

# CIVIL ENGINEERING TECHNICIAN



We need Civil Engineering Technicians to keep mines operating safely and efficiently. They are vital members of the mine's engineering department and the specialized team that designs and builds new mine infrastructure and maintains existing infrastructure.

## JOB DESCRIPTION

- Perform scheduled mine-wide surveys (e.g. face advance and drilling surveys, ventilation) and collection of data
- Conduct surveys and mapping of planned new excavations in an operating mine
- Inspect concrete, shotcrete, steel and timber to ensure surface and new areas undergoing underground construction is completed as per specifications
- Collect samples and carry out tests on materials samples
- Write regular reports, diagnose issues, develop and communicate corrective actions
- Assist with preparation, review and updating of civil and mechanical construction drawings using AutoCAD or other software
- Work with the mine planning and projects teams
- File and maintain engineering drawings and documents
- Install ground control instrumentation and read electronic instrumentation
- Make arrangements with mine operations personnel for equipment requirements, and physical installation of the instrumentation station
- Maintain and repair instrumentation stations

## SUCCESS PROFILE

- Good at math, with interest in technology, information technology and science
- Identifies issues and solves problems with a positive attitude
- Committed to precise and accurate data collection
- Has respect for and understanding of safety procedures, regulations and legislation
- Learns quickly, especially detailed legislative, technical and production information
- An organized critical thinker with strong communication, computer, interpersonal and troubleshooting skills

## JOB ENTRY REQUIREMENTS

**Note:** The requirements listed below illustrate what it takes to start the career and do not take into account on-the-job training given to new employees.

### Fixed Requirements

- Post-secondary diploma or degree (2 – 3 years) in a relevant engineering subject, or a suitable combination of education with experience in quality assurance / control for field and laboratory testing
- Proficiency with word processing, spreadsheet and email software
- Computer-based drafting and design experience in AutoCAD or mining specific software
- Must be able to pass a medical test
- Must be able to pass a drug test
- Willingness to work in a diverse environment
- Proficiency in language of operation

### Assets

- Red Seal certification
- Work experience as a foreman
- Training in business administration and leadership
- Post-secondary degree in Construction Science or Construction Management
- Willingness to relocate
- Other languages

## COMPENSATION

\$74,700      \$80,600      \$93,400

AVERAGE

(Source: Canadian Mine Salaries, Wages & Benefits: 2018 Survey Results, InfoMine USA, 2018).

## JOB PROSPECTS

### Demand in Mining

1      2      3      4      5

LIMITED

GREAT

### Skill Transferability Among Other Industries

1      2      3      4      5

LOW

HIGH

## WHY ARE PEOPLE ATTRACTED TO THIS CAREER?

Civil Engineering Technicians enjoys a challenging variety of projects and appreciate the chance to work with new technologies.

## WHAT IS IT LIKE TO WORK AS A CIVIL ENGINEERING TECHNICIAN IN MINING?

**Note:** conditions vary according to employer and region.

Civil Engineering Technicians are likely based in an office or laboratory on (or near) the mine site, but spend most of their time in the mine. They are often required to work safely in confined spaces, at heights and near open holes, and must be willing and able to climb ladders and steel ramps on the surface and underground.