

# What is Civil Engineering?

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Minnesota Department of Transportation

## Civil Engineers

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. Civil engineers ensure that these infrastructures are safe, functional, elegant and economically sound.

### Lifestyle

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.



### 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.

### Skills

There is no one “type” of person who becomes an engineer. Civil Engineers....

- Are Creative
- Like collaborating with others
- Are curious and persistent
- Want to make a difference
- Have a good grasp of physics and math
- Like solving problems and improving processes

### Examples

- Design a highway interchange
- Ensure safe drinking water by managing a community’s water reservoir
- Cut down on Airport Delays by designing a better runway system

### **For more information contact**

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