Important Dates-Fall 2013

- September 1: Tuition payment or Alternate Payment Arrangement (APA) due
- September 1: Orientation begins (arrival day)
- September 3: Welcoming Ceremony for new students
- September 4: Engineering Frosh Week begins
- September 4-6: Challenge Examinations for First Year students
- September 9: Fall term classes begin
- September 10: Last day to drop a Fall or Fall-Winter course without financial penalty
- November 1: Last day to drop a Fall term course without academic penalty
- November 29: Fall term classes end
- Nov 30-Dec 3: Fall term pre-examination study period
- December 4-19: Final examination period
- December 4-19: First Year Program orientation nights

Important Dates-Winter 2014

- January 6: Winter term classes begin
- January 13-27: First Year Program Orientation Nights
- January 17: Last day to drop a Winter term course without financial penalty
- January 17: Last day to drop a Fall-Winter course without academic penalty
- January 17: Last day to apply for a First Year Fall course rewrite examination
- January 20: Extended Program (J-Section) Fall classes begin
- February 10-March 1: First Year Program selection in SOLUS
- February 17-21: Mid-Term Reading Week
- February 24: Extended Program (J-Section) Winter classes begin
- February 28: Last day to drop a Winter term course without academic penalty
- April 4: Winter term classes end
- April 5-9: Winter term pre-examination study period
- April 10-26: Final Examination Period
- June 13: Extended Program (J-Section) Winter classes begin
- June 16-20: Extended Program (J-Section) Winter Course Examinations

Quick Reference Guide and Contact Information

Need Academic Advice about First Year or Upper Year programs?

First Year students
Aphra Rogers
firstyr@appsci.queensu.ca

For general information:
Stacy Shane
mgrss@appsci.queensu.ca
Main Reception
reception@appsci.queensu.ca

Aboriginal Access to Engineering
Melanie Howard
melanie.howard@queensu.ca

For appointments with the Associate Dean (Academic):
Contact her Assistant, Karen Merrill at (613) 533-6000 ext. 78266 or by email at: karen.merrill@appsci.queensu.ca

Engineering Program Advisors
Chemical Engineering/Engineering Chemistry
Liaan Joanette
liaan.joanette@chee.queensu.ca
Dr. Ron Neufeld (CHEE)
ron.neufeld@chee.queensu.ca
Dr. Scott Parent (ENCH)
scott.parent@chee.queensu.ca

Civil Engineering
Cathy Wagar
wagarc@civil.queensu.ca
Dr. Amir Fam
fam@civil.queensu.ca

Computer & Electrical Engineering
Patty Jordan
patty.jordan@queensu.ca

Dr. Shahram Yousefi (ELEC)
s.yousefi@queensu.ca
Dr. Tom Dean (CMPE)
tom.dean@queensu.ca

Engineering Physics
Noreen Haun
noreen.haun@queensu.ca
Dr. Kevin Robbie
robbie@physics.queensu.ca

Geological Engineering
Larke Zarichny
zarichny@geol.queensu.ca
Dr. Vicki Remenda
remenda@geol.queensu.ca

Mathematics & Engineering
Johana Ng
johana@mast.queensu.ca
Dr. Andrew Lewis
andrew@mast.queensu.ca

Mechanical & Materials Engineering
Jacquie Brown
brownj@me.queensu.ca
Dr. Darko Matovic
darko@me.queensu.ca

Minning Engineering
Tina McKenna
tina.mckenna@mine.queensu.ca
Dr. Takis Katsabanis
katsabanis-t@mine.queensu.ca

General Queen’s Info

Learning Strategies Development
Need help with organizing and managing time, making notes, preparing for exams, quantitative problem solving, and/or coping with academic stress? Sign up on the appointment board in RM 142, Learning Commons, Stauffer Library for a consultation.

Counselling Services
Having difficulty coping? Need someone to talk to? Make an appointment with Queen’s Counselling Services. Located at 146 Stuart Street. To make an appointment: (613) 533-2506. For same-day visits, open 9 a.m. - 4:30 p.m. Monday to Thursday and 9 a.m. - 12:30 p.m. on Friday. First-come, first-served.

Disability Services
Require accommodation for a disability? Make an appointment with Queen’s Disability Services. Located at 146 Stuart Street. To make an appointment: (613) 533-6467 or TTY (telephone for the deaf) 613-533-6566. Email: hcds.dso@queensu.ca

Health Services
Have a general medical concern? Make an appointment with Queen’s Health Services. Located at 146 Stuart Street. To make an appointment: (613) 533-2506. For same-day visits, open 9 a.m. - 4:30 p.m. Monday to Thursday and 9 a.m. - 12:30 p.m. on Friday. First-come, first-served.
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2 Quick Reference Guide and Contact Information
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4 The Queen’s University Campus
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8 Welcome to Engineering at Queen’s!
9 Queen’s Academics 101
10 First Year Courses
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13 Academic Regulations and Evaluation
14 Section 900 (J-section)
15 QE5 and QE6: Why not take a bit more time to finish your degree?
15 Other Important Academic Information
16 Choosing Your Engineering Program
18 Services and Contact Numbers
Queen's University campus is beautiful and historic. It is relatively small so that getting from one class to another is easy to do. Queen's consists of two campus areas—see Map 1 and Map 2. The first year residences, the engineering buildings, and other locations of interest to Engineering students are identified in the legends.

**Map Legend**

**Map 1:**
- **Residences:**
  - 70 Adelaide Hall
  - 69 Ban Righ Hall
  - 12 John Deutsch University Centre Residences
  - 75 Gordon-Brockington Hall
  - 60 Leonard Hall
  - 77 Leggett Hall
  - 61 McNeill House
  - 76 Morris Hall
  - 46 Victoria Hall
  - 95 Waldron Tower
  - 62 Watts Hall
- **Lecture Theatre and Laboratory Locations:**
  - 16 Beamish-Munro Hall - Integrated Learning Centre (BMH)
  - 35 Ellis Hall (Ellis AUD)
  - 51 Jeffery Hall
  - 66 Stirling Hall (Stirling AUD)
  - 64 Chernoff Hall (Chernoff AUD)
  - 83 Etherington Hall (Etherington AUD)
  - 57 Biosciences Complex Auditorium
  - 30 Miller Hall
  - 15 Dupuis Hall (Dupuis AUD)
- **Other Buildings of Interest:**
  - 6 Athletics and Recreation Centre (ARC)
  - 15 Chemical Engineering/Engineering Chemistry Main Office
  - 35 Civil Engineering Main Office
  - 26 Douglas Library
  - 18 Electrical and Computer Engineering Main Office
  - 66 Engineering Physics Main Office
  - 30 Geological Engineering
  - 11 Joseph S. Stauffer Library
  - 51 Mathematics & Engineering Main Office
  - 82 Mechanical and Materials Engineering Main Office
  - 17 The Robert M. Buchan Department of Mining Main Office
  - 27 University Registrar’s Office

**Map 2:**
- **Residences:**
  - 105 Jean Royce Hall (105a, 105b)
  - 104 John Orr Tower
- **Other Buildings of Interest:**
  - 102 Coastal Engineering Lab (Civil Engineering)
Kingston—a great place to be!

Kingston is a great place to live and study—beautiful and full of history. Known as the “Limestone City,” Kingston is located on the shores of Lake Ontario at the mouth of the St. Lawrence River. Kingston was the first capital of Canada and was the home of Sir John A. McDonald, our first Prime Minister.

Traveling to and from Kingston

By Train
Kingston lies on the main rail line between Montreal and Toronto, and Ottawa and Toronto, so Via Rail is a fast and easy way to get home and back.

By Air
Kingston has a local airport with 6 flights a day to and from Toronto.

By Bus
Queens Alma Mater Society runs a “Tricolor Express” bus that leaves from campus to destinations in Toronto and Ottawa. The local Greyhound bus station is about a 10 minute taxi ride away.

By Car
Kingston lies about halfway between Toronto and Montreal along Hwy 401. By car, it is about 2.5 hours from each of these cities, and about 1.5 hours from Ottawa.
Being a Queens student, you are able to experience all of the best Kingston has to offer—and it’s all within easy walking distance. The Queen’s campus is located in the heart of historic Kingston: Lake Ontario lies on the southern border of the campus, and a 5 minute walk to the northeast takes you to downtown—with its stores, restaurants, clubs and even an open air skating arena in Market Square!
Welcome to Engineering at Queen’s!

Engineering programs are formally structured in order to meet the requirements of the Canadian Engineering Accreditation Board (CEAB). In each year of their programs, students are required to take “core” courses, however as you move into the 3rd and 4th years of your program you will have the opportunity to choose many of your courses (technical electives and complementary studies courses). Your Engineering program requirements and structure are provided in the Academic Calendar. Provided you follow this structure, you should meet the graduation requirements required by the CEAB. It is important to recognize that each student is personally responsible for ensuring that he/she has met the requirements for graduation. If you have ANY questions, or wish to modify your program in any way, we strongly encourage you to ask an academic advisor. Your academic counsellors go by different names—student advisors, program advisors, undergraduate advisors, undergraduate chairs. We have over 30 academic advisors in Engineering. Most are listed on page 2—the inside front cover. We are here to help you—come and visit us!

Academic Counselling at Queen’s University

“In Queen’s Engineering we have over 30 academic counsellors. Our job is to help students navigate their academic programs and graduate successfully. If you have any problems or concerns—academic or otherwise—please come to see us! “

Questions or concerns?

**First year students**

Email or visit
Aphra Rogers
First year advisor
firstyr@appsci.queensu.ca

**Upper year students**

Drop in to the
Engineering Faculty Office
3rd Floor ILC

Email or visit your:
undergrad advisor
undergrad chair
(see inside front cover for information)
Definitions

**SOLUS:** The Queen's student admin system is your source for schedules, course selection (for upper years in Engineering), fee status, contact info, etc. For the “how to” guide on SOLUS, see the Registrar’s booklet “2013-2014 Guide to Registration and Fees.”

**Plan (also called your Program or Discipline):** Solus refers to the type of Engineering (eg. MECH, CHEE, etc.) as your Plan. Traditionally, we have called this a Program. For the purposes of this document, the term “Program” will be used.

**Sub-plan (also called an option):** A speciality within your program—some programs have them (e.g. MECH – General, BioMech, Materials); others don’t (e.g. CIVL).

**Academic:** Anything to do with your program and courses (e.g. academic advisor).

**Academic Calendar:** Lists of all courses you must do over the 4 years of your program.

**Academic Session:** Both Fall and Winter terms together for one academic year.

**Academic Transcript:** The listing of your courses, including unit weighting, grades and GPA.

**CEAB:** Canadian Engineering Accreditation Board

Your Engineering courses

**Course length:** Most Engineering courses are 12 weeks (one term) long—called Fall term (F) courses or Winter term (W) courses. A few of your courses run through both Fall & Winter terms (F/W).

**Course weight:** Each course is assigned units reflecting the weight of the course (this corresponds approximately to the number of contact hours per week).
- Term-length Fall (F) or Winter (W) Engineering courses are 3.0 - 4.5 units.
- Fall/Winter courses are generally twice this (e.g. APSC100 is 11 units).
- Courses in the Art & Science Faculty are all 3 units (one term) or 6 units (Fall/Winter).

**Course types in Engineering:**
- **Core courses:** These are courses you must take and pass in order to complete your degree requirements (you don’t choose these—we put them into your schedule—e.g. all of your first year courses are core).
- **Technical elective courses:** Engineering upper year courses you can choose.
- **Complementary studies courses:** 3 courses (9 units) chosen from Humanities/Languages/management/linkage (done in upper year).

**Course numbering:**
- **The 4-letter prefix denotes the type of course**
  - **APSC:** Course common to all programs. All first year courses are designated APSC.
  - All others denote the course type (e.g. CHEE= Chem Eng, MECH = Mech Eng, MTHE=Math, ENPH = Eng Phys)
- **The 3-digit number indicates the level of the course:**
  - 100-level = first year
  - 200-level = second year, etc.

**Course structure:** In Engineering, most courses consist of 3 x 50-minute lecture periods per week and 1 x 50-minute tutorial (class problem solving session). Some courses also contain lab components.

**Engineering Design and Practice Sequence (EDPS):** The CEAB requires that engineering students gain knowledge and skills in many different areas of design and professional practice. In order to achieve this, Queen's engineering students are required to complete an EDPS course every year. In first year, this course is APSC100, in second year APSC200. In third and fourth year, these courses have program-specific course numbers. These course will teach you the elements of design as well as professional skills, such as teamwork, problem solving and communication.
Queen’s Engineering: First Year

In the summer, all registered students are given an enrolment appointment. This is the date when a student can begin to choose his/her courses in SOLUS. However, in first year Engineering ALL of your courses are core courses. All core courses are automatically added to your program—you do not need to choose them. When you move into upper years, you will use your enrolment appointment to add your technical elective and complementary studies courses.

First year courses

**Fall Term**

<table>
<thead>
<tr>
<th>Course number</th>
<th>Name</th>
<th>Unit count</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSC111</td>
<td>Physics – Mechanics: vectors, work/energy, statics/dynamics, momentum/collisions, conservation of energy, oscillations and waves</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC131</td>
<td>Chemistry and Materials: thermochemistry, heat, work, energy, enthalpy, 1st law of thermo, gas laws, phase equilibria, material bonding and properties</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC151</td>
<td>Earth Systems: the complex Earth system (hydrosphere, biosphere, atmosphere, solid earth) and engineering interactions with it</td>
<td>4.0</td>
</tr>
<tr>
<td>APSC161</td>
<td>Graphics: development of the ability to visualize and communicate 3D shapes</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC171</td>
<td>Calculus 1: functions, limits, derivatives, optimization, rates, exponentials, logs, inverse trig, Fund Theorem of Calculus Riemann integral, some integration</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC100 F/W course</td>
<td>EDPS 1: Module 1: Problem Analysis and modelling in Matlab, and numerical computation Module 2: Introduction to Experimentation – laboratory data collection/ analysis/ presentation, experimental design.</td>
<td>11 units for F/W</td>
</tr>
</tbody>
</table>

**Winter Term**

<table>
<thead>
<tr>
<th>Course number</th>
<th>Name</th>
<th>Unit count</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSC112</td>
<td>Physics Electricity and Magnetism: electric current, field, potential, DC circuits, magnetic fields, induction</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC132</td>
<td>Chemistry and the Environment: 2nd law of thermo, Gibbs energy, acid-base chemistry, gas kinetics, environmental applications</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC142</td>
<td>Computer Programming: Concepts, theory and practice. Design of algorithms and programming style, applied to engineering problems.</td>
<td>3.0</td>
</tr>
<tr>
<td>APSC172</td>
<td>Calculus 2: Integration techniques, numerical integration, improper integrals. Partial derivatives, max/min. Sequences/series, Taylor approximations. Double/ Triple integrals.</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC174</td>
<td>Linear Algebra: vectors, systems of linear equations, matrix algebra, Determinants, Eigenvectors, eigenvalues, diagonalization</td>
<td>3.5</td>
</tr>
<tr>
<td>APSC100 F/W course</td>
<td>EDPS 1: Module 3: Team project:- project management, team dynamics, design methodologies, economics, communication, safety.</td>
<td>11 units for F/W</td>
</tr>
</tbody>
</table>

Fall Term | Winter Term
First year courses

There are approximately 720 students in our incoming first year class. Students are randomly placed into a section, numbered from 00-18. Sections 00-08 contain 58 students; sections 10-18 contain 18 students. Many activities (e.g. lectures) will involve combined sections.

Below, a typical Fall term schedule.

Note: There are no regularly-scheduled classes beyond 5:30 p.m., nor on weekends, unless you have selected the special evening tutorial/lab section on Tuesday/Wednesday nights.

<table>
<thead>
<tr>
<th>Time</th>
<th>Monday Sep 10</th>
<th>Tuesday Sep 11</th>
<th>Wednesday Sep 12</th>
<th>Thursday Sep 13</th>
<th>Friday Sep 14</th>
<th>Saturday Sep 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00AM</td>
<td>APSC 131 - 101 Lecture</td>
<td>APSC 111 - 101 Lecture</td>
<td>APSC 111 - 101 Lecture</td>
<td>APSC 111 - 101 Lecture</td>
<td>APSC 111 - 101 Lecture</td>
<td>APSC 111 - 101 Lecture</td>
</tr>
<tr>
<td></td>
<td>8:30AM - 9:30AM Ellis Hall AUD</td>
<td>8:30AM - 9:30AM Stirling Hall AUD</td>
<td>8:30AM - 9:30AM Stirling Hall AUD</td>
<td>8:30AM - 9:30AM Stirling Hall AUD</td>
<td>8:30AM - 9:30AM Stirling Hall AUD</td>
<td>8:30AM - 9:30AM Stirling Hall AUD</td>
</tr>
<tr>
<td></td>
<td>9:30AM - 10:30AM Stirling Hall AUD</td>
<td>9:30AM - 10:30AM Ellis Hall AUD</td>
<td>9:30AM - 10:30AM Ellis Hall AUD</td>
<td>9:30AM - 10:30AM Ellis Hall AUD</td>
<td>9:30AM - 10:30AM Ellis Hall AUD</td>
<td>9:30AM - 10:30AM Ellis Hall AUD</td>
</tr>
<tr>
<td>10:00AM</td>
<td>APSC 131 - 101 Lecture</td>
<td>APSC 100A - 101 Lecture</td>
<td>APSC 131 - 101 Lecture</td>
<td>APSC 131 - 101 Lecture</td>
<td>APSC 131 - 101 Lecture</td>
<td>APSC 131 - 101 Lecture</td>
</tr>
<tr>
<td></td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
<td>10:30AM - 11:30AM Ellis Hall AUD</td>
</tr>
<tr>
<td></td>
<td>11:30AM - 12:30PM Etherington Hall AUD</td>
<td>11:30AM - 12:30PM Stirling Hall 414</td>
<td>11:30AM - 12:30PM Chernoff Hall AUD</td>
<td>11:30AM - 12:30PM Chernoff Hall AUD</td>
<td>11:30AM - 12:30PM Chernoff Hall AUD</td>
<td>11:30AM - 12:30PM Chernoff Hall AUD</td>
</tr>
<tr>
<td></td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
<td>12:30PM - 1:30PM Chernoff Hall AUD</td>
</tr>
<tr>
<td>1:00PM</td>
<td>APSC 151 - 101 Lecture</td>
<td>APSC 171 - 205 Tutorial</td>
<td>APSC 151 - 101 Lecture</td>
<td>APSC 151 - 101 Lecture</td>
<td>APSC 151 - 101 Lecture</td>
<td>APSC 151 - 101 Lecture</td>
</tr>
<tr>
<td></td>
<td>1:30PM - 2:30PM Chernoff Hall 234</td>
<td>1:30PM - 2:30PM Jeffery Hall 234</td>
<td>1:30PM - 2:30PM Jeffery Hall 234</td>
<td>1:30PM - 2:30PM Jeffery Hall 234</td>
<td>1:30PM - 2:30PM Jeffery Hall 234</td>
<td>1:30PM - 2:30PM Jeffery Hall 234</td>
</tr>
<tr>
<td>2:00PM</td>
<td>APSC 151 - 305 Laboratory</td>
<td>APSC 151 - 305 Laboratory</td>
<td>APSC 161 - 101 Lecture</td>
<td>APSC 161 - 101 Lecture</td>
<td>APSC 161 - 101 Lecture</td>
<td>APSC 161 - 101 Lecture</td>
</tr>
<tr>
<td></td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
<td>2:30PM - 4:30PM Miller Hall 106</td>
</tr>
<tr>
<td>3:00PM</td>
<td>APSC 151 - 305 Laboratory</td>
<td>APSC 100A - 205 Studio</td>
<td>APSC 151 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
</tr>
<tr>
<td></td>
<td>2:30PM - 4:30PM Miller Hall 102</td>
<td>3:30PM - 5:30PM Beamish-Munro Hall 213</td>
<td>2:30PM - 4:30PM Miller Hall 102</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 214</td>
</tr>
<tr>
<td>4:00PM</td>
<td>APSC 100A - 205 Studio</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
</tr>
<tr>
<td></td>
<td>3:30PM - 5:30PM Beamish-Munro Hall 213</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 214</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 214</td>
<td>2:30PM - 4:30PM Beamish-Munro Hall 214</td>
</tr>
<tr>
<td>5:00PM</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
<td>APSC 161 - 305 Laboratory</td>
</tr>
<tr>
<td></td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 212</td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 214</td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 214</td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 214</td>
<td>2:30PM - 5:30PM Beamish-Munro Hall 214</td>
</tr>
</tbody>
</table>

Find your section by looking at the last two digits of the LAB time block. For example, this is the fall schedule for Section 5.

Note:
100s = Lectures
200s = Tutorials
300s = Labs
Queen’s GPA System

Queens University uses a “Grade” and “Grade Point (GP)” system for assessing your course performance. In individual courses, you will be assigned a grade (A, B, C-, etc). The mark equivalents for those grades are approximately as shown in the table to the right. Each grade has an equivalent “Grade Point” or GP as seen in this table.

The GPA is the weighted average for a group of courses. The important GPAs are the Engineering Sessional GPA (for the Fall and Winter terms) and the Engineering Cumulative GPA (for all courses while you are registered in Engineering).

Calculating your GPA: recall that your courses are weighted in units (reflecting the total number of course hours). The box at right contains grades and unit weights for a sample group of courses. The column on the far right is calculated by multiplying the units by the GP (obtain the GP from the grade by using the table above). To obtain your GPA for this group of courses, divide the Points column sum by the Units sum.

<table>
<thead>
<tr>
<th>Grade</th>
<th>GP</th>
<th>Mark eq</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.3</td>
<td>92-100%</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>85-89</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
<td>80-84</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
<td>77-79</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>73-76</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
<td>70-72</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
<td>67-69</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
<td>63-66</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
<td>60-62</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
<td>57-59</td>
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<tr>
<td>D</td>
<td>1.0</td>
<td>53-56</td>
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<tr>
<td>D-</td>
<td>0.7</td>
<td>50-52</td>
</tr>
<tr>
<td>F</td>
<td>0.0</td>
<td>&lt;50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Grades</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>APSC100</td>
<td>11</td>
<td>B</td>
<td>33.00</td>
</tr>
<tr>
<td>APSC111</td>
<td>3.5</td>
<td>C+</td>
<td>8.05</td>
</tr>
<tr>
<td>APSC131</td>
<td>3.5</td>
<td>A-</td>
<td>12.95</td>
</tr>
<tr>
<td>APSC171</td>
<td>3.5</td>
<td>F</td>
<td>0.00</td>
</tr>
<tr>
<td>APSC161</td>
<td>3.5</td>
<td>B+</td>
<td>11.55</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td></td>
<td>65.55</td>
</tr>
</tbody>
</table>

GPA = 65.55/25 = 2.62
C+ to B- average (from table above)
Academic regulations and evaluation

All students are evaluated academically as they progress through their Engineering program. Evaluation takes place in May, once all Fall and Winter term grades are in. There are two important GPA calculations that are used to evaluate Engineering students—the Engineering Sessional GPA (ESGPA) and the Engineering Cumulative GPA (ECGPA). [Note: The “Engineering” addition to the GPA—i.e. the ESGPA and ECGPA—is included to distinguish courses that are taken while a student is registered in Queens Engineering. For example, for a student transferring from another faculty or university, the ESGPA and ECGPA would not include any courses taken before they registered as a Queen’s Engineering student].

**Engineering Sessional GPA (ESGPA):** Includes Fall and Winter courses for the previous academic session (while registered in Queen’s Engineering).

**Engineering Cumulative GPA (ECGPA):** includes ALL Fall and Winter courses you have done at Queen’s while registered in Queen’s Engineering.

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Some important regulations to note*:

- **All core courses for your program must be taken and passed in order to graduate.** In addition, you must follow the structure outlined for your program in terms of taking and passing technical electives and complementary studies courses. If you wish to deviate from the program structure in any way, it is important that you see an Academic Advisor.

- **Passing a course:** The passing grade for an individual course is a D- (see previous table).

- **ECGPA for graduation:** A minimum ECGPA of 1.6 is required for graduation.

- **GPAs for honours and scholarships:**
  - Yearly Dean’s Honour List: ESGPA ≥ 3.5
  - Requirement to retain entrance scholarships: ESGPA ≥ 3.5
  - First class honours at graduation: ECGPA ≥ 3.5
  - Second class honours at graduation: 2.0 < ECGPA < 3.5

- **GPAs dealing with academic progression:**
  - ESGPA < 0.7: Student is Required to Withdraw (RTW)
  - ECGPA < 1.6: Student is placed on Academic Probation

- **Academic Probation:**
  - Students placed on Academic Probation must follow a special program for the following Academic Session:
    - Students with an ECGPA < 1.3 must repeat all courses from their previous Academic Session for which they received less than C.
    - Students with 1.3 ≤ ECGPA < 1.6 must repeat courses specified by the Associate Dean.
  - Students on Academic Probation who achieve an ECGPA ≥ 1.6 by the end of their next academic session will be released from probation.
  - Students on Academic Probation who do not achieve an ECGPA ≥ 1.6 by the end of their next academic session will be Required to Withdraw.

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*A complete listing of all of the Engineering Faculty Regulations can be found on the Faculty website: [http://www.engineering.queensu.ca](http://www.engineering.queensu.ca). Look under Current Students > Calendar > Regulations and Policies.*
Section 900 (J-section)—Your personal safety net in first year!

As mentioned earlier, we do not formally examine your academic performance until May. However, in first year we take a look at your Fall term marks in early January to see how you are doing. If your Fall term GPA is < 1.6, or you have failed the Fall term Physics, Calculus or Chemistry, then you will be invited to an orientation session in which you will be strongly recommended to move into Section 900 (J-section).

So, how does J-section work?

**Winter term week 1:** Information meeting and sign-up

**Winter weeks 2-6:** 5-week review of the material presented in the Fall term Physics, Calculus and Chemistry courses (APSC111, APSC131, APSC171)

**Reading week:** Rewrite the final exams for these three courses. Note: The final J-section marks REPLACE the original Fall final marks for these three courses.

**Week 7:** Winter term courses begin for J-section Physics, Calculus, Chemistry and Algebra. These run for the usual 12 weeks.

**April exam period:** J-section midterm exams are held

**Early May:** Restart the final six weeks of J-section courses

**Mid-June:** J-section final exams (these are also used as rewrite exams for students who didn’t do well in the regular section final exams)

**A couple of other points:**
- There are extra fees for the 4 courses that extend into the Spring/Summer sessions—total costs are between $400-$500/course.
- Your two other Winter term courses are APSC100 and APSC142. You continue to do these courses in your regular sections and complete them before May.

"After first semester didn’t go as well as I wanted it to, I opted to give J-Section a try. I felt a difference immediately. The smaller class size felt like high school again. My peers were in the same boat as me and had similar learning styles. J-Section renewed my confidence in choosing engineering. J-Section is one of the many reasons Queen’s is known for being your family away from home: They always have your back and give you all the support you need."

—Meghan

Fact: J-section students are indistinguishable from their peers in upper years!

About 50-90 students a year do J-section.
QE5 and QE6: Why not take a bit more time to complete your degree?

The course load of Engineering students is very high. As such, some students find that they benefit from taking a reduced course load in each year and stretching their degree out to 5 or 6 years. In order to facilitate this, we have recently prepared QE5 and QE6 course plans for each of our 10 programs.

QE5: Students take 2-3 courses less per year and expect to add one extra year to their program.

QE6: Students take 3-5 courses less per year and expect to add two extra years to their program.

Note: Internships and Exchanges are still available with both QE5 and QE6 course plans.

Interested? See Aphra Rogers (First Year Co-ordinator) BEFORE week 8 of Fall term first year.

Other important academic information...

Adding courses: Term-length courses may be added up until the end of Week 2 of the term in which they are offered.

Dropping courses: Term-length courses may be dropped on SOLUS until the end of Week 8 of the term in which they are offered, and they disappear from the academic transcript. Courses may be dropped after this date (through paper application) ONLY given extenuating circumstances and upon approval from the Faculty Operations Committee. In this latter case, the course does not disappear, rather a DR (Dropped) appears on the transcript.

Repeating a course: Repeating a course does not remove the previous indication of that course/grade from the transcript. However the MOST RECENT grade is used to calculate the GPA.
Choosing Your Engineering Program

Provided you have passed all of your first year courses (yes, this is after J-section, if you choose to do that), you are guaranteed to get into your program of choice. In late January/early February, each program has orientation evenings (discipline nights) to showcase its features—there are presentations, speakers, tours, pizza—and many upper year students and professors ready to answer your questions. After these program evenings, you get a few weeks to think about it, and then make your choice when you return from Reading Week in late February.

We have 10 programs to choose from—6 engineering and 4 engineering science. Below and on the following page you will find a list of the programs and options (subplans), as well as the contact information for the Faculty Advisor and Program Assistant.

Before choosing a program do some research! Look into the program structure, what courses you will take, what companies employ those graduates and the grad schools to which our grads are accepted. ALL of this information is conveniently summarized on the Faculty website, www.engineering.queensu.ca. Click on Future Students / Undergraduate Studies and then choose from Engineering Programs or Engineering Science Programs. Each program listing contains a complete course calendar, a video, and a listing of recent employers and grad schools. Doing your research will really help you make the right decision!

## Queen’s Engineering programs

### Chemical Engineering
- Available Sub-plans:
  - Chemical Processing Sub-plan (CHE1)
  - Biochemical Engineering Sub-plan (CHE2): BIOCHEMICAL / BIOMEDICAL STREAM
  - Biochemical Engineering Sub-plan (CHE2): ENVIRONMENTAL STREAM
- Department Head: Dr. P.J. McLellan
- Undergraduate Chair: Dr. R.J. Neufeld
- Undergraduate Assistant: L.D. Joanette
- Main Office: Dupuis Hall, Room 205
- Telephone: (613) 533-6000 Ext. 74829
- E-mail: undergrad@chee.queensu.ca
- Departmental Web Site: [http://www.chemeng.queensu.ca](http://www.chemeng.queensu.ca)

### Computer Engineering
- Department Head: Dr. M. Greenspan
- Chair of Undergraduate Studies: Dr. T. Dean
- Undergraduate Assistant: P. Jordan
- Main Office: Walter Light Hall, Room 416
- Telephone: (613) 533-2925
- E-mail: patty.jordan@queensu.ca
- Departmental Web Site: [http://www.ece.queensu.ca](http://www.ece.queensu.ca)

### Civil Engineering
- Department Head: Dr. K. Novakowski
- Chair of Undergraduate Studies: Dr. A. Fam
- Undergraduate Assistant: C. Wagar
- Main Office: Ellis Hall, Room 241
- Telephone: (613) 533-2122
- Email: undergradchair@civil.queensu.ca or wagarc@civil.queensu.ca
- Departmental Web Site: [http://www.civil.queensu.ca](http://www.civil.queensu.ca)

### Electrical Engineering
- Department Head: Dr. M. Greenspan
- Chair of Undergraduate Studies: Dr. S. Yousefi
- Undergraduate Assistant: P. Jordan
- Main Office: Walter Light Hall, Room 416
- Telephone: (613) 533-2925
- E-mail: patty.jordan@queensu.ca
- Departmental Web Site: [http://www.ece.queensu.ca](http://www.ece.queensu.ca)

### Engineering Chemistry
- Department Head: Dr. P.J. McLellan
- Chair of Undergraduate Studies: Dr. S. Parent
- Undergraduate Assistant: L.D.Joanette
- Main Office: Dupuis Hall, Room 205
- Telephone: (613) 533-6000 Ext. 74829
- E-mail: undergrad@chee.queensu.ca
- Departmental Web Site: [http://www.chemeng.queensu.ca](http://www.chemeng.queensu.ca)
Queen’s Engineering programs (cont’d)

**Engineering Physics**
Available Sub-plans:
- Electrical Sub-plan (P1)
- Materials Sub-plan (P3)
- Mechanical Sub-plan (P4)
- Computing Sub-plan (P6)

Department Head: Dave Hanes
Chair of Undergraduate Studies: Dr. K. Robbie
Undergraduate Assistant: N. Haun
Main Office: Stirling Hall, Room 208H
Telephone: (613) 533-6799
E-mail: hanes@astro.queensu.ca
Departmental Web Site: http://www.physics.queensu.ca

**Geological Engineering**
Department Head: Dr. D.J. Hutchinson
Chair of Undergraduate Studies: Dr. V. Remenda
Undergraduate Assistant: L. Zarichny
Main Office: Miller Hall, Bruce Wing
Telephone: (613) 533-2597
E-mail: remenda@geol.queensu.ca
Departmental Web Site: http://geol.queensu.ca

**Mathematics & Engineering**
Available Sub-plans:
- Applied Mechanics Sub-plan (M6)
- Computing And Communications Sub-plan (M9)
- Systems And Robotics Sub-plan (M11)

Department Head: Dr. R. Murty
Chair of Undergraduate Studies: Dr. A. Lewis
Undergraduate Assistant: J. Ng
Main Office: Jeffery Hall, Room 310
Telephone: (613) 533-2390
E-mail: matheng@mast.queensu.ca
Departmental Web Site: http://www.mast.queensu.ca/meng

**Mechanical Engineering**
Available Sub-plans:
- General Sub-plan (ME1)
- Materials Sub-plan (ME2)
- Biomechanical Sub-plan (ME3)

Department Head: Dr. A.M. Birk
Chair of Undergraduate Studies: Dr. D. Matovic; darko@me.queensu.ca
Undergraduate Assistant: J. Brown; brownj@me.queensu.ca

Main Office: McLaughlin Hall, Room 319
Telephone: (613) 533-2575
Fax: (613) 533-6489
Departmental Web Site: http://me.queensu.ca

**Mining Engineering**
Available Sub-plans:
- Mining Sub-plan (N1)
- Minerals Processing Environmental Sub-plan (N2)
- Mine-Mechanical Sub-plan (N3)

Department Head: Dr. L. Daneshmend
Chair of Undergraduate Studies: Dr. T. Katsabanis
Undergraduate Program Assistant: T. McKenna
Head Office: Goodwin Hall, Room 354
Telephone: (613) 533-2230
Fax: (613) 533-6597
E-mail: pa.mineugrads@itu.queensu.ca
Departmental Web Site: http://www.mine.queensu.ca
Services and Contact Numbers

Faculty of Engineering and Applied Science Office
(613) 533-2055
reception@appsci.queensu.ca

Policies and Regulations in Engineering and Applied Science
http://engineering.queensu.ca/policy/index.html
- Academic Regulations
- Academic Dishonesty
- Senate Policies
- Professional Service, Consulting and Related Work
- Use of Calculators in Tests or Examinations

Senate Policies for all Students
http://engineering.queensu.ca/Calendar/2012-2013/Regulations_Policies_Senate.html
- Access and Privacy
- Student Appeals, Rights and Discipline
- Academic Dishonesty
- Code of Conduct
- Student Access to Final Examination Papers
- Confidential Exams
- Computer User Code of Ethics
- Volunteer Kingston
  http://www.volunteerkingston.ca

Exam Information
(613) 533-2101
http://www.queensu.ca/registrar/currentstudents/exams.html

IT (Information Technology) Services
http://www.queensu.ca/its/index.html

Health, Counselling & Disability Services
(613) 533-2506
http://www.queensu.ca/hcds

Residence Services
(613) 533-2550
http://residences.housing.queensu.ca
- Co-ordinator, Residence Life Activities
  (613) 533-6790
- Facilities Control (613) 533-3155

Learning Commons
http://www.queensu.ca/qlc/index.html
Centrally located in Stauffer Library, this enriched learning environment brings together a comprehensive, integrated set of academic support services and resources for Queen’s students.
- Learning Strategies Development
- Writing Centre (613) 533-6315

Career Services
(613) 533-2992
http://careers.queensu.ca
- Undergraduate Internships
- Career Direction
- Resumes and Interviews

Diversity at Queen’s
- Positive Space Program – General Inquiries:
  posspace@queensu.ca
  http://www.queensu.ca/positivespace/
- Four Directions Aboriginal Student Centre
  (613) 533-6970
  http://www.queensu.ca/fdasc/index.html
- Living in a Diverse Community
  http://residences.housing.queensu.ca/our-buildings/theme-floors

University Chaplain
(613) 533-2186
http://www.queensu.ca/chaplain
The Chaplain’s Office provides a confidante and advisor to students, staff and faculty. A listing of campus religious organizations and spiritual resources is available at this website.
Faith-based Campus Groups

- Geneva Fellowship (Christian)  
  http://geneva.queensu.ca
- Hillel House (Jewish)  
  http://www.queenshillel.com
- Kuluta Buddhist Centre (Buddhist)  
  http://www.kuluta.org
- Newman House (Christian-Catholic)  
  http://www.newmanhouse.ca
- Queen’s University Muslim Student Association  
  http://qumsa.net

Safety on Campus

- Walk Home Service  
  (613) 533-WALK (9255)  
  6:00 pm – 2:00 am Sun – Wed  
  6:00 pm – 3:00 am Thurs - Sat  
  http://www.myams.org/walkhome
- Campus Safe Walk Program*  
  (613) 533-6080  
  *Available when Walk Home is off duty
- Campus Security (613) 533-6733  
  http://www.queensu.ca/security/index.html
- On-Campus Defense Training (613) 533-6733
- Kingston City Police (613) 549-4660
- Campus Watch… keeping our campus safe

Queen’s International Centre
(613) 533-2604  
http://www.quic.queensu.ca

University Rector
(613) 533-2733  
http://www.queensu.ca/rector/about.html
The Rector supports and advises students on matters of course mark appeals, residence grievances, disputes with the student government, racism or other forms of discrimination.

Human Rights Office
(613) 533-6886  
http://www.queensu.ca/humanrights/2main.htm
Queen’s University
Kingston, Ontario, Canada K7L 3N6
Tel: 613.533.6000 ext. 77324
Fax: 613.533.2535