

COMBINED MAJOR IN SCIENCE

<http://www.cms.science.ubc.ca/home>

Earth and Environmental Sciences (EES), Life Sciences (LSC), Mathematical Sciences (MATH)

First and Second Year

First Year	<input type="checkbox"/> MATH 100 (or equiv)	<input type="checkbox"/> *CHEM 121, CHEM 123 (or 111, 113 or CHEM 1*)	<input type="checkbox"/> * PHYS 101 or 107	<input type="checkbox"/> BIOL 112	<input type="checkbox"/> Communication (See page 2)
	<input type="checkbox"/> MATH 101 (or equiv)	<input type="checkbox"/> _____	<input type="checkbox"/> (EOSC 114 Recom)	<input type="checkbox"/> BIOL 121 <input type="checkbox"/> BIOL 140	<input type="checkbox"/> Communication (See page 2)
Second Year	<input type="checkbox"/> STAT 200	<input type="checkbox"/> MATH 200	<input type="checkbox"/> EES** elective	<input type="checkbox"/> BIOL 200	<input type="checkbox"/> Arts (See page 2)
	<input type="checkbox"/> Computing Requirement (see page 2)	<input type="checkbox"/> MATH 221	<input type="checkbox"/> (MATH 215 Recom)	<input type="checkbox"/> (Biol 201 Recom.)	<input type="checkbox"/> Arts (See page 2)

*Take two CHEM and one PHYS lecture courses at the 100-level beyond CHEM 111 and PHYS 100

**EES Elective: one of ATSC 201, BIOL 111, BIOL 112, BIOL 121, GEOB 103, 200 or EOSC 110 and 111

Third and Fourth Year – See below for specific information on packages

3rd/4th Years	<input type="checkbox"/> SCIE 300	<input type="checkbox"/> MATH pkg course	<input type="checkbox"/> EOSC 340	<input type="checkbox"/> LSC pkg course	<input type="checkbox"/> Arts (See page 2)
	<input type="checkbox"/> _____	<input type="checkbox"/> MATH pkg course	<input type="checkbox"/> EOSC 326, 355, or 372	<input type="checkbox"/> LSC pkg course	<input type="checkbox"/> Arts (See page 2)
	<input type="checkbox"/> Generalist Requirement (see page 2)	<input type="checkbox"/> MATH pkg course	<input type="checkbox"/> EES pkg course	<input type="checkbox"/> LSC pkg course	<input type="checkbox"/> _____
	<input type="checkbox"/> _____	<input type="checkbox"/> Lab Requirement (See page 2)	<input type="checkbox"/> _____	<input type="checkbox"/> _____	<input type="checkbox"/> _____

CMS PACKAGES:

1. EARTH AND ENVIRONMENTAL SCIENCES (EES) CMS PACKAGE:

- EOSC 340 (3)
- 3 credits from EOSC 326*, 355, 372
- 3 credits from Earth and Environmental Science courses 300- or 400-level: ATSC, ENVR, GEOB (except for GEOB 307, 407), EOSC (except for EOSC 310, 311, 312, 314, 315, 371, 470, 471, 474, 475, 478). Recommended: another one of EOSC 326*, 355, 372 or EOSC 324*, 329, 330*, 373 or GEOB 300*

Specific prerequisites required from the EES electives *

3. LIFE SCIENCES (LSC) CMS PACKAGE:

- 9 credits Life Science courses 300- or 400-level
- Life Science courses include: CAPS 301, 390, 391, BIOC, BIOL (except BIOL 300), GEOB 307, 407, MRNE, MEDG, MICB, PCTH, PHYL, PSYC 360-368, PSYC 460-462, and EOSC 470, 471, 474, 475, 478

3. MATHEMATICAL SCIENCES (MASC) – MATH CMS PACKAGE:

- 9 credits 300- and 400-level MATH
- Highly Recommended: MATH 302, 307, 317, 340, 360
- Recommended*: MATH 303, 316, 345, 361, 441, 442, 445
- * additional prerequisites

LOWER LEVEL REQUIREMENTS FOR BSC:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1465>

CMS LAB REQUIREMENT:

Must take 2 of the following:

- **CHEM 315** (1 cr) - Prerequisites: CHEM 233, 235, 205
- **EOSC 442** (1 cr) - Prerequisites: EOSC 340 and one of (CPSC 110, CPSC111, CPSC 301, EOSC 211, PHYS 210, MATH 210), and one of STAT 200, STAT241, BIOL300)
- **BIOL 342** (2 cr) - Prerequisite: BIOL 121, 140. (BIOL112/BIOL200 recommended)
- **PHYS 309** (3 cr) - Prerequisite: PHYS 209

CMS CORE COURSES:

- **MATH 100/101** (or equivalent)
- **STAT 200** - can be replaced with STAT 241 or BIOL 300 in program
Note: BIOL 300 does not count as a LSC package course.
- **SCIE 300** (Communicating Science)
- **Computing Requirement:** one of: CPSC 110 (or 111), CPSC 301, EOSC 211, MATH 210, PHYS 210
- **Generalist Requirement:** One course (at least 3 cr) from:
Chemistry: CHEM 200-level
Physics and Astronomy: ASTR 200, PHYS 200, 305, 330, 333

CMS GRADUATION CHECKLIST TABLE:

Review Upper Level B.Sc. Requirements:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1466>

CREDIT TOTALS	Completed	in Progress	Total	Required
Total Credits: includes all UBC courses, transfer credits & advance credits. DO NOT count paired courses, COOP credits, or courses “not for credit in the Faculty of Science”.				120
Science Credits: includes all required & elective Science courses at all year levels.				72
Communication Credits: six credits from ENGL 100, 110, 111, 112 (recommended), 120, 121; SCIE 113; SCIE 300 or CHEM 300; APSC 176; ASTU 100, 150; or WRDS 150; their equivalents				6
Arts Credits: includes arts courses at all year levels.				12
Upper-Level Credits: includes all courses at the 300-level and 400-level in any field (Arts, Science, and a maximum of 18 “Other” cr.).				48
Upper-Level Science Credits: includes all Science courses at the 300-level and 400-level required for program.				32 – 38*

* Number of credits will depend on selection of lab and generalist requirements.

Review CMS information in Calendar:

<http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,1474>