



## IDENTIFICATION

Department	Position Title	
Aurora College	Engineering and Technology Projects Technician	
Position Number(s)	Community	Division/Region(s)
91-15239	Inuvik	Research Division

## PURPOSE OF THE POSITION

The Engineering and Technology Projects Technician supports engineering, computer science, and technology based applied research programs at Aurora College. The technician supports the Manager, Technology Development on the applied research, technology transfer, and educational outreach programs Aurora Research Institute (ARI) is delivering.

## SCOPE

Located in Inuvik and reporting to the Manager, Technology Development, the Technician is responsible for supporting the Manager, Technology Development in planning, organizing, and delivering applied research, technology transfer, and education initiatives in all regions of the Northwest Territories. The incumbent will be responsible for supporting the development of programs and proposals with other Aurora College staff.

## RESPONSIBILITIES

- 1. Coordinates applied research initiatives including proposal/program development, fieldwork, data collection, synthesis, and reporting.**
  - Carries out the collection of data, reporting, and preliminary analysis on ARI and ARI's partners engineering and technology applied research programs;
  - Supports all of ARI's energy related programs including biomass, oil and gas, wind, and solar projects; and
  - Monitors and enhances the existing reporting on the performance of solar and wind energy demonstration projects at ARI.
- 2. Provides support to all aspects of the development and delivery of technology transfer initiatives.**

- Supports ARI initiatives including program delivery and capacity development in robotics, engineering, computer science, and other Science, Technology, Engineering and Math (STEM) fields;
- Provides support for technology transfer initiatives;
- Develops initiatives to provide access and training to new technologies for the benefit of regional needs and economic development; and
- Develops educational materials and knowledge mobilization tools for STEM related education and the dissemination of knowledge created by ARI and ARI partners.

**3. Undertakes special project coordination.**

- Networks with local and territorial industry and local, territorial, and national funding agencies to develop and fund third party projects;
- Collaborates within the government to develop projects that benefit the mandate of ARI;
- Prepares detailed funding proposals that clearly describe the training, partners, support, job opportunities, methodology, and criteria for program evaluation;
- Develops partnerships with public, private, and not for profit organizations to collaborate on projects;
- Manages program partnerships to ensure timely program delivery;
- Subcontracts other resources as required;
- Initiates unsolicited proposals for new and existing projects; and
- Prepares detailed budgets, plans, and program evaluations that are reflective of costs of initiatives including in-kind support.

**4. Support outreach initiatives in the fields of engineering, computer science, and STEM generally.**

- Supports ARI educational outreach initiatives including development of materials, planning, and delivery; and
- Uses a range of technology including print, television, digital, and social media to raise awareness of STEM outreach activities in the region and to provide access to materials and content.

**WORKING CONDITIONS**

**Physical Demands**

No unusual demands

**Environmental Conditions**

The incumbent may be subjected to discomforts of the Northern climate. The incumbent is also faced with constant interruptions and must meet on a regular basis with others.

## **Sensory Demands**

The incumbent must spend long hours in intense concentration of both a technical and an interpersonal nature. The incumbent must be especially adept to listening to, and understanding, others from a variety of cultural backgrounds. The incumbent must also spend long hours on the computer which requires a great deal of attention and detail.

## **Mental Demands**

The incumbent will need to travel between various College locations and Beaufort Delta communities. The incumbent may be required to visit field locations to collect data, carry out inspections, or install equipment that may require travel by boat, snowmobile, or on foot. The incumbent will occasionally be required to work outside, and is therefore exposed to inclement conditions such as cold in the winter and insects in the summer. The incumbent is faced with mental demands stemming from the need to communicate with others constantly, the intensity of meetings, the need for attention to detail, and to provide instruction in a cross-cultural environment. Stress is also caused by the variety of program areas and the need to help others succeed in spite of significant barriers.

## **KNOWLEDGE, SKILLS AND ABILITIES**

- Strong knowledge and academic background in the fields of engineering and technology.
- Demonstrated technical writing, reporting, and data analysis skills.
- Excellent oral and written English communications skills.
- Experience with engineering and computer science software tools (Matlab, spreadsheets, Computer-Aided Design (CAD), Visual Studio or other development environments, and other engineering, math, and programming related software tools).
- Demonstrated knowledge in designing, implementing, and managing projects.
- Knowledge and experience in project assessment and evaluation.
- Knowledge of proposal writing process and working in partnership with other service agencies to deliver programs.
- Strong interpersonal and relationship building skills.
- Experience building and maintaining collaborative partnerships.
- Independent and innovative with the ability to take on new challenges.
- Must be able to work in a team environment.
- Self-motivated and able to motivate others.
- Knowledge, experience, and an understanding of working in a cross-cultural environment.
- Ability to use Microsoft Office, e-mail, Internet, and basic office equipment.
- Sound knowledge of Northern Canada.

## **Typically, the above qualifications would be attained by:**

- Completion of a Degree in Engineering or Computer Science; and

- Two (2) years of experience working in the field of Engineering, Computer Science, or other technology related field.

**Assets:**

- Awareness of Aurora College and structure of the Government of the Northwest Territories.
- Experience with software development and software development methodologies.
- Experience with fieldwork in a northern environment.
- Experience working for a post-secondary institution.
- Experience in the energy sector.
- Project management experience.

**ADDITIONAL REQUIREMENTS**

**Position Security** (check one)

No criminal records check required  
 Position of Trust – criminal records check required  
 Highly sensitive position – requires verification of identity and a criminal records check

**French language** (check one if applies)

French required (must identify required level below)  
Level required for this Designated Position is:  
ORAL EXPRESSION AND COMPREHENSION  
Basic (B)  Intermediate (I)  Advanced (A)   
READING COMPREHENSION:  
Basic (B)  Intermediate (I)  Advanced (A)   
WRITING SKILLS:  
Basic (B)  Intermediate (I)  Advanced (A)   
 French preferred

**Aboriginal language:** Choose a language

Required  
 Preferred