



NUCLEAR WASTE MANAGEMENT ORGANIZATION
SOCIÉTÉ DE GESTION DES DÉCHETS NUCLÉAIRES

The **Nuclear Waste Management Organization** is responsible for the safe, long-term management of used nuclear fuel in Canada. The approach it is implementing, known as Adaptive Phased Management (APM), involves developing a centralized underground repository, supported by a robust social and technical research program in collaboration with Canadian universities, consultants and international waste management organizations.

Join our growing team of scientists, engineers and other professionals to work collaboratively with Canadians in implementing our management approach in a manner that safeguards people and respects the environment, now and in the future.

**Development Intern Student Opportunity – Engineering
Buffer Systems and Emplacement**
(One position available)

We are currently seeking a development intern student (May 1, 2019 to August 31st, 2020) with the Engineering department at our Proof Test Facility at 2009 Wyecroft Rd., Oakville.

Responsibilities:

This position would be ideal for a third to fourth year student enrolled in Nuclear, Mechanical, Geological, Physics / Mathematical Engineering with Mechanical option. Reporting to the Manager, Fuel Handling & Sealing System Design the student will support the engineering activities of the entire department.

The core objective of the role will be working with the Buffer Systems and Emplacement team to assist senior engineers in the manufacturing of bentonite clay blocks, which act as a protective buffer using a robotic shaping cell, to support a future full-scale emplacement trial using novel semi-autonomous equipment. Responsibilities will include:

- Assist and/or lead in the procurement of high quality raw materials and implementation of quality assurance / quality control procedures including coring, sample logging, and laser scanning for raw bentonite and highly compacted bentonite,
- Support technical staff in the fabrication process including operation of a robotic shaping cell and documenting results of trials,
- Assist in the definition and development of a full scale demonstration experiment integrating all aspects of the NWMO developed emplacement technology,
- Conduct literature research to support the above objectives and prepare summary reports with recommendations,
- Assist in inputting technical reports and drawings into configuration management software to ensure quality assurance,
- Assist in engineering measurement/testing and associated documentation.

In addition, there will be opportunities for the student to participate in a wide spectrum of engineering tasks, such as:

- Perform simple engineering calculations (e.g. using Excel spreadsheet, MATLAB, MathCAD or by hand) and documentation;
- Assist in the development of CAD models for mechanical systems or repository systems using commercial modeling software (e.g. Solidworks);
- Perform verification of engineering calculations done by other engineering staff;
- Review and quality check technical reports and drawings prepared by other engineering staff;
- Conduct vendor and market search for specific engineering services or products;
- Assist in the development of technical illustrations and presentations using MS Office and other software;
- Assist in the preparation of engineering procurement documents;

The student will be given tasks based on business need and the student's knowledge/skill level. Training and guidance will be provided to the student regarding the assigned tasks. Occasional travel to NWMO's Toronto Head Office (22 St. Clair Ave East) and vendor sites may be required.

Qualifications & Experience:

- Currently enrolled in the third or fourth year of a Bachelor's Degree program of engineering with a focus on Nuclear, Mechanical, Geology, Physics / Mathematical Engineering with Mechanical option;
- Hands-on design or manufacturing experience through previous student positions, co-ops, capstone projects, and/or extracurricular teams (e.g. mini-Baja, solar team, Formula SAE, etc.) is required.
- Knowledge of office applications (i.e. MS Word, MS Excel, MS PowerPoint, Acrobat Professional, etc.) is required. Knowledge in MS Excel VBA would be an asset;
- Experience in CAD modeling using Solidworks (or similar software packages) and technical drawing preparation would be an asset;
- Experience in technical measurement, experimentation, and testing would be an asset;
- Ability to draft and edit scientific documents of a technical nature;
- Good oral and written communication skills;
- Good organizational skills and ability to manage large datasets;
- Attention to detail;

The applicant must be eligible to work in Canada and must be able to meet security clearance requirements.

EMPLOYMENT PERIOD:

May 1, 2019- August 31st, 2020 (16 months).

ELIGIBILITY

Students must be returning full-time to their program at their University following the completion of their work term or be a full-time student requiring the work term or co-op placement to graduate.

The NWMO supports the principles and practices of diversity and is committed to providing a respectful, accessible, and inclusive environment for all persons with disabilities in a way that is respectful of the dignity and independence of people with disabilities and in a manner which takes into account the person's disability and embodies the principles of integration and equal opportunity. The NWMO will provide accommodation to applicants with disabilities. If you require accommodation, please [Contact Us](#).

Please submit your application including your resume and cover letter by March 22, 2019 via e-mail quoting **Developmental Intern Student Opportunity – Engineering, Buffer Systems and Emplacement** to: Employment@nwmo.ca.