

First-Year Engineering Certificate

2015-16 Program Planning Guide

This checklist is provided for reference only. It is the student's responsibility to consult the official Academic Calendar at kwantlen.ca/calendar and meet with a Central Educational Advisor to ensure that all program graduation requirements have been met.

Central Educational Advising Kwantlen Polytechnic University 604.599.2000

kwantlen.ca/advising

For more information about UBC's Engineering University Transfer program, please visit: http://engineering.ubc.ca/eng/students/admissions/university-transfer

Kwantlen Polytechnic University offers the full first year of the Engineering core program for students wishing to transfer to the University of British Columbia (UBC).

Students who successfully complete the program within one full-time year with a GPA of at least 2.8 (as calculated by UBC admissions) are guaranteed admission to second year engineering at UBC. Students must still formally apply for admission to UBC engineering, as transfer from Kwantlen to UBC is not automatic. Students who do not complete their program in one full-time year are not eligible for the admission guarantee as stated above and will be evaluated as transfer applicants. For more information visit: engineering.ubc.ca/eng/students/admissions/engineering-transfer

ADMISSION REQUIREMENTS

KPU's Undergraduate English Proficiency Requirement applies to any students wishing to take engineering-related undergraduate level courses. Visit www.kpu.ca/calendar/2015-16/ar/englishproficiency.html for further information.

Students wishing to take first year courses without having to undertake any upgrading must have:

- Chemistry 12 (with a C+ or better)
- Pre-calculus 12 (with a B or better)
- English 12 (with a B or better)
- Physics 12 (with a C or better)

REGISTRATION FOR COURSES

The First-Year Engineering Certificate (8 months) is a Selective Entry, Limited Enrolment Program. Although seats are reserved, students must still register themselves for courses each semester. Unsatisfactory completion of pre-requisite courses required for the Spring term – CPSC 1103, MATH 1120, PHYS 1120 – will result in automatic re-classification into the General engineering certificate program.

PROGRAM CONTENT

Fall Semester	Spring Semester
APSC 1124 (F) – Introduction to Engineering	APSC 1299 (SP) – Introduction to Microcontrollers
APSC 1151 (F/SU) – Introduction to Engineering	MATH 1152 (SP) – Matrix Algebra for Engineers
Graphics	
CHEM 1154 (F, SP) – Chemistry for Engineering	PHYS 1170 (SP) – Mechanics I
CPSC 1103 – Introduction to Computer	PHYS 1220 – Physics for Physical and Applied
Programming I	Sciences II
ENGL 1100 – Introduction to University Writing	MATH 1220 – Integral Calculus (Calculus II)
MATH 1120 – Differential Calculus (Calculus I)	Complementary Studies Elective**
PHYS 1120 – Physics for Physical and Applied	
Sciences I	

Courses marked (F) or (SP) are offered only in the fall or spring semesters. Those marked (SU) are normally also offered on an accelerated basis in May/June. Math 1220, PHYS 1220, & APSC 1151 are normally offered on an accelerated basis in May/June.



**Complementary Studies Elective – Most social science and humanities courses will meet the requirements of this 3-credit elective. In general, any course offered within the Faculty of Arts at UBC satisfies this requirement with the following exceptions: scientific geography courses, statistics courses, studio/performance courses in fine arts, music and theatre, and courses that teach language skills. For more information, visit: http://students.engineering.ubc.ca/faqs. If in doubt contact the UBC Faculty of Engineering at 604-822-6556.

PROGRAM NOTES

1. Kwantlen's first year program is based on UBC's. Students intending to transfer to engineering at a university other than UBC should ensure that course selections conform to the requirements at that university.

UBC Faculty of Engineering website: www.engineering.ubc.ca/

UVIC Faculty of Engineering website: www.engr.uvic.ca/

Kwantlen engineering students can complete UVIC's first year program with one second-semester course substitution.

UNBC Faculty of Environmental Science & Engineering website: www.unbc.ca/ensc

Students who wish to transfer to UNBC/UBC's joint Environmental Engineering program can meet most first year plus one second year requirement with one or two course substitutions.

SFU Faculty of Engineering Science website: www.ensc.sfu.ca

Most, but not all, of Kwantlen's courses transfer to SFU's Engineering Science program. Please contact SFU for details.

- 2. Transfer from Kwantlen is not automatic. Students intending to transfer to UBC or any other university must still apply formally for admission and meet admission requirements for that institution. They must then compete with all other second year students for seats in the Engineering program of their choice.
- 3. For transfer information refer to the BC Transfer Guide website www.bctransferguide.ca. Courses which are "accepted in lieu of" a specific course may not be shown in the BC Transfer Guide.

For more information about the Engineering profession and how to become an engineer in British Columbia, please refer to the Professional Engineers and Geoscientists of BC website: www.apeg.bc.ca