Student Affairs website
Queen's wants you to succeed! Check out the successful, both academically and personally. offers the programs and services you need to be our welcoming living and learning environment to physical, emotional, or spiritual resources – Ranging from help with academics and careers, do.
Queen's, you are never alone. We have many support services from your first point of contact Queen's provides you with a broad range of support services from your first point of contact with the university through to graduation. At Queen's, you are never alone. We have many offices dedicated to helping you learn, think and do. Ranging from help with academics and careers, to physical, emotional, or spiritual resources – our welcoming living and learning environment offers the programs and services you need to be successful, both academically and personally. Queen's wants you to succeed! Check out the Student Affairs website for available resources.

How to use this map
Use the 5 rows of the map to explore possibilities and plan for success in the five overlapping areas of career and academics. The map just offers suggestions – you don’t have to do it all! To make your own custom map, use the My Major Map tool.

Get started thinking about the future now – where do you want to go after your degree? Having tentative goals (like careers or grad school) while working through your degree can help with short-term decisions about courses and experiences, but also help you keep motivated for success.

Get the help you need
Civil Engineering MAJOR MAP

Civil Engineering

Major Map

Get to know CIVIL ENGINEERING

We go about our lives within a physical environment created by civil engineers: homes, schools, office buildings, highways, bridges, subway systems, airports, river and coastal systems and green landscapes. As a civil engineering student, you will study how to plan, design and build these structures and systems with an environmentally-respectful approach. As part of its real-world preparation, this innovative program emphasizes self-learning, teamwork, communication, leadership and problem solving. Courses and electives are grouped into structural, environmental, hydrotechnical, and geotechnical streams.

Civil Engineering

**Civil Engineering MAJOR MAP**

**BACHELOR OF APPLIED SCIENCE | BACHELOR OF APPLIED SCIENCE WITH PROFESSIONAL INTERNSHIP**

**2ND YEAR**

Students will start their second year by participating in Civil Week.

Courses include: Structural Analysis, Geotechnical Engineering, Hydraulics, Groundwater Engineering, Structural Steel Design, Water & Wastewater Engineering and Design & Practice.

You will also take one List A Complementary Studies course, plus one Management Elective.

**3RD YEAR**

Courses include: Structural Analysis, Geotechnical Engineering, Hydraulics, Groundwater Engineering, Structural Steel Design, Water & Wastewater Engineering and Design & Practice.

You will also take the second EEPS course – APS200. Finally, you will take one List A (Humanities and Social Science) Complementary Studies course.

**4TH OR FINAL YEAR**

All Civil students take a core course in Civil Engineering Design and Practice. You will also need to take 3 Technical Electives, which provide the opportunity to specialize or do a research thesis (CIVL 500) as one of the electives.

Finally, you will need to choose one List A, B, C, or D Complementary Studies course, and you are set to graduate!

**GET THE COURSES YOU NEED**

Queen's Engineering first year is common – courses include: Physics, Chemistry, Calculus, Algebra, Graphics, Computing and Earth Systems Engineering.

Also APSC100, the entry level course in our Engineering Design and Practice Sequence (EDPS), focusing on problem solving, experimentation principles and finishing off with a team-based engineering project.

Discipline selection will take place in February!

**GET RELEVANT EXPERIENCE**

Join teams or clubs on campus such as the Concrete Canoe Team.

See the AMS Clubs Directory or the Queen’s Get Involved page for more ideas.

Look into summer jobs by talking to the Dept. or Career Services about work through SWEP or NSERC.

Take more responsibility within different clubs or extramurcillaries such as: Civil Club, Concrete Toboggan Team, Concrete Canoe Team, and the Bridge Building Club.

Stay during the summer as an assistant to a faculty member or apply for an external summer research opportunity. If interested, apply to do a 12-16 month QUIP internship between your third and fourth year.

Civil also offers a Job Network and Industry Open House which students are encouraged to attend.

**GET CONNECTED WITH THE COMMUNITY**

Volunteer on or off campus with different community organizations, such as Let’s Talk Science (LTS), Science Quizz and Engineers without Borders (EWB).

Consider joining an intramural sports or an athletics team. Check out the Athletics & Recreation site.

Get involved with the Engineering Society (ENGSOC).

Start or continue volunteering with organizations such as the Commerce & Engineering Environmental Conference (CEEC).

Consider applying to the NSERC CREATE Programs.

Consider registering with Professional Engineers Ontario (PEO).

Join groups on Linkedin reflecting specific careers or topics of interest in Civil Engineering. Consider volunteering opportunities or extracurriculars such as: Civil Club, Concrete Toboggan Team, Concrete Canoe Team, and the Bridge Building Club.

**GET THINKING GLOBALLY**

Speak to a Quic advisor or get involved in their programs, events and training opportunities.

Prepare for work or studies in a multi-cultural environment by taking the Intercultural Awareness Training Certificate hosted by Quic and Four Directions Indigenous Student Centre.

Build your intercultural competence by getting involved with other cultures or by practicing or improving your language skills.

**GET READY FOR LIFE AFTER GRADUATION**

Grappling with program decisions? Go to the Orientation Evenings held by different Engineering departments and attend the various Career Fairs during the year.

Get some help about career options from Career Services.

Explore different careers of interest by reading books in the Career Services Career Advising and Resource Area, such as Civil Engineering Careers. For more information check out Career Cruising or by finding and connecting with alumni on LinkedIn.

Start focusing on areas of interest. Research education requirements for careers of interest. If needed, prepare to take any required tests, like the LSAT or GMAT and get help thinking about grad school from Career Services.

Apply to jobs or future education, or make plans for other adventures. Get help from Career Services with job searching, resumes, interviews, grad school applications, or other decisions.

**Consider a 12-16 Month QUIP Internship**

International students interested in staying in Canada can speak with an International Student Advisor.

Visit careers.queensu.ca/majormaps for the online version with links!  

Employability skills

Your time at Queen’s will give you valuable skills to boost your employability, including:

- Knowledge of civil engineering methods and theory
- Apply principles of physics and mathematics to the design of physical environments such as bridges, buildings, and dams
- Knowledge of the interactions among land use, water use, and environment quality
- Work independently and become a life-long learner
- Team work – work with other students on a project
- Oral and written communication – engineering report writing skills and presentation skills
- Leadership
- Time management and organization – manage several ongoing projects

Where could I go after graduation?

- Archaeology
- Architecture
- Environmental engineering
- Design engineer
- Geographic information systems
- Geomatics
- Industrial engineering
- International development
- Landscape architecture
- Mapping, surveying & cartography
- Materials engineering
- Mining engineering
- Occupational health and safety
- Public administration
- Real estate
- Robotics
- Strategic planning
- Structural engineer
- Water resources engineering
- Urban and regional planning

Taking time to explore career options, build experience, and network can help you have a smoother transition to the world of work after graduation.

* Some careers may require additional training. Listed careers are only suggestions.  

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