Curious About Careers: Mechanical Engineering

Do you like to build with blocks? Are you curious about how solar panels turn sun rays into electricity? Have you wondered how planes stay in the air? Do you wonder why putting gas into cars causes the wheels to turn? Do you like to design and create new things? If you do, a career in mechanical engineering might be right for you!

A mechanical engineer is responsible for coming up with and designing mechanical systems. Mechanical systems can include machine design, heating and cooling equipment, power generation, and product design. Products like the latest cellphone begin with an engineer coming up with the idea.

Mechanical engineers are in high demand right now. That means that there are a lot of job openings for mechanical engineers, but there aren’t enough people to fill those jobs. Because there is a high need for engineers, and the work requires specialized knowledge, engineers get paid more than some other careers.

To be a mechanical engineer, you need to graduate from college with a bachelor’s degree. During your years in college, you will learn problem-solving and critical thinking skills that will help you to succeed as an engineer.

Problem solving is very important in the field of mechanical engineering. People in this career need to be able to think about problems in different ways to figure out the best solution. You also need to be creative, because you may need to make something that’s never been made before. Attention to detail is important, as well. Many designs rely on a lot of little details that need to work together.
Mechanical engineers should also be very comfortable using a variety of tools, such as calculators, high-speed cameras, measurement tools, and computers to assist them in completing their job. There are many computer programs mechanical engineers use to create designs in 3D, run scenarios, and analyze calculations. Engineers also use computers for research.

As with many other jobs, mechanical engineers need to be able to meet deadlines and work well with other people. Some jobs can be done with just one person, but more often mechanical engineers are working on a team to complete a project. If an engineer cannot manage his or her time well and misses a deadline, the entire team gets delayed, which is not good for the company.

Some engineers work in an office, and some travel to different worksites while a machine or product is being built, so they can help solve any problems.

Mechanical engineering takes a lot of thought. It is a great career for people who like to make objects and machines work, solve problems, and be creative!
**Questions:**

1. What are two skills engineers should have to be successful?

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2. Why is it important for engineers to be creative?

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3. What does “high demand” mean in the 3rd paragraph? How do you know?

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4. A printing company may need engineers to design a machine to make magazines. What other type of company might need mechanical engineers?

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5. Would mechanical engineering be a good fit for you when you grow up? Why or why not?

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Answers:

1. What are two skills engineers should have to be successful?
   
   Two skills engineers should have to be successful are curiosity and interest in creating new things.

2. Why is it important for engineers to be creative?
   
   It is important for engineers to be creative because they are responsible for inventing and designing mechanical systems. It takes creativity to do this.

3. What does “high demand” mean in the 3rd paragraph? How do you know?
   
   High demand means greatly sought after or required by many people. There are a lot of job openings for mechanical engineers so they are greatly sought after.

4. A printing company may need engineers to design a machine to make magazines. What other type of company might need mechanical engineers?
   
   Answers will vary.

5. Would mechanical engineering be a good fit for you when you grow up? Why or why not?
   
   Answers will vary.