

Pre-Engineering at Columbia College: Transfer to UBC & UVIC

(Updated on September 15, 2022)

UBC: CC students seeking admission to Engineering at UBC are advised to select from the following courses. Students must complete a minimum of 27 (UBC) transferable credits to gain admission to 2nd year Engineering at UBC.

The following courses satisfy the Foundation Year for Engineering:

CC Courses

ENGL 100 or 101
MATH 113 & 114
CHEM 121 & 123

UBC Equivalent Courses

ENGL 112(3)
MATH 100(3) & 101(3)
CC's 121&123 together
exempt UBC's Chem 154(3) and APSC 101(3)

PHYS 110 & 120	PHYS 117(3)* & 118(3)* & 119(1)*
PHYS 130 & 120	PHYS 157(3) & 118(3)* & 119(1)*
PHYS 118	PHYS 170(3)
MATH 252	MATH 152(3)
APSC 160	APSC 160(3)
ENGL Lit course or other Arts course	Complementary Studies course (3)

* UBC's PHYS 117, 118, & 119 satisfy, respectively, the PHYS 157, 158, & 159 requirements.

Second year courses that may be required, depending on specialization:

MATH 206 (Civil/Geological/Mining)	Exempts STAT 251
MATH 225 (Computer)	MATH 220
PHYS 200 (Engineering Physics)	PHYS 205

Note 1:

- an English literature course (108, 110, 121, or 131), along with Engl 100 or 101, will satisfy the English Language Admission Standard (ELAS), if completed by December. The ELAS Deadline is Feb 15th, so taking a Literature course in Winter semester (Jan-Apr) would be too late. Students who do not complete a Literature course by December can satisfy ELAS with Ielts or Toefl instead. See more ways to satisfy ELAS by going to:
<https://you.ubc.ca/applying-ubc/requirements/english-language-competency-ok/>

Note 2:

- Some Mechanical Engineering 2nd year courses at UBC have the following prerequisites: Engl 100 or 101, Math 113/114/252, Phys 130/120 & Phys 118. These courses must be completed by April in order to be eligible for 2nd year Mechanical Engineering.
- Other Engineering specializations starting at 2nd year also have specific prerequisites (to be done by April); check the UBC Engineering website for details.

See UBCO & UVIC next page.

UBCO (Okanagan Campus): Applied Sciences/Engineering

UBCO Engineering One Curriculum

APSC 169 (Fundamentals of Sustainable Engineering Design)

APSC 171

APSC 172

APSC 173

APSC 176

APSC 177

APSC 178

APSC 179

APSC 180

APSC 181

APSC 182

APSC 183

Columbia College Equivalent

No equivalent

APSC 151

MATH 113

MATH 114

ENGL 100 or 101

APSC 160

PHYS 120

MATH 252

PHYS 118

PHYS 110

CHEM 121

CHEM 123

UBCO (in Kelowna) offers Civil, Electrical, and Mechanical Engineering (entry September). CC offers 11 of the 12 required 1st year courses. CC students need to complete at least 9 of the courses above to gain 2nd year standing, but whatever courses are not completed at CC will need to be completed at UBCO. UBC Okanagan is a great option for students who want to go to UBC Applied Sciences (Engineering) but who might not get admitted to the UBC Vancouver campus.

University of Victoria (UVIC): Engineering

UVIC: CC students seeking admission to Engineering at UVIC are advised to take the following core courses and complementary studies courses:

CC Courses

MATH 113&114

MATH 252

ENGL 100 or 101

PHYS 110 & 130

PHYS 118

CHEM 121

APSC 160

Math 213

CSCI 225 (Prereqs: CSCI 120 & 125)

UVIC Equivalent Courses

MATH 100&101

MATH 110

ENGL 135

PHYS 110 & 111

ENGR 141

CHEM 101 → sub CHEM 150

CSC 111

MATH 200

CSC 115 → sub for CSC 116

One Complementary Studies (CS) Course (3cr): UVIC Engineering has a list of courses which have been given CS status over the last 5 years. Students are required to check in advance with a program advisor in the UVIC BEng office to ensure that the course they wish to take at CC (or at UVIC) qualifies as a CS course. Some of the courses CC offers that transfer to UVIC as CS approved courses are Busn 272, Engl 210, 215, 230, Phil 101/102 (together), 113, Psci 200, 202, 210, 240, and Soci 110. Additional courses may be granted CS status, but approval must be obtained in advance for such CS courses.

Note: Students must take Engr 110, 120, & 130 at UVIC.