Civil Engineering

If you can dream it, civil engineers can build it! Almost every piece of infrastructure you see (and lots you don’t) were designed by civil engineers: buildings, bridges, tunnels, dams, highways, airports, water and sewer systems. Civil engineers meet the needs of the future by balancing human demands with the requirements for healthy, natural environments.

Where do Civil Engineers Work?
Civil engineers work in a variety of organizations, including:
- Structural Design Firms
- Geotechnical Consulting Firms
- Commercial Construction Firms
- Residential Development Firms
- Departments of Transportation

Civil engineering spans many disciplines, but is generally broken into a few subfields:
built environments, architectural, construction, geotechnical and earthquakes, transportation and water resources.

What do Civil Engineers Study?
To address the complex problems we face with designing and implementing infrastructure to serve a growing population, civil engineers need to understand a wide array of systems and how they interact. Designing energy and resource efficient structures, roads, bridges and treatment systems requires engineers to have an understanding of properties of materials, computer-aided design, environmental factors, statics and dynamics. Civil engineers collaborate with other engineers on heating and cooling systems, electrical systems and finding ways to minimize environmental impact of new construction.

Explore Our Civil Curriculum
**Grades 3-5:**
Dam Forces
Test & Improve: Making Tall & Strong Recycled...
Building Our Bridge to Fun!

**Grades 6-8:**
Protecting Our City with Levees
Breaking Beams
Construction Technologies: Create the Strongest...

**Grades 9-12:**
Preventing Potholes
Pump It! Design-Build-Test Helpful Village Water...
Boom Construction

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