

COMBINED MAJOR IN SCIENCE

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

Earth and Environmental Sciences (EES), Life Sciences (LSC),
Physics (PHYS)

First and Second Year

| | | | | | |
|--------------------|---|---|---|---|--|
| First Year | <input type="checkbox"/> MATH 100 (or equiv) | <input type="checkbox"/> CHEM 121 (111) | <input type="checkbox"/> PHYS 101 (or PHYS107) | <input type="checkbox"/> BIOL 112 | <input type="checkbox"/> Communication (See page 2) |
| | <input type="checkbox"/> MATH 101 (or equiv) | <input type="checkbox"/> CHEM 123 (113) | <input type="checkbox"/> PHYS 102 (or 108) | <input type="checkbox"/> BIOL 121 BIOL 140 | <input type="checkbox"/> Communication (See page 2) |
| Second Year | <input type="checkbox"/> STAT 200 | <input type="checkbox"/> PHYS 200 | <input type="checkbox"/> MATH 200 | <input type="checkbox"/> BIOL 200 | <input type="checkbox"/> Arts (See page 2) |
| | <input type="checkbox"/> Computing Requirement (see page 2) | <input type="checkbox"/> (PHYS 219 / PHYS 229 <i>Recom.</i>) | <input type="checkbox"/> EES** elective | <input type="checkbox"/> (<i>Biol 201 Recom.</i>) | <input type="checkbox"/> Arts (See page 2) |

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

Note: MATH 215 (or 225), MATH 217 (or 227 or 317), EOSC 114 recommended

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

| | | | | | |
|--|--|---|--|--|---|
| 3rd/4th Years | <input type="checkbox"/> SCIE 300 | <input type="checkbox"/> PHYS 301, 304, or 333 | <input type="checkbox"/> EOSC 340 | <input type="checkbox"/> LSC pkg course | <input type="checkbox"/> Arts (See page 2) |
| | <input type="checkbox"/> _____ | <input type="checkbox"/> PHYS 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"/> PHYS 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*

2. 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. PHYSICS (PHYS) CMS PACKAGE:

- 3 credits of PHYS 301*, 304*, 333
- 6 credits PHYS or ASTR courses 300- or 400-level
- Recommended Courses: PHYS 301*, 304*, 305*, 309*, 312*, 314*, 315*, 318*, 319*, 330, 333, 404*, 405, 420

*Other Prerequisites in addition to 1st/2nd year Core.

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: 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
 - Mathematical Sciences: MATH 200-level, MATH 360 or 300-level MATH

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>