

Multidisciplinary Programs and University Wide Courses

II. -ENGINEERING AND LIBERAL ARTS PROGRAM

The Engineering and Liberal Arts Program is the result of close co-operation between Bishop's University and the Université de Sherbrooke. This exclusive, double-degree program leads simultaneously to two Bachelor's degrees: a B.A. Liberal Arts, from Bishop's University (delivered in English), and a B.Eng. (either Civil or Chemical Engineering), from the Université de Sherbrooke (delivered in French). Students in this program will study at both Universities, in both of Canada's official languages, while benefiting from two unique university cultures.

This innovative joint program is unique in Canada and will produce a new generation of leaders for Québec and Canadian industrial and public life — bilingual graduates with superb technical expertise coupled with a solid general education. The program trains engineers who will be culturally grounded, critically minded and capable of effective communication in complex situations. Graduates will be professional engineers possessing a firm grounding in political and social issues, with the capability of integrating engineering practice into a broad cultural and historical perspective.

The program is part of a co-operative system that alternates study semesters on campus with paid engineering work internships in the industrial or public sectors. French or English language upgrading is available for students who require it. The normal length of this dual-degree program is four academic years and one semester for students possessing the appropriate CEGEP DEC, with an extra year for those entering from high school systems in the rest of Canada (see the schedule below)

Entrance Requirements

Students enter the Engineering and Liberal Arts dual-degree program in one of two ways depending on their high school or college diplomas. In both cases, only students of the highest academic standing will be admitted, as admission is strictly limited. Candidates will normally possess strong linguistic skills in both official languages.

Candidates applying from the province of Québec must have a Québec college diploma (D.E.C.) in pure and applied sciences. These candidates submit their applications to the Faculty of Engineering at the Université de Sherbrooke, choosing either the Department of Civil Engineering or the Department of Chemical Engineering. Upon admission, the first year consists of two academic semesters at the Université de Sherbrooke, followed by a paid summer work internship in engineering.

Candidates applying with high-school diplomas from provinces other than Québec (or from the U.S.A. or elsewhere) must submit their applications to Bishop's University. Upon admission, the first year consists of two general science semesters spent entirely at Bishop's University, in English. In both the fall and winter semester these students must register in 18 course credits and 3 co-requisite laboratory credits, (for a total of 42 Bishop's credits) as follows:

	Bio 191	Introductory Biology
	Che 191	General Chemistry I + Che 081 (corequisite lab)
Fall	Phy 191	Introductory Physics I (Mechanics) + Phy 081 (corequisite lab)
	Mat 191	Enriched Calculus I + Mat 081 (lab/tutorial)
	Mla 116	Effective Writing for Engineers
	Che 192	General Chemistry II + Che 082 (corequisite lab)
	Phy 192	Introductory Physics II (Electricity and Magnetism)
Winter	Phy 106	Waves and Optics + Phy 085 (corequisite lab)

Mat 192 Enriched Calculus II
+ Mat 082 (lab/tutorial)

Elective Course (three credits from courses in English, History, Classical Studies, Philosophy,
Religion or Liberal Arts)

The summer following this first academic year can be spent in upgrading French language skills if required.

Students can receive credit for Bishop's general science courses after completion of AP (Advanced Placement) examinations. A minimum score of 4 is required:

Biology: credit for BIO 191

Chemistry: credit for CHE 191/081 and CHE 192/082

Mathematics BC: credit for MAT 191/081 and MAT 192/082

Physics C-Mechanics: credit for PHY 191/081

Physics C-Electricity: credit for PHY 192/082.

Entry into the second year for students from outside of Quebec is contingent on achieving a 70% cumulative average in courses taken during the general science year. Following the general science year, all students in the Engineering and Liberal Arts dual-degree program embark on the following sequence of alternating semesters at the Université de Sherbrooke (S), semesters at Bishop's University (B) and paid work internships (W):

1st Year	FALL	WINTER	SUMMER
	S1	S2	W1
2nd Year	FALL	WINTER	SUMMER
	S3	B1	S4
3rd Year	FALL	WINTER	SUMMER
	W2	S5	S6
4th Year	FALL	WINTER	SUMMER
	W3	S7	W4
5th Year	FALL		
	S8		

Included in the above schedule are two blocks of courses which must be completed at Bishop's University:

BLOCK A: (21 to 33 credits)

During the appropriate academic semesters at the Université de Sherbrooke (S1-S8), students must register in specified and elective credits to be taken at Bishop's. Thus in several of the engineering academic semesters, students will replace one or two of the regular engineering courses at Université de Sherbrooke, to enroll in replacement and elective courses at Bishop's University as described below

For students in Chemical Engineering, the following twelve credits must be taken at Bishop's: CHE 105 Organic Chemistry, MAT 210 Ordinary Differential Equations, ESG 266 Environmental Policy, and BMG 214 Creating a Business. These courses replace the equivalent courses in the regular engineering program at the Université de Sherbrooke: GCH 111, GIN 110, GCH 532, and INS 124. For students in Civil Engineering twelve specified credits must be taken at Bishop's: MAT 210 Ordinary Differential Equations, ESG 266 Environmental Policy, BMG 214 Creating a Business, and PHI 240 Topics in Professional Ethics. These courses replace GIN 110, GCH 532, INS 124, and GCI 635 in the regular engineering program at the Université de Sherbrooke.

Both Civil and Chemical Engineering students must register in a further nine credits of elective courses at Bishop's, chosen from the course offerings of the Division of Humanities or Social Sciences. These courses count towards the B.A. in Liberal Arts and one of these must be at the 300 level.

Finally, both students in Civil and Chemical Engineering may register in up to twelve additional elective credits from Bishop's courses which are recognized equivalents of Engineering courses at Sherbrooke. For students in Civil Engineering this list includes Esg 346 Urban Planning and Esg 354 Canadian Environmental Planning and Management.

BLOCK B: (18 credits)

During the winter of the second year of studies (or third year for out-of-province students) a complete semester of academic study will be taken at Bishop's University. Students must register in eighteen credits as follows:

- Lib 20x - the course in the Lib 210-217 rotation being offered
- Humanities Elective - one course from Classical Studies, History Philosophy or Religion
- Literature Elective - one literature course from English, Études Françaises et Québécoises or Modern Languages
- Fine and Performing Arts Elective - one course from Drama, Music or Fine Arts
- Social Sciences Electives - two (200 level or higher) courses from Sociology, Psychology, Political Studies or Environmental Studies and Geography

One of the three electives in Humanities, Literature or Fine and Performing Arts must be at the 300 level. Students should be aware that required prerequisite courses may need to be completed prior to the selected course(s) above.

For more information about this program, please contact the academic coordinators for this program:

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