NSERC USRA and other Undergraduate Summer Research Awards

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What is USRA?

- Undergraduate Summer Research Award
- Stimulates students' research interest in Natural Sciences and Engineering
- Engages students in research activities
- Encourages and motivates students to pursue graduate studies
- Provide financial support for research experience through the host university

Value of Award

- **$4,500** for 16 consecutive weeks on a full time basis (May - August)
- Part-time hours and vacation leave will **not** be approved
- Supervisors supplement award by at least **25% (minimum $1,125)** using NSERC grants or any other research funds
- Total minimum stipend: **$5,626**
- Competitive award

Eligibility

- Canadian Citizen or Permanent Resident
- Registered full-time student in the term immediately before the award
- Do not hold higher degrees in natural science or engineering
- Minimum cumulative 78%
- May hold up to three USRAs throughout university career
- Have not begun a graduate program prior to the tenure of award
- Not enrolled in a professional degree (M.D., D.D.S., B.Sc.N.)

Other Summer Research Awards

- Dean's Research Award
  - (Domestic + International students)
- Summer Research Award
  - (Domestic + International students)

Summary of all Awards

Award Type	Academic average	Stipend (Minimum)	Stipend breakdown	
NSERC USRA	78% and above	$5625	$1125 (Supervisor)	$4500 (NSERC)
Dean's Award	78% and above	$5625	50% (Supervisor)	50% (Faculty)
Summer Research Award	70% and above	$5625	75% (Supervisor)	25% (Faculty)

One application for all Awards that must be submitted through NSERC Portal

International applicants for Dean's and Summer Research awards also complete the NSERC USRA application but must contact and inform Whitney Barrett (Graduate Officer), wbarret2@uwo.ca

How to Apply

- Form 202 Part-I completed on NSERC site by Student (must verify on the website)
- Once form is completed a “reference number” will be visible via the e-console – submit this to the supervisor so s/he can complete their form
- Form 202 Part-II completed on NSERC site by supervisor (need surname and reference number)
- E-submission via NSERC website
- Deadline: **Last week of January 2019**
- Complete form (Parts I and II) MUST be submitted by the deadline
- NSERC website: http://www.nserc.ca


Natural Sciences and Engineering Research Council of Canada
Conseil de recherches en sciences naturelles et en génie du Canada
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Smaller
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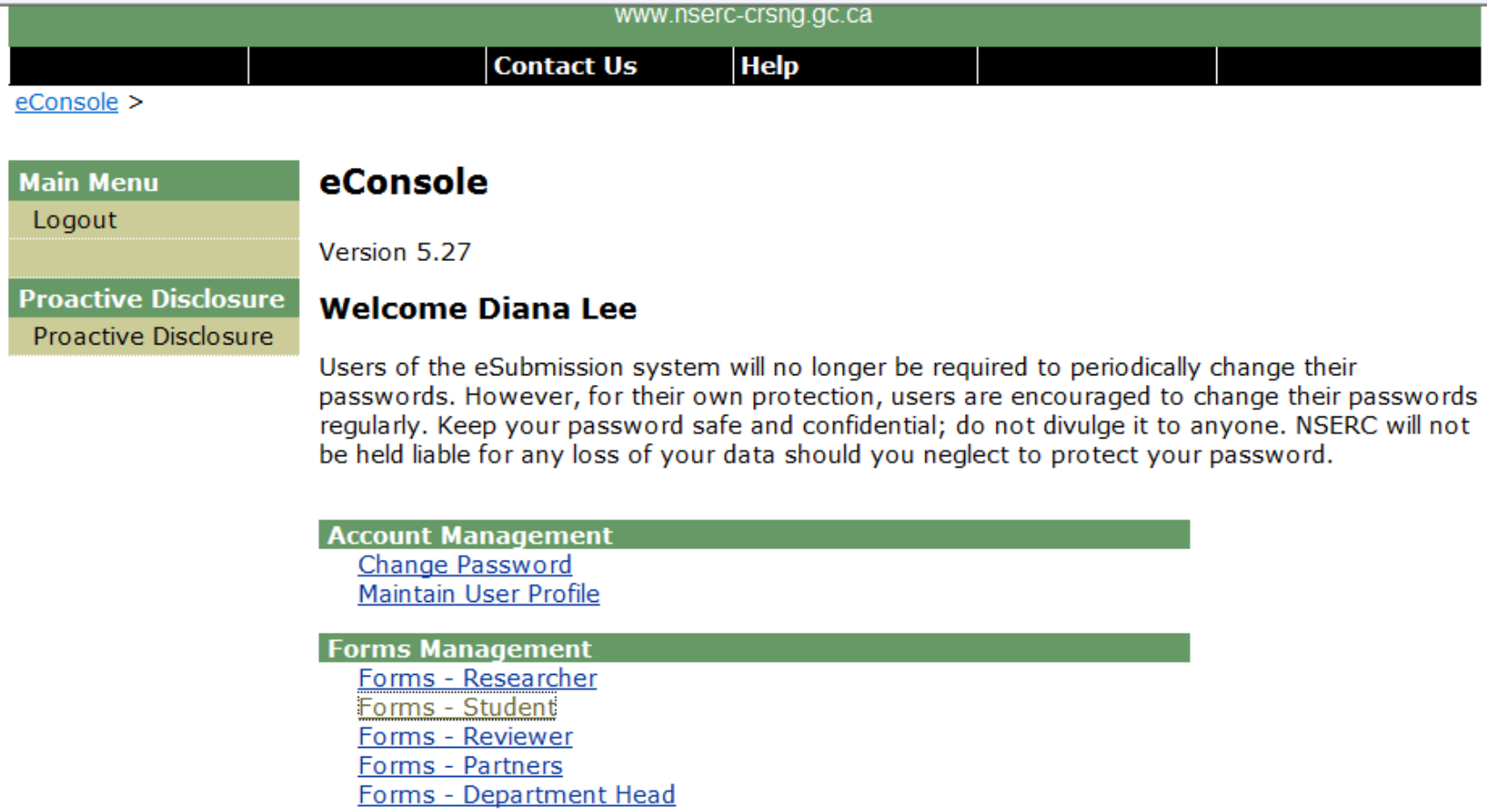
On-line Services
Our on-line services are designed to give you easier access to NSERC services.
On-line System Users
Select On-line System Login to create or access an application.
On-line System Login
First-Time User? Please Register
Frequently Asked Questions
Forms in PDF Format and Instructions
Pilot Site Training site to help you understand how the system works.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Proactive Disclosure
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Welcome Diana Lee
Users of the eSubmission system will no longer be required to periodically change their passwords. However, for their own protection, users are encouraged to change their passwords regularly. Keep your password safe and confidential; do not divulge it to anyone. NSERC will not be held liable for any loss of your data should you neglect to protect your password.
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Forms - Researcher
Forms - Student
Forms - Reviewer
Forms - Partners
Forms - Department Head

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Portfolio >

My Portfolio

Applications

Your in-progress and completed applications are listed in the table below (see Security/Privacy Act Statement for details). To create a new application, select the appropriate form from the drop-down box below. To edit, preview/print or verify the completeness of a given application, click on the appropriate button below. Note that the Scholarships & Fellowships applications cannot be submitted electronically. A paper copy **must** be submitted by the appropriate program deadline. However, Form 201 - Scholarships (PGS M, PGS D & PDF) can ONLY be submitted electronically to NSERC.

Select form to be created | Create

Upon verification of your application, the system will assign it a reference number. Once your application is complete, you must forward this number to your proposed referees to enable them to complete the Report on the Applicant. You must click "verify" to ensure that your application is complete.

Forms: 200, 201

Program	Application Title	Reference Number	Status	Last Updated	Edit Form	Verify Completeness	Preview/ Print	Submit
Postgraduate Scholarships - PGS M		145596533	In Progress	2010/09/29			Preview	Submit

Form 202 - USRA (Part 1)

Once you have created your application, the system will assign it a reference number. Once Part I is complete, you must forward this number to your proposed supervisor to enable him or her to complete Part II. If you intend to apply a second time using your Form 202, do not forget to update it.

Reference Number	Status	Last Updated	Edit Form	Verify Completeness	Preview/ Print
170801	In Progress	2010/02/01	Edit	Verify	Preview

eConsole | Logout
Date Modified: 2011/01/07 ^ Top of Page ^ Important Notices

Other Summer Opportunities

Engineering Dean's Award

- This award has the same requirements and value as NSERC USRA but is also open to International Students. If you are an international student and wish to apply, please contact the Graduate Office by emailing we-researchandgrad@uwo.ca
- This award is paid with a combination of funds from the student's supervisor and the Faculty of Engineering

Other Summer Opportunities

Undergraduate Summer Research Award

- This award has the same requirements and value as NSERC USRA but is also open to International Students. In addition, students with an average below 70% may be considered for this award. If you are an international student and wish to apply, please contact the Graduate Office by emailing we-researchandgrad@uwo.ca

- This award is paid with a combination of funds from the student's supervisor and the Faculty of Engineering.

Other Summer Opportunities

Interested applicants ***must*** apply through the NSERC USRA Application system to be considered for either the Dean's Award or the Undergraduate Summer Research Award.

Potential projects

- A Faculty member is required for the submission of application
- Faculty member completes the Part-II of Form 202 with the project description and agrees to provide the stipend for the Award
- Several faculty members in MME have projects for USRA students
- Some faculty members have provided a brief project description
- You may also contact faculty members directly if you are interested in a particular research area

Research Area: Materials and Solid Mechanics

Supervisor: Prof. Liying Jiang

ljiang55@uwo.ca

- Understanding microstructure effects on the elastic properties of fiber-reinforced composites.

Research Area: Materials and Solid Mechanics

Supervisor: Prof. Hamidreza Abdolvand

hamid.abdolvand@uwo.ca

- Understanding deformation mechanisms of polycrystals: finite element modeling and experimentation (one or two projects).

Research Area: Materials and energy conversion

Supervisor: Prof. Eric Johlin

ejohlin@uwo.ca

- Nanostructure design for enhanced light absorption
- Machine learning for optimization of optical emission

Research Area: Thermo-fluids

Supervisor: Prof. Kamran Siddiqui

ksiddiq@uwo.ca

Potential projects

- 3D flow investigations in a turbulent boundary layer
- Flow characterization over textured surfaces to reduce aerodynamic drag
- Investigation of droplet formation to simulate fuel injection in an afterburner of a fighter jet

Research Area: Manufacturing

Supervisor: Prof. Remus Tutunea-Fatan:

rtutunea@eng.uwo.ca

Potential projects

- Development of ultraprecise single point microcutting technologies for surface functionalization purposes (i.e., optical, hydro/aero-dynamic enhancements, etc.)

- Analysis of laser polishing process parameters to improve the quality of metallic surfaces produced through additive manufacturing (i.e., 3D printing and similar technologies)

Research Area: Micro-Systems

Supervisor: Prof. Jun Yang

jyang@eng.uwo.ca

Potential projects

- Various projects related to Industry 4.0, Internet of Things, 3D printing and printed electronics

Research Area: Biomechanics

Supervisor: Prof. Emily Lalone

Emily.lalone@uwo.ca

- Quantitative four-dimensional CT imaging to examine wrist contact mechanics in patients with a distal radius fracture.

- Montion analysis for the upper extremity during standard and complex tasks.

Research Area: Biomechanics

Supervisor: Prof. Ryan Willing

rwilling@uwo.ca

- Further development and analysis of a 3D printed implant for shoulders.
- Further development of a pneumatic muscle actuator system for a knee joint simulator
- Development of a computational biomechanical model of the leg (collaboration with school of Physical Therapy/ Fowler-Kennedy Sports Medicine Clinic.

Research Area: Biomechanics

Supervisor: Prof. Dan Langohr

dan.langohr@uwo.ca

- Tribology and wear testing of orthopaedic joint replacement implants.

Research Area: Biomechanics

Supervisor: Prof. Haojie Mao

hmao8@uwo.ca

- Investigate the biomechanics of sports concussions and develop novel protective gears such as new helmets
- Improve active and passive automotive safety to reduce injuries such as whiplash injury
- Apply machine learning to understand brain injuries and brain networks.

Need more information?

- Engineering's Graduate Studies Website: http://www.eng.uwo.ca/gradstudies/nserc_usra.html
- The NSERC Website: http://www.nserc-crsng.gc.ca/Students-Etudiants/UG-PC/USRA-BRPC_eng.asp
- Research Western http://www.uwo.ca/research/funding/students/nserc_usra_overview.html

Accelerated Master of Engineering Science (MESc) Program

To complete the MESc degree through one extra year of study beyond the BESc program

How to Apply and Requirements

- Students who work in the summer prior to beginning their 4th year of study through summer research program in Engineering (NSERC USRA, Dean's Award or Summer Research Award) are eligible to apply.
- The applicant must have at least 78% cumulative average based on 2nd and 3rd years of the undergraduate program.
- Canadian citizens, permanent residents and international students are all eligible to apply.
- Interested students must complete an online application for graduate studies (Accelerated MESc program) no later than August 1st prior to beginning their 4th year of study.

Accelerated Master of Engineering Science (MESc) Program

Program Format

During the 4th year of undergraduate program, the student,

- Register in the thesis course (1.0 credit), substituting two 4th year technical electives. The thesis course should be the continuation of the work conducted during the summer before
- Take one graduate level course as a substitute for a 4th year technical elective
- Complete rest of the courses and other requirements for BESc program
- May take (optional) one graduate course as an overload. To be counted as a credit the graduate degree
- Maintain a cumulative average of 78% based on 3rd and 4th years of the undergraduate program
- Satisfactory performance in research as determined by the supervisor

Starts MESc program in May (immediately after completing BESc degree)

- Take two or three graduate courses and complete research and thesis

Accelerated Master of Engineering Science (MESc) Program

Program Format

Undergraduate (BESc) Program		Graduate (MESc) Program	
Summer term before 4th year	4th year (Sept. –Apr)	Summer term after 4th year	Subsequent terms
• **Research begins in supervisor's lab**	• Thesis course • One graduate course • Second graduate course (optional) • Other 4th year course requirements	• Graduate studies begin	• Two or three graduate courses • Research work • Thesis writing
Typically funded through NSERC USRA or Dean's Award	No financial support provided	**Fully funded program that covers tuition fee plus a living allowance of at least $13,000/year**	

Western

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