and with test objectives and make recommendations for changes in products or in test methods
- Estimate labor costs, equipment life, and plant space



The median annual wage for mechanical engineering technicians was \$56,250 in May 2018. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than \$34,900, and the highest 10 percent earned more than \$85,430.

Mechanical engineering technicians typically need an associate's degree or a certificate from a community college or vocational—technical school. Community colleges offer programs similar to those in technical institutes but include more theory-based and liberal arts coursework and programs. Community colleges typically award an associate's degree. Vocational—technical schools include postsecondary public institutions that emphasize training needed by local employers. Students who complete these programs typically receive a diploma or certificate.



Engineering Technician Understanding

Use the internet to research the following questions:

- 1. Description of the occupation including main duties and responsibilities.
- 2. What are the education and training requirements for the occupation?
- 3. List other required qualifications such as licensing, certifications, etc.
- 4. What field of Engineering works closely with Engineering Technicians?
- 5. List the name of one person that you know of who is in an Engineering Technician (someone famous, use Google).