

# NTCO-CREATE Program Application Form

## Program Overview

NTCO combines expertise at the University of Victoria, University of Toronto/ Dunlap Institute, Laval University/ Mont-Mégantic Observatory, McMaster University, the NRC-Herzberg government laboratories, and at least six Canadian industrial facilities in order to develop a program in advanced instrumentation for engineering and science students. The NTCO program will place highly qualified students into industrial research labs, to study new directions in detectors, optics & photonics, focal plane, and manufacturing technologies. The training will be industrially relevant, produce internationally recognized research, and will involve hands-on training in leading edge research centers.

## Eligibility

Students will be selected for their academic skills and interests in astronomical instrumentation, and projects will be selected that best match the student's skill set. In order to be considered for admission into the NTCO-CREATE program, a student must be accepted into a Canadian graduate program, with a co-supervisor confirmed from one of the host institutes: University of Victoria, University of Toronto/ Dunlap Institute, Laval University/ OMM, and McMaster University.

In some instances, students from other Canadian universities can be accepted. Please contact the Program Coordinator for more information.

Undergraduates are also admissible, with the support of a NTCO faculty member.

The NTCO program is committed to diversity and inclusiveness.

## Value

Student internships with our industrial partners will provide hands on experience in industry and the benefit of supervision from experts in cutting-edge instrumentation laboratories. Students must commit to a minimum internship length of 2 months for undergrads (spread over 1 year), 4 months for MSc students (spread over 2 years), and 6 months for PhD students (spread over 3 years).

Professional skills training relevant to the needs of the program and participating students will also be offered, including a selection of MITACS Step workshops. Annual supplements to regular graduate student funding are available in the form of stipends, as well as support for travel to NTCO-related activities.

## Conditions

In order to participate in the NTCO program all students must:

- spend 20% of their academic time conducting research in Canadian industry
- complete the expectations of their programs at their home institutes
- participate in a summer school related to astronomical instrumentation (e.g. the Dunlap Institute Summer School) or equivalent
- participate in several short courses on professional skills (such as project management, risk assessment, costing and budgets, working on international teams, etc.)
- participate in NTCO events such as our annual general meeting

## NTCO Undergraduate Application

Submit this completed application form, along with your current CV and transcript, via email to the Program Coordinator at [ntco@uvic.ca](mailto:ntco@uvic.ca).

Name

Home Institution

Dept/Faculty

Program

Current year of program

Proposed NTCO supervisor

Industrial partner (if already identified)

Summary of research interests (max 100 words)

Applicant signature:

Date

By signing this application form the applicant certifies that the information contained in their application package is correct to the best of their knowledge, and agrees to fulfill the requirements of the program listed in the "Conditions" section above. Note that applications may also be shared with NTCO industrial partners, in order to identify suitable candidates for internship placements.

Supervisor signature:

Date

Co-supervisor signature:

Date

Signatures of supervisor(s) indicate an understanding of the NTCO program requirements and a commitment to supporting the student in completing them.