# **CIVIL ENGINEERING**

# Information provided by CHOICES Career &Education Advice

# WHO IS A CIVIL ENGINEER?

A civil engineer conceives, designs and maintains infrastructure and systems in both the public and private sectors. These could include roads, buildings, airports, tunnels, dams, bridges and systems for water supply and sewage treatment. Every time we open a water faucet we expect water to come out without even knowing that a civil engineer played a very important part in this process.

Civil engineering is arguably the oldest engineering discipline. It can be traced back to the first time someone ever placed a roof over their head or laid a tree trunk across a river to make it easier to get across. Civil engineering is the application of physical and scientific principles for solving the problems of society. It is a wide-ranging profession, including several specialized sub disciplines.



## WHAT THE WORK INVOVLES:

A typical day for a civil engineer might include:

 Analysing long term plans, survey reports maps and other data to plan and design projects

- Reviewing construction costs, government regulations, potential environmental hazards and other factors during the planning and risk analysis stages of a project
- Compiling and submitting permit applications
- Managing the repair, maintenance and replacement of public and private infrastructure
- Establishing building locations and site layouts
- Preparing cost estimates for materials, equipment and labour to determine a project's economic feasibility

A career in civil engineering can be very rewarding. You will work on very complex projects and seeing the project reach its completion will give you great satisfaction.

Many civil engineers are project supervisors. It is common to have to split work time between working in an office and working outdoors at a construction or project site. Work may not be close to home as project sites may be great distances away.

#### WHO IS THIS CAREER FOR?

A civil engineer should have great organisational, decision-making and leadership skills. Such a professional must be able to communicate well with others in various settings. Having a clear thought process and being able to think through complicated problems are also necessary traits.

#### WHAT CAN I EARN?

As a civil engineer you can earn a median or higher-level salary but this may vary depending on the institution in which you work, whether private or public and the position which you hold.

## **HOW DO I QUALIFY?**

During your high school years, mathematics, statistics and science classes are a must particularly physics. Then after which a bachelor's degree in civil engineering or civil engineering technology is required.

### WHO OFFERS TRAINING IN JAMAICA?

The University of the West Indies
The University of Technology

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