

WHAT IS AN ENGINEER?

CISCO SYSTEMS/CISCO LEARNING INSTITUTE GENDER INITIATIVE

Engineering is the art of applying scientific and mathematical principles, experience, judgment, and common sense to make things that benefit people.

In every step of product development, manufacturing, sales, and support, there is an engineer ready to solve a problem. For example, when people did not want to wait hours for their hair to dry, engineers designed hair dryers. When people needed to travel across bodies of water, engineers developed bridges. More recently, when we needed to transmit information around the world rapidly, engineers created computer networks and the Internet.

As an engineer, you can make a difference and help people solve problems that are important to society. For example, you can develop methods to help prevent pollution, create opportunities for space exploration, contribute to medical research, and create technologies that allow people to communicate around the world.

Engineers have the opportunity to make the wonders of the future a reality.

Type of engineer	Function
Development engineers	Implement ideas for new products or processes to solve a problem, based on the requirements from customers.
Design engineers	Take those ideas and fine-tune them into a working product or process. They design a product that incorporates the requirements from customers.
Production engineers	Take the product and figure out how to produce it in large quantities.
Test engineers	Look at the mass produced product and put it through a series of tests to make sure it works before they sell it.
Sales engineers	Get the word out about new products. They help customers decide how these products can be used to solve their problems.
Technical support engineers	Help customers solve problems during the installation of new products or processes.
Customer support engineers	Answer questions for the duration of the time that these products or processes are used.