

Job Description

Summer 2015 Engineering Student Co-op(

Job Number:

07096)

Description

Job Duration: Summer Term (May 2015 - August 2015)

Compensation: Wage determined by class standing

Job Status: Minimum 32 hours per week, prefer 40 hours per week

Work Environment: Office, Field, & Power Plant

Locations: Various

Key Accountabilities

Students will work with engineers and other office personnel to:
Provide support in updating and managing data input for engineering databases; Document and develop a new database to track performances or provide information for evaluation or analysis;
Perform equipment analysis, troubleshooting and problem solving;
Collect, analyze and input trend data; Prepare reports on equipment;
Perform engineering calculations in the areas of thermodynamics, heat transfer and fluid flow; Communicate with vendors/suppliers and other engineers at a variety of levels to discuss/resolve technical issues, equipment availability, costs etc. Understand and interpret various graphs; Assist with process improvements, writing standard work instructions, prepare monthly reports for management, track performance of projects, update and create process flow charts;
Improve data integrity of database and spreadsheet formation.

Other assignments include:

- Perform testing on various equipment
- Prepare statistics on various aspects of power plant, distribution and gas equipment
- Assist in analysis of electrical equipment problems
- Support and observe field activities to develop an understanding of what is required to maintain, repair, operate, install, and test substation, overhead, underground, and power plant electrical equipment
- Analyze gate station regulation repair planning
- Participate in system studies using system modeling software
- Record research to determine original installation components

- Analyze exiting station modes of operation, project information coordination
- Conduct database maintenance and reporting
- Track materials and project sequence planning
- Categorize typical regulator, valve and meter types
- Learn and implement Continuous Improvement Methodology

Qualifications

Must be a Graduate or Undergraduate student majoring in Engineering or Engineering Technology Degree (Mechanical, Civil, Chemical, Electrical, or Industrial), with a minimum 2.7 grade point average.

The DTE Energy Co-op Program requires students to be able to complete two co-op rotations, alternating between work and school prior to graduation. It is preferred that, students must have completed their program pre-requisites and are taking courses specific to their major. Students should be knowledgeable in fluid mechanics, process economics, thermodynamics, heat transfer and the ability to read flow charts and technical drawings statistics. Students are expected to have above average skills working with Word, Excel, and Power Point. Access, GIS Mapping Systems, Visio, Six Sigma and Lean Operating Principles experience a plus. Students should possess good written and oral communication and organizational skills, demonstrate the ability to work effectively with people at all levels and be safety conscious at all times. Also, students should be physically capable of working in a Power Plant or Field Environments.

Job Type

Student Co-op

Primary Location

Michigan-Southeast Michigan-Detroit

Is this position covered under a Collective Bargaining Agreement? No

This position is a Department of Transportation (DOT) covered position and must pass DOT drug screen and is subject to random drug testing. No

NERC-CIP Authorization: This position will require authorized unescorted access (cyber and/or physical) to NERC-CIP (North American Electric Reliability Corp. — Critical Infrastructure Protection Cyber Security Standards) controlled assets or documents? No

CFATS Authorization: This position will require authorized unescorted access to restricted areas and/or access to critical assets of a CFATS (Chemical Facility Anti-Terrorism Standards) designated High Risk Chemical Facility? No