General Degree Requirements

Following is a list of the faculty requirements needed to satisfy degree programs in the College of Arts and Science. Details of these requirements can be found on the pages following these lists. Departmental requirements can be found in the appropriate department/faculty listing in this calendar. Please note that students must satisfy both department and faculty requirements. Before registering for the second year, each student in the College of Arts and Science should declare a subject of concentration and obtain program advice from a faculty advisor in the appropriate department.

Requirements for degree programs other than College of Arts and Science can be found in the appropriate department/school/college/faculty listing.

Subject Groupings

Course offerings within the College of Arts and Science are placed into three subject groupings: (1) Languages and Humanities, (2) Social Sciences and (3) Life and Physical Sciences. All BA and BSc programs must include a minimum of six credit hours from each of the three subject groupings.

1. Languages and Humanities

Arabic, Canadian studies, Chinese (Mandarin), classics, comparative religion, contemporary studies, creative writing, early modern studies, English, European studies, French, gender and women's studies, German, Greek, history, history of science and technology, Italian studies, King's Foundation Year, Latin, music, Performance Studies, philosophy, religious studies, Russian, Spanish, and theatre.

2. Social Sciences

Canadian studies, contemporary studies, early modern studies, european studies, economics, gender and women's studies, history, history of science and technology, international development studies, King's Foundation Year, political science, psychology, sociology and social anthropology, and sustainability (for BSc only).

3. Life Sciences and Physical Sciences

Biochemistry and molecular biology, biology, chemistry, computer science, earth sciences, economics, engineering, environmental science, human physiology* (for BA only), informatics, marine biology, mathematics, microbiology and immunology, neuroscience, oceanography, physics, psychology, science, statistics, and sustainability (for BA only).

* Offered by the Faculty of Medicine. See Electives section below, for limit on courses from other Faculties.

PLEASE NOTE:

- 1. In cases where a subject is listed in more than one of the groupings, any credit taken in that subject may be used to satisfy only one of the grouping requirements. A second credit in the same subject cannot be used to satisfy another subject grouping requirement. The exceptions are the Dalhousie Integrated Science Program and King's Foundation Year Program. King's Foundation Year Program (KING 1000.24, KING 1100.18) satisfies the humanities-language and social science groupings and students must take six credit hours in a single life/physical sciences subject to complete the subject grouping requirements. The Integrated Science Program satisfies the life sciences and physical sciences and social sciences subject groupings. Integrated Science students are required to take another three credit hours of Languages and Humanities in addition to PHIL 1050.03 to satisfy the Languages and Humanities requirement.
- 2. The subject groupings requirement should normally be completed in the first 60 credit hours.

Writing Course Requirements

An approved writing course or set of courses is required for all BA and BSc degrees. Courses and course combinations that can be used to fulfill the writing requirement are listed below. It is recommended that students complete the writing requirement early in their programs, preferably in their first year of studies.

FQ	CLAS 1100X/Y.06: Gods, Heroes, and Monsters: Ancient Mythology
	ENGL 1000X/Y.06: Introduction to Literature
	ENGL/CRWR 1030.06: Reading and Writing Stories

CLAS 1010X/Y.06: Ancient History: God-Kings, Spartans and Caesars

Any two of ENGL 1010.03: Prose and Fiction: Writing Requirement, ENGL 1020.03: Poetry and Drama: Writing Requirement, ENGL 1040.03: Reading Popular Culture: Writing Requirement, ENGL 1045.03, ENGL 1050.03: Pulp Fiction: Writing Requirement, ENGL 1100.03: Writing for University

GERM 1020X/Y.06: German Fiction in Novel and Film

GERM 1080X/Y.06: German Folk and Fairy Tales

HIST 1022.03 and HIST 1023.03: Introduction to European History (Writing Requirement Version)

F₫ ≧	HIST 1510.06: The History of the Future: How Visions of the Future Have Shaped History Around the World
∓0 ≊	Any two of HIST 1503.03: The Black Death, Silk, and the Mongols - Shock, Culture, and Awe in Medieval Eurasia (12-
	15th Centuries): Comparative Global History, HIST 1504.03: Origins of Modern Global Society, HIST 1006.03: The Idea
_	of the Past and the Making of the Present
FQ B	HSTC 1800.03: Technology and Engineering: From the Stone Age to the Industrial Age and HSTC 1801.03: Technology
	and Engineering: From the Industrial Age to the Cybernetic Age
FO	JOUR 1001X/Y.06: Foundations of Journalism *
FQ	Integrated Science Program (SCIE 15XX)
FO	King's Foundation Year
F9	OCEA 1000X/Y.06: Conversations with Ocean Scientists
FO	PERF 1000.03: Introduction to Performance Studies and one of PERF 1001.03: Writing About Music OR PERF 1002.03:
	Writing About Stage and Screen
	PHIL 1010X/Y.06: Introduction to Philosophy
	POLI 1103X/Y.06: Introduction to Government and Politics
F9	RELS 1200X/Y.06: Gods, Heroes, and Monsters: Ancient Mythology
FQ E	RUSN 1020.03: Russian Culture and Civilization under the Tsars and RUSN 1070.03: Modern Russian Culture and
	Civilization
	SCIE 1111.03 (satisfies writing requirement for BSc students only)
	SOSA 1050X/Y.06: Explorations in Culture and Society
ξg	SUST 1000.06: Introduction to Environment, Sustainability and Society I

The Writing Course may also be used to satisfy one of the subject groupings.

Mathematics Requirement (Bachelor of Science)

A minimum of six credit hours in mathematics or statistics other than MATH 1001.03, MATH 1002.03, MATH 1003.03, MATH 1110.03, MATH 1120.03 or MATH 1115.03, are required for all BSc programs. A course taken to satisfy the mathematics requirement may not be used to also satisfy the subject groupings requirement.

Students may also satisfy this requirement by passing the test which is administered by the <u>Department of Mathematics and Statistics</u>. Such students must nevertheless complete 90 or 120 credit hours in order to graduate.

Language Course (Bachelor of Arts)

Students should consider becoming fluent in French. BA students are required to obtain six credit hours from the following language courses:

=0	ARBC 1020X/Y.06: Introduction to Arabic
FQ 8	CHIN 1030X/Y.06: Introduction to Chinese (Mandarin)
F0	CHIN 1031.03: Introduction to Chinese (Mandarin) Pt 1 and CHIN 1032.03: Introduction to Chinese (Mandarin) Pt 2 (both
	must be completed)
FQ 8	CLAS 2500X/Y.06: Introductory Ancient Greek, CLAS 1800X/Y.06: Introductory Latin; CLAS 1900X/Y.06: Introductory
	Classical Hebrew
∓0 81	FREN (any course taught in French)
=0 2	GERM 1001X/Y.06: German: A Practical Course for Beginners, GERM 1010X/Y.06: German for Beginners, GERM
	1060X/Y.06: German for Reading
F0 81	ITAL 1010X/Y.06: Italian for Beginners
F0 2	RELS 2600.03/CLAS 2600.03: Introductory Sanskrit II and RELS 1600.03/CLAS 1600.03: Introductory Sanskrit I both
_	must be completed
FQ 8	RUSN 1000X/Y.06: Elementary Russian
F0 81	RUSN 1002.03: Elementary Russian I and RUSN 1003.03: Elementary Russian II (both must be completed)
FQ 8*	SPAN 1021.03: Beginning Spanish and SPAN 1022.03: Advanced Beginning Spanish (both must be completed)
F9	SPAN 1035X/Y.06: Intensive Beginning Spanish

For students with advanced language skills, upper-level language courses may be substituted. Consult the Registrar's Office if you require further information. A course taken to satisfy this requirement cannot also satisfy the requirement of a course from section 1.

^{*} Offered by the School of Journalism. See Electives section below, for limit on courses from other Faculties.

Students may satisfy this requirement by passing one of the tests administered by the language departments. Such students must nevertheless complete 90 or 120 credit hours in order to graduate.

BA students who choose to major in economics, philosophy, political science, psychology or sociology and social anthropology may substitute for a language course at least six credit hours in mathematics or statistics taught by the Department of Mathematics and Statistics, other than MATH 1001.03, MATH 1002.03, MATH 1003.03, MATH 1110.03, MATH 1120.03, or MATH 1115.03, to meet this requirement; or they may meet it by passing the test administered by the Department of Mathematics and Statistics.

A course taken to satisfy this requirement cannot also satisfy the requirement of a course from <u>Life Sciences and Physical Sciences</u>.

Electives

Students may choose electives from any of the courses offered by teaching units within the College of Arts and Science, College of Sustainability, and the Faculty of Computer Science. In addition, without prior permission, electives are permitted as follows provided prerequisites are met and the consent of the instructor(s) is obtained when necessary:

Bachelor of Arts

18 credit hours from courses offered in other faculties plus up to 12 credit hours in Commerce

Please note that BA students registered for minors in Business, Law and Society, Health Studies, Community Design, Journalism or other minors approved for students within the College of Arts and Science are permitted to take the courses necessary to satisfy the requirements for the minor. In addition, 12 credit hours from courses offered in other faculties are permitted.

BA/BEng

Students may count as electives a total of 36 engineering credit hours. In addition 12 credit hours from courses offered in other faculties are permitted.

Bachelor of Science

18 credit hours from courses offered in other faculties plus up to 12 credit hours in Commerce OR
30 credit hours in Engineering or Food Science courses and 18 credit hours from courses offered in other faculties

Please note that BSc students registered for any approved <u>minor</u> are permitted to take the courses necessary to satisfy the requirements for the minor. In addition, 12 credit hours from courses offered in other faculties are permitted.

BSc/BEna

Students may count as electives a total of 36 engineering credit hours and in addition 12 credit hours from courses offered in other faculties.

Any additional elective credit hours outside the College of Arts and Science will require explicit permission, to be obtained by application to the appropriate Dean's Office. Permission to count a requested course for degree credit will only be granted to students who demonstrate clearly, in a written submission, how a desired course will enhance the objectives of the BA or BSc program in progress. In this regard, a written statement of support from an academic advisor in the department of concentration is desirable.

Students seeking to enrol in courses beyond the above provisions as a means of preparing to transfer to a program of study outside the College of Arts and Science will be given approval to do so by the appropriate dean's office if admission to the course(s) has been granted by the instructor(s) concerned. In such cases, however, it will be explicitly stated that the courses will not count for credit towards a BA or BSc degree.

Cross-listed Courses

Please note that cross-listed courses will count as one subject only for the purpose of satisfying degree requirements, e.g. ECON 2260.03 cross-listed with MATH 2060.03 may count either as a mathematics course or economics course but not both.

Major/Honours Conversion

Upgrading of BA or BSc (90 credit hour) to a BA or BSc Major (120 credit hour)

A person who holds a Dalhousie BA or BSc (90 credit hour) degree may apply through the Registrar's Office for admission to a major program. On completion of the required work with proper standing, a conversion certificate will be awarded which has the effect of upgrading the degree to major status.

Upgrading of a BA or BSc (90 or 120 credit hour) to a BA or BSc Honours (120 credit hour)

A person who holds a Dalhousie BA or BSc (90 or 120 credit hour) degree may apply through the Registrar's Office with the appropriate department advisor(s) approval, to an Honours program. On completion of the required work with proper standing, a certificate will be awarded which has the effect of upgrading the degree to honours status.

BA/BSc (120 credit hour) Programs

The 120 credit hour degree is the standard BA or BSc degree. There are a variety of programs within the 120 credit hour degree. Each is designed to develop some level of concentration of knowledge and expertise.

Major Programs

A major program focuses a student's studies, but not to the extent that an honours program does. Unlike the honours degree, the major degree may not be adequate for admission to graduate programs. Students interested in a major program are advised to seek detailed information from the department in which they wish to concentrate their studies.

BA (120 credit hour)

FQ M	First Year
	No more than 18 credit hour equivalents of the first 30 credit hours taken may be in a single subject
E9 20	6 credit hours in an approved <u>writing course</u>
F₫	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
F0 20	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
F0 81	6 credit hours in one or more life or physical science subjects (see Section 3 of Subject Groupings).
F0	6 credit hours in a single language subject (see <u>Language Course section</u>)
FQ 81	A minimum of 30, maximum of 54 credit hours in the major subject beyond the 1000 level, including 18 credit hours
_	beyond the 2000 level.
F⊈	Within the last 90 credit hours, complete 6 credit hours in each of two subjects other than the major
F9	Total credit hours required above 1000 level - 72
F0	Total credit hours required for degree - 120
FO	Required GPA for graduation - 2.00
F0	Graduation with distinction - 3.70
Ε	May be combined with minor(s)

Bachelor of Arts major subjects: classics, English, European Studies, French, German, gender and women's studies, history, international development studies, music, philosophy, political science, religious studies, Russian studies, sociology and social anthropology, Spanish, theatre, or any of the BSc major subjects.

BSc (120 credit hour)

FQ E	an approved writing course
F0 81	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings)
FO E	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
F₫	6 credit hours in math (see Math Requirement).

A minimum of 30, maximum of 60 credit hours in the major subject beyond the 1000 level, including 18 credit hours beyond the 2000 level. Total credit hours required above 1000 level - 72 Total credit hours required for degree - 120 Required GPA for graduation - 2.00 Graduation with distinction - 3.70 May be combined with minor(s)	
Bachelor of Science major subjects: Actuarial Science, Biochemistry and Molecular Biology, Biology, Chemistry, Earth Sciences, Economics, Environmental Science, Marine Biology, Mathematics, Microbiology and Immunology, Neuroscience, Ocean Science, Physics, Psychology, or Statistics.	
BSc Major (120 credit hour) Science Co-operative Education Requirements are as for the major program with the addition of the following:	
A minimum of three co-op work terms	
The following departments currently offer co-op programs: Biochemistry and Molecular Biology, Biology, Chemistry, Earth Sciences, Marine Biology, Microbiology and Immunology, and Physics and Atmospheric Science. For details on these programs, consult the calendar entries for the departments and the Science , Information Technology and Engineering (S.I.T.E.) Cooperative Education section.	
Double Major programs The double major program allows study in two disciplines of equal or comparable interest.	
BA Double Major (120 credit hour)	
First Year	
No more than 18 credit hour equivalents of the first 30 credit hours taken may be in a single subject	
 6 credit hours in a writing course 6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings). 6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings). 6 credit hours in one or more life or physical science subjects (see Section 3 of Subject Groupings). 6 credit hours in a single language subject for (see Language Course section) A minimum of 60, maximum of 84 credit hours in the major subject beyond the 1000 level are to be in the two allied subjects, with no more than 48 credit hours and no fewer than 30 credit hours in either, including 12 credit hours beyond the 2000 level in each of the two major subjects. The major subject with the most advanced credits appears first on the record. Within the last 90 credit hours, complete six credit hours in a single subject other than the two major subjects Total credit hours required above 1000 level - 72 Total credit hours required for degree - 120 Required GPA for graduation - 2.00 Graduation with distinction - 3.70 May be combined with minor(s) 	
Bachelor of Arts Double Major subjects: Choose both subjects from the Bachelor of Arts and Bachelor of Science major subjects, Computer Science (as a second subject only); or combine one BA major subject with Environment, Sustainability and Society. In addition to the BA major subjects listed in the BA (120 credit hour) section, Canadian studies, music and creative writing are also available as one of the subjects in a double major. European Studies is not available in the double major program.	
BSc Double Major (120 credit hour)	
an approved <u>writing course</u> 6 credit hours in one or more language/humanities subjects (see Section 1 of <u>Subject Groupings</u>).	

	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
FQ E	6 credit hours in math (see Math Requirement).
F₫	Minimum of 60 and a maximum of 84 credit hours in the two major subjects beyond the 1000 level, with no more than 54
	credit hours and no fewer than 30 credit hours in either, including at least 12 credit hours beyond the 2000 level in each of
	the two major subjects. The major subject with the most advanced credit hours appears first on the record.
FO M	Total credit hours required above 1000 level - 72
FQ E	Total credit hours required for degree - 120
FO M	Required GPA for graduation - 2.0
F0 81	Graduation with distinction - 3.70
FQ	May be combined with minor(s)
	·
c Do	while Major subjects:

BSc Double Major subjects:

- Choose two BSc major subjects (Actuarial Science, Biochemistry and Molecular Biology, Biology, Chemistry, Earth Sciences, Economics, Environmental Science, Marine Biology, Mathematics, Microbiology and Immunology, Neuroscience, Ocean Sciences, Physics, Psychology, or Statistics)
- Combine one BSc major subject with Computer Science or Environment, Sustainability and Society
- Combine one BSc major subject with one of the BA major subjects (except European Studies) or with Canadian Studies, Creative Writing, or Music. The larger number of major credit hours must be in the BSc subject.

Honours Programs

Honours programs require a higher quality of work than is required by the other undergraduate programs of the college (such as the 90 credit hour degree and 120 credit hour major). Able and ambitious students are urged to enter these programs. There are two types of honours programs in the BA (concentrated and combined) and three types in the BSc (concentrated, combined, and multidisciplinary). Applications for admission to honours programs must be made to the departments concerned on forms available in departments, at the Registrar's Office or online at dal.ca/honours.

Students should apply in their second year. If application is made later, it may be necessary to make up some work not previously taken.

For each individual student the entire honours program, including elective credit hours, is subject to supervision and approval by the department or departments concerned, or in the case of multidisciplinary honours, by an interdisciplinary committee.

NOTE: The last day to apply to an honours program is September 19.

BA Concentrated Honours (120 credit hour)

=0 2	First Year
	No more than 18 credit hour equivalents of the first 30 credit hours taken may be in a single subject
FQ 8°	6 credit hours in a <u>writing course</u>
FQ 81	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
FQ S*	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
FQ 81	6 credit hours in one or more life or physical science subjects (see Section 3 of Subject Groupings).
FQ 8°	6 credit hours in a single language subject for (see <u>Language Course section</u>)
FQ 81	A minimum of 54, maximum of 66 credit hours beyond the 1000 level in the honours subject, grade must be "C or better",
_	otherwise, course will not count toward degree.
8	Within the last 90 credit hours, complete 6 credit hours in each of two subjects other than the major
FO	Total credit hours required above 1000 level - 72
FO	Total credit hours required for degree - 120
FQ 8°	Required GPA for graduation - 2.00
FQ 81	Graduation with distinction - 3.70
FQ 8	Honours Qualifying Examination: At the conclusion of an honours program a student's record must show a grade which is
	additional to the grades for the courses taken to obtain the required 120 credit hours. This grade may be obtained through a
	comprehensive examination, the presentation of a research paper (which may be an extension of one of the courses), or
	such other method as may be determined by the committee or department supervising the student's program. The method
	by which this additional grade is obtained is referred to as the Honours Qualifying Examination. Departments may elect to

_	use a pass-fail grading system for this examination. Unless pass/fail grading is employed, the grade must be "B-" or better for honours, and "A-" or better for first class honours. Required standing for graduation: Arts and Social Sciences subjects require a GPA of 2.70 (3.70 for first class) on courses in the honours subject. Science subjects (see below) require a GPA of 3.00 (3.70 for first class) in the honours subject. May be combined with minor(s)
Note: If	the student has a minor, courses in the honours subject and the minor are included in the GPA.
	r of Arts concentrated honours subjects: classics, English, European Studies, French, German, history, international ment studies, music, philosophy, political science, religious studies, Russian studies, social anthropology, sociology, Spanish,

BSc Concentrated Honours (120 credit hour)

and theatre or any of the BSc honours subjects.

	an approved <u>writing course</u> 6 credit hours in one or more language/humanities subjects (see Section 1 of <u>Subject Groupings</u>). 6 credit hours in one or more social science subjects (see Section 2 of <u>Subject Groupings</u>). 6 credit hours in math (see <u>Math Requirement</u>).
	Minimum of 54 credit hours with a grade of C or better, maximum of 66 credit hours beyond the 1000-level in the honours
_	subject
20	Total credit hours required for degree - 120
=0 ≥	Total credit hours required above 1000 level - 72
EQ.	Honours Qualifying Examination: At the conclusion of an honours program a student's record must show a grade which is additional to the grades for the courses taken to obtain the required 120 credit hours. This grade may be obtained through a comprehensive examination, the presentation of a research paper (which may be an extension of one of the courses), or such other method as may be determined by the committee or department supervising the student's program. The method
	by which this additional grade is obtained is referred to as the Honours Qualifying Examination. Departments may elect to use a pass-fail grading system for this examination. Unless pass/fail grading is employed, the grade must be "B-" or better
	for honours, and "A-" or better for first class honours.
F0	Required standing for graduation:
_	GPA 3.00 (3.70 for first class) on courses in the honours subject.
=0 ≥	May be combined with minor(s)

Bachelor of Science concentrated honours subjects: Actuarial Science, Biochemistry and Molecular Biology, Biology, Chemistry, Earth Sciences, Economics, Environmental Science, Marine Biology, Mathematics, Microbiology and Immunology, Neuroscience, Ocean Sciences, Physics, Psychology and Statistics.

BA Combined Honours (120 credit hour)

F₫	First Year
	No more than 18 credit hour equivalents of the first 30 credit hours taken may be in a single subject
	6 credit hours in a writing course
	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
∓0 ≦	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
FQ 81	6 credit hours in one or more life or physical science subjects (see Section 3 of Subject Groupings).
FQ 8	6 credit hours in a single language subject for (see Language Course section)
₹0 2	Total credit hours required above 1000 level - 72
FQ 8	Total credit hours required for degree - 120
FQ E	Minimum of 66, maximum of 84 credit hours beyond the 1000 level in two allied subjects, not more than 48 credit hours
	nor fewer than 30 credit hours being in either of them. Grade must be "C" or better, otherwise, course will not count toward
	degree.
	Within the last 90 credit hours, 12 to 24 - depending on the number selected in the honours subjects - elective credit hours.
	Honours Qualifying Examination: see concentrated honours program above for details.
	Required standing for graduation:
	Arts and Social Sciences subjects require a GPA of 2.70 (3.70 for first class) on courses in the honours subjects.
_	Science subjects (see below) require a GPA of 3.00 (3.70 for first class) in courses in the honours subjects.
FQ B	May be combined with minor(s)

Note: If the student has a minor, courses in the honours subjects and the minor are included in the honours GPA.

Bachelor of Arts combined honours subjects: Canadian studies, classics, contemporary studies, creative writing, early modern studies, English, French, gender and women's studies, German, history, history of science and technology, international development studies, Italian studies, music, philosophy, political science, religious studies, Russian studies, social anthropology, sociology, Spanish, theatre and computer science, Environment, Sustainability, and Society or any of the BSc honours subjects.

BSc Combined Honours (120 credit hour)

F 0 8 T	an approved writing course
F0 81	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
F0	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
F0	6 credit hours in math (see Math Requirement).
F 0	Minimum of 66, maximum of 84 credit hours beyond the 1000 level in two subjects, not more than 54 credit hours nor
_	fewer than 30 credit hours being in either. Grades in honours subject courses must be C or better.
F 0 8 T	Total credit hours required above the 1000 level - 72
F0	Total credit hours required for degree - 120
F 0	Honours Qualifying Examination: see concentrated honours program above for details.
F ()	Required standing for graduation:
	GPA of 3.00 (3.70 for first class) on courses in the honours subjects.
F 0 8 1	May be combined with minor(s)
Bachelo	or of Science combined honours subjects:
30 31	Choose two BSc honours subjects (Actuarial Science, Biochemistry and Molecular Biology, Biology, Chemistry, Earth
	Sciences, Economics, Environmental Science, Marine Biology, Mathematics, Microbiology and Immunology,
	Neuroscience, Ocean Sciences, Psychology and Statistics)
F0	Combined one BSc honours subject with Computer Science or Environment, Sustainability and Society provided the larger
_	number of honours credit hours is in a science subject.
FO	Combined one BSc honours subject with one of the BA honours subjects (except European Studies), or with Canadian
	Studies, Creative Writing or Music. The larger number of honours credit hours must be in the BSc subject.
BSc	Multidisciplinary Honours (120 Credit Hour)

BSc Multidisciplinary Honours (120 Credit Hour)

F0 E1	an approved writing course
FQ %™	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
F0 2	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
FO 8	6 credit hours in math (see Math Requirement).
F0	A total of 72 credit hours beyond the 1000 level in three or more subjects. A minimum of 18 and a maximum of 30 in each
없고 없고 없고 없고	of three subjects. Grades must be "C" or better.
	Total credit hours required for degree - 120
	18 elective credit hours
	Honours Qualifying Examination: See Concentrated Honours program above for details.
	Required standing for graduation:
	GPA of 3.00 (3.70 for First Class) on courses in the honours subjects.
∓0 8	May be combined with minor(s)

Bachelor of Science multidisciplinary honours subjects - at least 54 credit hours of the 120 selected must be from the following subjects: biochemistry, biology, chemistry, computer science, earth sciences, economics, environmental science, mathematics, microbiology and immunology, neuroscience, physics, psychology and statistics.

BSc Honours Science Co-op (120 Credit Hour)

Requirements are as for appropriate honours program (described above) with the addition of the following:

A minimum of three co-op work terms

Joint Honours: Dalhousie University - Mount Saint Vincent University

Special arrangements exist under which students may be permitted to pursue an honours program jointly at Dalhousie and Mount Saint Vincent universities. Interested applicants should consult the appropriate department of their own university at the beginning of the second year. Prospective joint honours students must be accepted by the honours departments concerned at both institutions. These departments supervise the entire program of study of accepted applicants. Students should be aware that not all courses available for credit at Mount Saint Vincent University can be given credit at Dalhousie and vice versa. In order for students to gain a joint honours degree they must satisfy all requirements of both institutions.

College of Sustainability Degree Programs

The College of Sustainability offers a Double Major and Combined Honours program with any subject in the College of Arts and Science. For complete details about the College, its programs, major/honours requirements and courses please see the College of Sustainability section of the Calendar.

Minor Programs

Minor programs comprise a minimum of 18 and a maximum of 27 credit hours in a defined subject area, above the 1000 level. Students minoring in a Faculty of Science subject may take up to 36 credit hours in the minor subject. Minors can be added to any 120 credit hour BA, BMus, or BSc degree. If a minor is added to a double major or a combined honours program, students may find that they need to take more than 120 credit hours to complete all of their degree requirements. For BA students, when a minor subject is taken in conjunction with an honours program, grades in the minor subject must be "C" or better. Please note that a course cannot be used to satisfy both the major or honours subject requirement and the minor requirement.

List of Minors

BA/BSc (90 credit hour) Programs

BA with Minor

=0 8*	First Year
	No more than 18 credit hour equivalents of the first 30 credit hours taken may be in a single subject
F©	6 credit hours in a writing course
₹0 20	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
F⊆	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
F0 E1	6 credit hours in one or more life or physical science subjects (see Section 3 of Subject Groupings).
F0 81	6 credit hours in a single language subject for (see Language Course section)
F9 81	A minimum of 18, maximum of 27 credit hours in the minor subject at the 2000 level or higher.
=0 ≥	Within the last 90 credit hours, complete 6 credit hours in each of two subjects other than the minor
F0 81	Total credit hours required above 1000 level - 42
F0 81	Total credit hours required for degree - 90
F0	Required GPA for graduation - 2.00
₹0 81	Graduation with distinction - 3.70

Bachelor of Arts minor subjects for the 90 credit hour degree: any of the following approved minors in either the Faculty of Arts and Social Sciences or the Faculty of Science:

	•
F0	Biochemistry and Molecular Biology
∓0 ≥1	Biology
F0 ≥1	Canadian Studies
∓0 %1	Chemistry
F0 ≥	Classics
F9 M	Earth Science
F0 81	<u>Economics</u>
F0 81	<u>English</u>
8	<u>French</u>
=0 8**	Gender and Women's Studies

₽₫	German
∓0 ‰	History
F₫	International Development Studies
FO	Mathematics
FQ M	Music
FO	Philosophy
F0 81	Physics
FO M	Political Science
F0 M	Psychology
F₫	Russian Studies
F0	Sociology and Social Anthropology
F₫	Spanish
FO M	Statistics
FQ M	Theatre

BSc with Minor

FQ 8	an approved writing course
∓0 8*	6 credit hours in one or more language/humanities subjects (see Section 1 of Subject Groupings).
FO P	6 credit hours in one or more social science subjects (see Section 2 of Subject Groupings).
F0 81	6 credit hours in math (see Math Requirement).
FQ E	Minimum of 18, maximum of 36 credit hours in the minor subject at the 2000 level or higher.
F0 81	Total credit hours required above 1000 level - 42
F0	Total credit hours required for degree - 90
F0 81	Required GPA for graduation - 2.00
F9	Graduation with distinction - 3.70

BSc (90 credit hour) degrees are available with the following Faculty of Science minors:

FO 8⊤	Biochemistry	and	Molecular	Biology
E7				-

Biology

Chemistry

Earth Science

Economics

Mathematics

Physics Physics

Psychology

Statistics

Concurrent Programs

BSc/BEng

Students who meet the admission requirements for the Bachelor of Science program and the Bachelor of Engineering program are eligible to select this concurrent degree option. Students wishing specific advice should consult the Assistant Dean, Faculty of Science and the Associate Dean, Faculty of Engineering. Students accepted will normally complete the 90 credit hour BSc and the first two years of engineering studies leading to the Diploma in Engineering (DipEng) concurrently in a period of three calendar years. At the end of the three year period, both the degree and the diploma will be awarded to successful candidates. This opportunity should appeal to students with career objectives in multi-disciplinary fields such as biomedical engineering, environmental science, or materials science (among others). It is thus possible to complete the requirements for the Bachelor of Science and Bachelor of Engineering degrees concurrently in a time period of five years in total (or up to six years for co-op programs).

BA/BEng

Students wishing to do so may complete the 90 credit hour BA degree program and the first two years of engineering studies leading to the Diploma in Engineering (DipEng) concurrently in a period of three calendar years. At the end of the three year period, both the degree and the diploma will be awarded to successful candidates. It is thus possible to complete the requirements for the Bachelor of Engineering and the Bachelor of Arts degrees concurrently in a time period of five years in total (or up to six years for co-op programs).

Students who meet the admission requirements for the Bachelor of Arts and Bachelor of Engineering programs are eligible to select this concurrent degree option. Students wishing specific advice should consult the Associate Dean, Faculty of Engineering and the department for the BA subject of concentration.

Courses in the fourth and fifth years are those required to finish the Bachelor of Engineering degree.

Individual Programs

In cases where students feel their academic needs are not satisfied under the above requirements, individual programs may be submitted to the Academic Development Committee of the Faculty of Arts and Social Sciences or to the curriculum committee of the Faculty of Science prior to or during the student's second academic year. The Dean shall act as advisor for such students.

Other Degree and Diploma Programs

Bachelor of Music

For the requirements of this degree, see the entry for the Fountain School of Performing Arts.

Diploma in Costume Studies

Study for this credential is entirely within the <u>Fountain School of Performing Arts</u>. See the entry for that department for detailed information.

Diploma in Meteorology

Details of the requirements for this diploma may be found in the entry of the Department of Physics and Atmospheric Science.

Certificates

The certificates listed at the right are specific to the Faculty of Arts and Social Science and Faculty of Science.

Certificates are one way that Dalhousie recognizes graduating students who have achieved a level of proficiency or specialization in a particular area or subject. Certificates are awarded upon graduation from a degree program and will be recorded on the student's academic transcript.

Certificates vary in their goals and requirements. Many have a research or practicum component. Some are interdisciplinary, requiring work in more than one department, while others focus on a specialization within a single program. Some Certificates are designed for students enrolled in particular programs, while others are broadly applicable to students in any program.

Certificate in Actuarial and Financial Mathematics

Offered by: Mathematics & Statistics

Coordinator: Dr. Toby Kenney (tkenney@mathstat.dal.ca) Mathematics and Statistics

This program provides many of the learning objectives and fundamental mathematical and statistical skills required to complete the classes (and examinations) of the Society of Actuaries accreditation program. Students who are interested in a career in actuarial science should consult the Basic Education Catalogue on the Society of Actuaries web page (www.soa.org) or the Syllabus of Basic Education on the Casualty Actuaries website (www.casact.org). This program also prepares students for employment in general financial institutions where modeling, quantitative risk analysis, management of investment instruments, asset and liability management, life contingencies and insurance assessment, and other complex financial calculations are required.