# **CIVIL ENGINEER**

## **DESCRIPTION**

Civil engineers play a mandatory role in society. They are responsible for maintaining the overall safety of society in a number of ways. From constructing highways and buildings, to bridges and tunnels, the responsibilities of civil engineers are many.

### **SKILLS**

- Communicating through problem-solving, research, teamwork and presentations
- Ability to maintain overview of an entire project while paying attention to detail
- Management ability and supervisory skills
- Written Communication Skills
- Oral Communication Skills

#### **DUTIES**

- Design major civil projects such as buildings, roads, bridges, water/waste management systems
- Develop construction specifications and procedures to meet guidelines or regulations
- Monitor air, water and soil quality and develop procedures to clean up contaminated sites
- Conduct technical analyses of survey and field data for development of hydrological and prepare reports

# **EDUCATION**

- A bachelor's degree in civil engineering or in a related engineering discipline is required
- Licensing by a provincial association of professional engineers is required to approve drawings, reports and to practice as a Professional Engineer (PEO)

#### **RELATED PATHWAY OPTIONS**

Estimator

CAD Technician

Civil Engineer Technologist

Municipal Engineer

SALARY RANGE \$65,000 to \$150,000

#### WHERE TO TRAIN

N/A



#### **EDUCATION OPTIONS**

CARLTON UNIVERSITY CIVIL ENGINEERING

LAKEHEAD UNIVERSITY CIVIL ENGINEERING

MCMASTER UNIVERSITY CIVIL ENGINEERING

RYERSON UNIVERSITY CIVIL ENGINEERING

UNIVERSITY OF TORONTO CIVIL ENGINEERING

UNIVERSITY OF WATERLOO CIVIL ENGINEERING

UNIVERSITY OF WESTERN ONTARIO

CIVIL ENGINEERING UNIVERSITY OF WINDSOR

UNIVERSITY OF OTTAWA CIVIL ENGINEERING

## **GETTING STARTED**

# THE OCCA CAN HELP YOU EXPLORE THESE THREE PATHWAYS:

- You can begin by applying for a job directly in the Construction Industry. Once you begin working with a Construction Company or Contractor you will quickly gain the necessary skills needed to advance yourself through in-house, work-as-you-learn training.
- You can get started through an apprenticeship program by combining on the job training with technical in-class training, gaining experience and increased responsibility. You can work in the industry, get paid, and work towards earning credits.
- You can enroll in a University, Community College or a Private Technical School to study and prepare yourself for a Career in Construction. All of this information may be found through our website.



