Collaborative Graduate Program with a Specialization

Applied Sustainability

MEng & MASc Map

Why GRADUATE STUDIES in APPLIED SUSTAINABILITY?

Applied Sustainability is the application of science and innovation to meet human needs while indefinitely preserving the life support systems of the planet.

The Collaborative Masters Program in Applied Sustainability (CMAS) is an innovative program building on the applied sustainability strategic theme of the Faculty of Engineering and Applied Science. The objective of the CMAS program is to expose MEng and MASc students to the implementation of sustainable engineering solutions within the context of broader sustainability theory. To do this properly, engineering students not only advance their technical education, but also gain insights into how public policy impacts the success of engineering solutions to multidisciplinary sustainability problems.

Why QUEEN'S?

These 12 and 24-month programs are exciting opportunities to work intensively in a critical interdisciplinary field with leading scholars. Our graduate students have the opportunity to work in a lively intellectual community, undertake cutting edge research projects and theses, and take courses to learn about sustainable applications of science and innovation to meet human needs.

"My understanding got deeper by studying with different teachers. You will enjoy interesting, debatable topics and learn from your friends. I must say that this program is so helpful that you and your future career will certainly benefit."

- Luowen Fu, MEng

A unique aspect of our program is that our faculty are drawn from the School of Policy Studies and six Engineering programs at Queen's: Chemical, Civil, Electrical and Computer, Geological Sciences and Geological Engineering, Mechanical and Materials Engineering, and Mining Engineering. Our students benefit from this interdisciplinarity and opportunities to collaborate with scholars and peers working in multiple fields but linked by the Applied Sustainability program.

Program STRUCTURE

Degrees:

- **MEng** (12 months, full time): 8 courses (one of which may be a project course, seminar series (CMAS 897).
- **MASc** (24 months, full time): 4 courses,seminar series (CMAS 897) plus thesis.

Research AREAS

- **Applied Sustainability and Policy Studies** (applications of social science & innovation)
- **Applied Sustainability and Fresh Water Systems** (moving toward long-term strategic fresh water systems globally)
- **Applied Sustainability and Resource Management** (moving toward environmentally benign research extraction and the preservation of existing resources)
- **Applied Sustainability and Innovative Materials** (moving toward environmentally friendly materials for the built environment, clean energy technologies, and recyclable consumer products)
- **Applied Sustainability and Energy Technology** (moving from fossil fuel based energy systems to sustainable energy technologies)

SMITH ENGINEERING
Queen's University

GRADUATE STUDIES AND POSTDOCTORAL AFFAIRS

Applied Sustainability

Faculty RESEARCH and SUPERVISION

ENERGY TECHNOLOGY

- **Dominik Barz** (Chemical Engineering)
- **Suzan Eren** (Electrical and Computer Engineering)
- **Laurent Béland** (Mechanical and Materials Engineering)
- **Cao Thang Dinh** (Chemical Engineering)
- **Jackson Crane** (Mechanical and Materials Engineering)
- **David Rival** (Mechanical and Materials Engineering)

INNOVATIVE MATERIALS

- **Marianna Kontopoulou** (Chemical Engineering)
- **Joshua Woods** (Civil Engineering)
- **Kevin de France** (Chemical Engineering)
- **Colin MacDougall** (Civil Engineering)

RESOURCE MANAGEMENT

- **Charlotte Gibson** (Mining Engineering)
- **Asli Sari** (Mining Engineering)
- **Ehssan Koupaie** (Chemical Engineering)
- **Qian Zhang** (Mining Engineering)

WATER SYSTEMS

- **Sarah Jane Payne** (Civil Engineering)
- **Bas Vriens** (Geological Engineering)
- **Yves Filion** (Civil Engineering)
- **Xiaying Xin** (Civil Engineering)

POLICY STUDIES

- **Warren Mabee** (Policy Studies)

SMITH ENGINEERING
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Application FAQs

What do I need to know to APPLY?

- Please review the admission requirements of the appropriate home department for a list of academic prerequisites and documentation necessary for application and entry into the desired graduate program.
- Applications must be submitted directly to the Queen's School of Graduate Studies and Postdoctoral Affairs, which can be done online. In that application, students must identify which of the participating departments they wish to identify as their home department. Usually, this is the department aligned with the applicant's undergraduate engineering degree.
- The online SGSPA Application Form asks "Describe (in a sentence or two) your Research Interest(s)". This is where students should enter "Collaborative Masters in Applied Sustainability" to indicate their interest in the CMAS program. Later in the form, students are asked to provide a "Statement of Interest". Students can use this section to expand on the nature of their interest in CMAS.

DEADLINES

- Please refer to the appropriate home department for program specific application deadlines.

What about FUNDING?

- Fellowships and teaching assistantships are available through the University and are automatically considered upon admission. Full-time students are encouraged to seek external financial support and to apply for NSERC and OGS graduate scholarships.
- Queen's automatically issues a one-time $5,000 top-up to federal tri-council Master's scholarship holders in their first year of study. For more information, see the School of Graduate Studies and Postdoctoral Affairs' information on awards and scholarships and the department's graduate awards page.

For admission into the Collaborative Program in Applied Sustainability, apply to one of the participating Engineering Departments through the School of Graduate Studies and Postdoctoral Affairs website and learn more at the Program Website.

CONTACT Information

For more information, contact the representative of the Department that is best aligned with their research interests.

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