## 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 Year

- □ MATH 100 (or equiv.)
- □ MATH 101 (or equiv.)

### Second Year

- □ STAT 200 (or equiv.)
- □ PHYS 101 or 107 or 117 or 131

### Third and Fourth Year

- □ SCIE 300
- □ Generalist req. (see page 2)

### EES Elective

- □ EES* elective

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*EES Elective: students in the EES/LSC/CPSC curriculum automatically fulfill this requirement by virtue of completing their 1st year BIOL courses

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

<table>
<thead>
<tr>
<th>Third and Fourth Years</th>
<th>CPSC 221</th>
<th>EOSC 340</th>
<th>LSC pkg Course 2</th>
<th>Arts (See page 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ SCIE 300</td>
<td>□ CPSC pkg Course 1</td>
<td>□ EOSC 326, or 355, or 372</td>
<td>□ LSC pkg Course 2</td>
<td>□ Arts (See page 2)</td>
</tr>
<tr>
<td>□ Generalist req. (see page 2)</td>
<td>□ CPSC pkg Course 2</td>
<td>□ EES pkg course</td>
<td>□ Arts (See page 2)</td>
<td>□ Arts (See page 2)</td>
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<tr>
<td>□ Lab req. (See page 2)</td>
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</tbody>
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1. **MATHEMATICAL SCIENCES – COMPUTER SCIENCE (CPSC) CMS PKG COURSES:**
   - 6 credits of CPSC courses 300- or 400-level.
   - Recommended: 302*, 303*, 304, 312, 314, 320, 322, 340, 402, 406, 420, 421, 422, 430, 445 (*have additional prerequisites)

2. **EARTH AND ENVIRONMENTAL SCIENCES (EES) CMS PKG COURSES:**
   - Recommended: another one of EOSC 324, 326*, 329, 330, 355, 372, 373, or GEOb 300*
   - Specific prerequisites required from the EES electives *

3. **LIFE SCIENCES (LSC) CMS PKG COURSES:**
   - Courses at the 300- or 400-level in CAPS, BIOC, BIOL (except: BIOL300, 344, 345, 346, 448), MICB, MRNE, MEDG, PCTH; as well as GEOb 307, 407, EOSC 470, 471, 474, 475, 478, PSYC 360-371 and 460 - 472.

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1 All students planning to pursue the CPSC package should contact the CMS advisor/director as soon as possible.
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 or 355** (1 cr) Prerequisites: one of CHEM 233+235, CHEM 203 or CHEM 223 + 225, CHEM 205, CHEM 208, CHEM 211 or CHEM 210+215.
- **EOSC 442** (1 cr) - Prerequisites: EOSC 340, and one of CPSC 103, CPSC 110, CPSC 111, CPSC 301, EOSC 211, PHYS 210, MATH 210, and one of STAT 200, STAT241, STAT251, BIOL300
- **BIOL 342** (2 cr) - Prerequisite: BIOL 121, 140
- **PHYS 309** (3 cr) - Prerequisite: PHYS 219 and PHYS 229 (PHYS 219 has multiple prerequisites). Please note that this course does not count as a PHYS package course unless you take two other lab courses to fulfill the lab requirement.

CMS CORE COURSES:
- **MATH 100/101** (or equivalent)
- **STAT 200** (or STAT 241 or STAT 251 or BIOL 300)
- **SCIE 300** (Communicating Science)
- **Computing Requirement**: students pursuing the CPSC package automatically fulfill their computing requirement by virtue of completing their 1st year CPSC courses
- **Generalist Requirement**: only required for students who entered the CMS program prior to 2019. These students take one (at least 3 cr) of CHEM 200 or higher (except: CHEM 300), ASTR 200, PHYS 200, PHYS 305, PHYS 330, PHYS 333

CMS GRADUATION CHECKLIST TABLE:
Review Upper Level B.Sc. Requirements:

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

* 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