## Job Posting: 176751 - Position: S26 Co-op: System Designer - Digital Metrology and Data Hub 176751

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| **Co-op Work Term Posted:** | 2026 - Summer |
| **App Deadline** | 01/19/2026 11:59 PM |
| **Application Method:** | Through Employer Website |
| **Posting Goes Live:** | 01/08/2026 11:42 AM |
| **Job Posting Status:** | Approved |

## ORGANIZATION INFORMATION

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| **Organization** | NRC - National Research Council of Canada |
| **Address Line 1** | 5071 West Saanich Rd |
| **City** | Victoria |
| **Postal Code / Zip Code** | V9E 2E7 |
| **Province / State** | BC |
| **Country** | Canada |

## JOB POSTING INFORMATION

| | |
|---|---|
| **Placement Term** | 2026 - Summer |
| **<b> Job Title <b>** | S26 Co-op: System Designer - Digital Metrology and Data Hub 176751 |
| **Position Type** | Co-op Position |
| **Job Location** | Ottawa, ON |
| **Country** | Canada |
| **Duration** | 4 months |
| **Salary Currency** | CAD |
| **Salary** | 833.0 per week for 37.5 Major List |
| **Salary Range $** | From $833 to $1107 per week (37.5 hrs) |
| **Job Description** | |

**Job Title: Career Opportunities: Co-op: System Designer - Digital Metrology and Data Hub (24849)**

**Job ID:** 24849

**Closing Date:** <mark>Monday, 19 January 2026- 23:59 Eastern Time</mark>

Priority may be given to the following designated employment equity groups: women, Indigenous peoples* (First Nations, Inuit and Métis), persons with disabilities and racialized persons*.

* The *Employment Equity Act*, which is under review, uses the terminology Aboriginal peoples and visible minorities.

Candidates are asked to self-declare when applying to this hiring process.

**City:** Ottawa

**Organizational Unit:** Metrology Research Centre

**Discover the possible**

Anything is possible at the NRC, named in 2025 one of Canada's Top Employers for Young People, Top Employer in the National Capital Region and Forbes Canada's Best Employers!

As Canada's leading research and technology organization, our world-renowned research pushes the boundaries of science and engineering to make the impossible, possible. Every day we explore new ideas through innovative research and help companies discover possibilities that impact Canada's future and the world.

At the NRC, you'll also discover new possibilities. Our supportive workplace fosters a culture of creativity, welcoming fresh

perspectives and innovation at all levels. We value teamwork. You'll collaborate across multiple fields and with the brightest minds to find creative solutions. Most importantly, you'll discover what's possible within you as you grow, make valuable contributions and progress in your professional journey. From ground-breaking discoveries to a life-changing career, discover your possible at the NRC.

**Project Description**

The National Research Council of Canada's Metrology Research Centre is seeking a Co?op student to contribute to the Digital Infrastructure for Quantum Measurement Science Research - an initiative to build a digital repository for measurement and research data. The project supports NRC's digitalization goals and the international Digital SI initiative, which aims to make measurement data interoperable and machine actionable.

The successful candidate will develop experiment data workflows between instrument data acquisition and controls to the digital repository using REST APIs. They will also help design, test and incorporate data models and schemas that represent research and measurement entities such as instruments, calibration data, provenance and experiment research outputs.

This position offers the opportunity to apply data engineering and software development skills to advance digital metrology infrastructure, supporting Canada's leadership in measurement science and its integration with emerging quantum technologies.

**Length of term**

This is a **«16 week»** term.

Anticipated dates: starting 4 May 2026, ending 21 August 2026.

**Responsibilities**

• Design, develop and test software for transferring experiment data from instruments to the repository.

•Implement and use REST API interfaces for data integration.

•Contribute to the design of and incorporation of data models and schemas into the digital repository.

•Evaluate approaches for storing, managing, and exchanging metrology data consistent with FAIR principles.

•Assist in digital repository evaluation, testing and scalability.

**Compensation**

• From $833 to $1107 per week (37.5 hrs)

•Salaries are determined based on the student's work term.

**Notes**

• In 2025, the NRC was chosen as one of Canada's Top Employers for Young People, a National Capital Region Top Employer and Forbes Canada's Best Employer.

•The incumbent must adhere to safe workplace practices at all times.

# Job Requirements

**Education**

Preferred Education level: **(please indicate as required)**

• University Undergraduate, preference 3rd or 4th year in Computer Science / Computer Engineering and/or Physics.

**Requirements**

• Experience with Linux environments, Java, JavaScript, Python and Linked Data frameworks

•Knowledge of data modeling and exchange formats (UML, XML, JSON) and familiarity with relational, hierarchical, or NoSQL databases

•Experience in data analysis techniques such as data wrangling, filtering, and querying

•Familiarity with research data management principles and FAIR data practices is an asset

**Who can apply?**

**You are eligible for the NRC Co-op Program if:**

• You attend a Canadian university/college with a recognized co-op program

•You possess a minimum "B" academic average or equivalent

• Preference may be given to candidates with a "B+" academic average

•You are a Canadian citizen or permanent resident of Canada

• Foreign national students who meet the eligibility requirements, are studying in a recognized and eligible Canadian educational institution and possess a valid Co-op Work Permit may also apply

•For more detailed requirements and information on this possibility, please refer to the information found at Citizenship and Immigration Canada

**Condition of employment**

Reliability Status

For a Reliability Status, verification of background information over a period of 5 years is required.

**Citizenship Requirement**        N/A


# APPLICATION INFORMATION

**Application Procedure**        Through Employer Website
**Cover Letter Required?**        Yes
**Address Cover Letter to**        Hiring Manager
**Special Application Instructions**

**Application Link:**

https://career17.sapsf.com/sfcareer/jobreqcareerpvt?jobId=24849&company=nationalreP&st=6BD658A5C7CE5BB03369CFE6FE7

118A2817544F4

**Application requirements**

To be considered for the Co-Op program please include the following in your application. Failure to do so will result in your application being excluded.

• Cover Letter

•Resume

•Transcript

• We will accept the most recent university/ college transcript available.

•Please ensure that your full name is clearly indicated on your transcript.

**Closing Date: Monday, 19 January 2026- 23:59 Eastern Time**

**Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website. Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received. Students should submit their applications as soon as they are ready.**