

Engineering Block Transfer Agreement 2009-2010

University of Alberta and University of Calgary Engineering Programs

Both the Universities of Alberta and Calgary offer undergraduate degree programs in Engineering. *The first year of the programs is similar but not identical.* A transfer student may obtain complete or partial credit towards first year depending on the courses selected and the university to which admission is sought.

Students should plan their programs carefully and in consultation with the academic advisor at the institution in which they begin their first year. First year program requirements at the two universities are indicated below. In instances where there is a course entry for both UofA and UofC, the courses are treated as equivalent. Please also note the footnotes below.

First Year Program Requirements	UofA*	UofC*
Chemistry – 2 courses	CHEM 103 CHEM 105	ENGG 201 CHEM 209
Engineering Statics ¹	ENGG 130	
Engineering Dynamics ¹	EN PH 131	
Engineering Statics / Dynamics ¹		ENGG 205
Calculus – 2 courses	MATH 100 MATH 101	AMAT 217 AMAT 219
Linear Algebra	MATH 102	MATH 211
Physics (Waves & Optics) ²	PHYS 130	
Physics (Electricity & Magnetism) ³		PHYS 259
Computing	ENCMP 100	ENGG 233
Orientation to the Engineering Profession	ENGG 100/101	
Design & Communications ⁴		ENGG 251/253
* Consult with the program head of the receiving institution for units of course weight for each course.		
Complementary Studies Elective ⁵	Yes	Yes

1. UofC offers a second Engineering Statics/Dynamics course, ENGG 349, in second year. It is required for 6 of 9 UofC programs. As it is not applicable for Electrical, Computer or Software Engineering, transfer students who are admitted to these 3 programs may count this extra credit as a technical elective. UofC's ENGG 205/349 is equivalent to UofA's ENGG 130/EN PH 131.
2. UofC offers an equivalent course, PHYS 369, as part of the second year program. It is required in all but Oil and Gas Engineering programs at UofC.
3. UofA offers an equivalent course, PHYS 230, as part of the second year program. It will be accepted as equivalent to PHYS 259 at UofC. Students transferring to Electrical, Computer and Software Engineering at UofC must complete PHYS 259 or equivalent before UofC classes start in the fall or registration will be cancelled. Students admitted to the other 6 programs must take PHYS 259 before entering 3rd year at UofC. Students transferring to Civil, Mining, Computer Process Control option in Chemical and Petroleum Engineering programs at UofA cannot receive degree credit for UofC's PHYS 259 or UofA's PHYS 230.
4. Students completing UofC's ENGG 251 and 253 will receive credit for ENGG 100/101 at UofA. UofA students transferring to UofC will have the ENGG 251/253 requirement waived. In place they must take the following: (a) an approved drawing course and (b) an extra technical elective whose engineering design content is at least 50%. Engineering design content will be judged from the latest CEAB accreditation report.
5. Complementary studies electives in first year are courses selected from the humanities (excluding languages) or social sciences. English courses are acceptable.

University Transfer Engineering Programs

The first year of engineering programs are offered at Grande Prairie Regional College, Grant MacEwan College, Keyano College, Medicine Hat College, Mount Royal College, Red Deer College and the University of Lethbridge. The following two charts show how courses at these institutions transfer to the Engineering Programs at UofA and UofC.

Transfer to the University of Alberta

All admissions to second year engineering programs are competitive and are based on academic performance in first year. Students who are in good standing after completing one of these engineering transfer programs are eligible for admission to UofA's Faculty of Engineering. Students from these programs are treated in the same way as students who have completed first year engineering at UofA. Students who have carried less than 10 three-weight courses in the preceding academic year will have an adjustment applied in the calculation of their admission GPA. In this context, design and communications courses equivalent to UofC's ENGG 251 and 253 are not counted as part of the 10 course requirement.

UofA	Grande Prairie Regional	Grant MacEwan	Keyano	Medicine Hat	Mount Royal	Red Deer	UofL
Chemistry - 2 courses							
CHEM 103	CH 1030	CHME 103	CHEM 103	CHEM 201	CHEM 2210	CHEM 203	CHEM 1000
CHEM 105	CH 1050	CHME 105	CHEM 105	CHEM 203	CHEM 2209	CHEM 205	CHEM 2000
Engineering Statics and Dynamics - 2 courses¹							
ENGG 130	EG 1300	ENGG 130	ENGG 130	ENGG 205/	ENGR 1205/	ENGG 230	ENGG 2000
EN PH 131	PC 1310	ENPH 131	ENPHY 131	ENGG 349	ENGR 3349	ENPH 231	ENGG 2060
Calculus - 2 courses							
MATH 100	MA 1000	MATH 100	MATH 100	AMAT 217	MATH 1217	MATH 212	MATH 1560
MATH 101	MA 1010	MATH 101	MATH 101	AMAT 219	MATH 1219	MATH 213	MATH 2560
Linear Algebra - 1 course							
MATH 102	MA 1020	MATH 102	MATH 102	MATH 221	MATH 1203	MATH 223	MATH 1410
Physics (Waves and Optics) - 1 course							
PHYS 130	PC 1300	PHYS 130	PHYS 1130	PHYS 269	PHYS 2130	PHYS 269	PHYS 2130
Computing - 1 course							
ENCMP 100	CS 1000	ENCMP 100	ENCMP 100	ENGG 233	ENGR 1233	ENCMP 200	CPSC 1620
Orientation to Engineering/Complementary Studies Elective							
ENGG 100/101	EG 1000/1010	ENGG 100/101 + ENGL 199	ENGG 102 + ENGL 199	ENGG 215 ²	ENGR 1261/1263	ENGG 200 + Comp Studies	Comp Studies ³

1. At institutions where both courses include statics and dynamics, students must complete both courses to obtain credit for ENGG 130 and EN PH 131. If only one is completed, the student will receive credit for either ENGG 130 or EN PH 131 depending on the engineering discipline to which they are admitted.
2. Students transferring will receive 5 units of course weight in lieu of UofA's ENGG 100/101 and ENGL 199 (a required second year course).
3. Introduction to engineering requirement waived.

Transfer to the University of Calgary

Admission to the Schulich School of Engineering is limited and based on the grade point average (GPA) of courses that are transferable to UofC. The admission GPA varies depending on the number of spaces available in the degree program to which the student has applied. Students who have completed eight of the ten technical first year courses will be considered for transfer into second year and directly into an area of specialization¹. Admission of transfer students to degree programs is competitive and the GPA necessary for admission will be different for each program and may also differ from one year to the next.

UofC	Grande Prairie Regional	Grant MacEwan	Keyano	Medicine Hat	Mount Royal	Red Deer	UofL
Chemistry - 2 courses							
ENGG 201	CH 1030	CHME 103	CHEM 103	CHEM 201	CHEM 2210	CHEM 203	CHEM 1000
CHEM 209	CH 1050	CHME 105	CHEM 105	CHEM 203	CHEM 2209	CHEM 205	CHEM 2000
Engineering Statics and Dynamics - 1 course							
ENGG 205/349	EG 1300/ PC 1310 ²	ENGG 130/ ENPH 131 ²	ENGG 130/ ENPHY 131 ²	ENGG 205/ ENGG 349	ENGR 1205/ ENGR3349	ENGG 230/ ENPH 231 ²	ENGG 2000/2060 ²
Calculus - 2 courses							
AMAT 217	MA 1000	MATH 100	MATH 100 ³	AMAT 217	MATH 1217	MATH 212	MATH 1560
AMAT 219	MA 1010	MATH 101	MATH 101 ³	AMAT 219	MATH 1219	MATH 213	MATH 2560
Linear Algebra - 1 course							
MATH 211	MA 1020	MATH 102	MATH 102	MATH 221	MATH 1203	MATH 223	MATH 1410
Physics - 1 course							
PHYS 259	PC 2300 ^{4,5}	Note 4,5	Note 4,5	Note 4,5	ENGR 1215 ⁵	PHYS 359 ^{4,5}	Note 4,5
Computing - 1 course							
ENGG 233	CS 1000	ENCP 100	ENCMP 100	ENGG 233	ENGR 1233	ENCP 200	CPSC 1620
Design and Communications - 2 courses							
ENGG 251/253	Note 6	Note 6	Note 6	Note 7	ENGR 1261/1263/ 1271/1273	Note 6	Note 6
Complementary Studies Elective - 1 course							
	Comp Studies	Comp Studies	Comp Studies	Comp Studies	Comp Studies	Comp Studies	Comp Studies

* The University of Lethbridge does not currently have an Engineering Transfer program to UofC; students interested in transferring from UofL should contact the Schulich School of Engineering at UofC.

- Transfer students are not required to complete the complementary studies elective to be admissible to second year and a degree program. Acceptable complementary studies are those transferable to UofC in the humanities (excluding languages) or social sciences. English courses are acceptable. See www.eng.ucalgary.ca/students/comp_studies.htm for a list of acceptable complementary studies courses.
- Students who complete the college courses equivalent to UofA's ENGG 130 and EN PH 131 will receive credit for UofC's ENGG 205 and 349. ENGG 349 is a 2nd year course and is required for 6 of 9 UofC programs. It is NOT applicable for Electrical, Computer or Software Engineering. Students who are admitted to these 3 programs may count this extra credit as a technical elective.
- Keyano students are strongly encouraged to take a complementary block week course at UofC.
- Students who complete the college course equivalent to UofA's PHYS 130 will receive credit for UofC's PHYS 369, which is required in all but the Oil and Gas Engineering program.
- Students admitted to Electric and Computer Engineering must complete PHYS 259 or equivalent before UofC classes start in the fall. If they do not, their registration will be cancelled. Students admitted to the other 7 programs must take PHYS 259 before entering 3rd year at UofC.
- Students admitted from a college transfer program which does not offer the equivalent of ENGG 251/253 will have this requirement waived. In place they must take the following: (a) an approved drawing course and (b) an extra technical elective whose engineering design content is at least 50%. Engineering design content will be judged from the latest CEAB accreditation report.
- MHC students completing ENGG 215 and a technical elective whose engineering design content is at least 50%, will have the ENGG 251/253 requirement waived. Engineering design content will be judged from the latest CEAB accreditation report. Alternatively, MHC students may use ENGG 215 to meet UofC's ENGG 251 requirement and complete ENGG 253 after admission to UofC.