## **COMBINED MAJOR IN SCIENCE**

# http://www.cms.science.ubc.ca/home

Earth and Environmental Sciences (EES), Life Sciences (LSC), Mathematical Sciences – Computer Science (CPSC)

| First and Sec                        | ond Year                            |                              |                               |                        |  |
|--------------------------------------|-------------------------------------|------------------------------|-------------------------------|------------------------|--|
| First<br>Year                        | MATH 100 (or equiv)                 | ☐ CHEM 121<br>(111)          | CPSC 110<br>(or CPSC 111)     | ☐ BIOL 112             | Communication                            |
|                                      | MATH 101<br>(or equiv)              | ☐ CHEM 123<br>(113)          | CPSC 121                      | ☐ BIOL 121<br>BIOL 140 | (See page 2)  Communication (See page 2) |
| Second<br>Year                       | ☐ STAT 200                          | CPSC 210<br>(or CPSC 211)    | ☐ PHYS 101                    | ☐ BIOL 200             | ☐ Arts<br>(See page 2)                   |
|                                      | CEOSC 114 Recom)                    | CPSC 213 Recom.)             | EES** elective                | ☐ (Biol 201<br>Recom.) | Arts (See page 2)                        |
| **EES Electiv                        | ve: one of ATSC 20                  | 1, BIOL 111, BIO             | DL 112, BIOL 121              | , GEOB 103, 200        | or EOSC 110 and 11                       |
| Third and Fa                         | ourth Year – Sec                    | helow for specifi            | c information on              | nackages               |  |
| B <sup>rd</sup> /4th<br>Years        | SCIE 300                            | ☐ CPSC 221                   | ☐ EOSC 340                    | LSC pkg course         | Arts (See page 2)                        |
|                                      |                                     | CPSC pkg course              | ☐ EOSC<br>326, 355,<br>or 372 | LSC pkg<br>course      | Arts (See page 2)                        |
|                                      | Generalist Requirement (see page 2) | CPSC pkg course              | EES pkg course                | LSC pkg course         |  |
|                                      | (see page 2)                        | Lab Requirement (See page 2) |                               |                        |  |
| CMS PACKA                            | GES:                                |                              |                               |                        |  |
| EARTH AND  EOSC 340 (  3 credits fro | ENVIRONMENT                         | , 372                        |                               |                        | VVR,                                     |

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 - COMPUTER SCIENCE (CPSC) CMS PACKAGE

- CPSC 221
- 6 credits 300- or 400-level CPSC Recommended: CPSC 302\*, 303\*, 304, 312, 314, 320, 322, 340, 402, 406, 420, 421, 422, 430, 445 \*additional prerequisites

Note: Students choosing this package may need additional upper-level Science credits to meet the requirement for a minimum of 30 upper-level science credits.

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

<sup>\*</sup> 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