Civil Engineer

Civil engineers design and supervise the creation of structures. Not just buildings - civil engineers work on everything from tunnels and dams, to highways and airports, to water and sewer systems. They use computer technologies and advanced materials to design structures that meet the needs of a growing population while protecting the environment, reducing the dangers from natural phenomenon like storms, and considering future needs of the community.

Examples of projects that civil engineers may work on:

- Ensure safe drinking water by managing a community's water reservoir
- Develop an art museum that provides state-of-the-art protection for paintings
- Cut down on airport delays by designing a better runway system
- Design the structure of one of the world's tallest skyscrapers
- Build cheap, sturdy shelters for victims of hurricanes and flooding

Education

A four-year college degree is required for most civil engineering jobs. Many civil engineers specialize in structural, hydraulic, water resources, environmental, transportation, or management positions and will seek engineering degrees specific to those fields.

Work Environment

Anywhere people build things, you can find civil engineers. Some work in offices, others on construction sites. Depending on the project, civil engineers can work regular business hours or longer.

Biography – Danielle

What I Do

I work with landfills to collect the landfill gas and utilize it as an alternative energy source. I am a project developer, which means my company identifies, finances and manages the projects.

Why Engineering?

Math and science were always easy and interesting for me. I initially chose engineering as a way to eventually pursue a medical degree. However, I learned along the way how much I love to solve problems and that's what engineers do. I wanted to work outside and be able to work on a variety of projects. Engineering offers a lot of flexibility.