

**UNIVERSITY OF VICTORIA  
CUPE LOCAL 951 POSITION DESCRIPTION**

<b>JOB:</b> Technician/PB13B	<b>TITLE:</b> Technician – Civil Engineering Program
<b>DEPARTMENT:</b> Civil Engineering	<b>POSITION NO:</b> <b>992797</b>
<b>SUPERVISOR:</b> Lab Supervisor	<b>LAST UPDATED:</b> May 2017

**SUMMARY:**

The Civil Engineering Department is part of the Faculty of Engineering and offers degree programs at the undergraduate and graduate levels.

This position reports to and works closely with the Lab Supervisor on a day-to-day basis.

The Civil Engineering Program Technician maintains, calibrates, repairs, and modifies a diverse array of scientific laboratory instrumentation and equipment to support teaching, research, and administration in the civil engineering program, and fulfills other duties as required. The areas of civil engineering labs include environmental engineering, materials/structural engineering, and geotechnical engineering.

Responsibilities include, but are not limited to, diagnosing and calibrating existing inventory; reviewing manufacturers' specifications, schematics and costs for components; design and fabrication of specialized teaching and research equipment, in consultation with the course instructors, researchers and the Director of Civil Engineering Program; assist in the ordering of lab supplies; assist in the development and setting-up of course labs; recommends procedures for the safe use of lab equipment; assist in cost recoveries by compiling information for secretarial staff to enter in the FAST Financial Service Journal Voucher system; and other duties of similar scope and complexity.

**MAJOR RESPONSIBILITIES AND DUTIES:**

**1. Responsibility:** Hardware support of various equipment including electronic, mechanical, computer systems equipment – 60%

**Duties:**

- Maintains, calibrates and repairs equipment in one or a combination of materials/structural, geotechnical, environmental, computer undergraduate teaching and drop-in labs, the research labs and the administrative, staff and faculty offices. .
- Maintains and repairs specialized equipment found in civil engineering program labs.
- Assists course instructors in the development and setting-up of labs for course lab deliveries.
- Assists in demonstrating the use of lab equipment to teaching assistants.

- Maintains and repairs the audio visual equipment, projectors, control units, cabling, etc. in the labs.
- Installs newly acquired computer equipment and software, reconfigures existing equipment layout and repairs damaged parts. Computer systems include both laptops and PCs running both Microsoft Windows or Linux, and Macs running OS X. These computers span teaching, research and administrative roles.
- Maintains and repairs department undergraduate lab and administrative printing equipment.
- Maintains the undergraduate labs in a clean, safe and orderly manner as required by Occupational Health and Safety.
- Prepare for and co-ordinate the disposal of redundant teaching or research materials and/or equipment.
- Repairs a variety of equipment in research labs.

**2. Responsibility:** Design, build, develop and consult – 20%

**Duties:**

- Designs, builds and tests specialized hardware for undergraduate teaching labs.
- Develops and maintains an in-house capability for testing, repair and cleaning of equipment.
- Develops detailed specifications for procurement of scientific laboratory instrumentation and equipment, computers, its peripherals and related parts.
- Consults with, and advises (where appropriate), faculty, students and staff regarding instrumentation and equipment needs and specifications.

**3. Responsibility:** Fiscal responsibilities – 10%

**Duties:**

- Prepares and presents cost estimates pertaining to construction of lab teaching aids.
- Researches cost and availability of parts for the repair of administrative and lab equipment.
- Orders parts, lab supplies as necessary.
- Maintains an organized filing system for parts invoices and receipts copies.
- Assist in cost recoveries by compiling necessary information for secretarial staff to enter in the FAST Financial Service Journal Voucher system.

**4. Responsibility:** Technical resources & Safety Policy and Procedures – 10%

**Duties:**

- Maintains a technical resource library of departmental manuals, schematics, data sheets and documents.
- Provides safe handling and technical advice to students, staff and faculty regarding lab equipment operation.
- Recommends procedures for the safe use of electronic and lab equipment.
- Safe handling of chemicals in environmental lab may be required.
- Researches and keeps-up-to-date on new developments in scientific instrumentation/equipment, software, computer systems used in civil engineering undergraduate labs.

**REQUIRED QUALIFICATIONS:****Skills:**

- Strong communication and organizational skills and the ability to work effectively as part of a team;
- Resourcefulness, and the ability to work independently with minimal supervision;
- Ability to design and set-up data acquisition systems including hardware and the appropriate computer interface using NI;
- Ability to repair, calibrate and maintain various scientific instrumentation and equipment;
- Ability to prioritize and perform detailed work accurately in a fast paced environment with constant interruptions;
- Ability to repair and maintain a variety of computers. These would include PCs running either Microsoft Windows or Linux, Apple Macs running OS X;
- Ability to repair and maintain various other electronics such as printers, photo copiers, projectors;
- Ability to work and communicate effectively with students, faculty and staff in a friendly and professional manner;
- A working knowledge of building electrical, plumbing and mechanical systems.
- Good logical deductive reasoning abilities and strong troubleshooting skills.

**Specialized Knowledge/Education:**

- A recognized technical institute diploma and related practical experience. Civil engineering diploma preferred.
- Knowledge and experience in troubleshooting and repairing electronic, mechanical devices.
- Proficiency in Excel, Word, Power Point and any software(s) including Labview and others pertinent to the operation of the work unit.

**Experience:**

A minimum of 2 years experience in the installation, repair and maintenance of assorted scientific instrumentation, computer and laboratory equipment.

**Employee's Signature:****Date:****Supervisor's Signature:****Date:**