## COMBINED MAJOR IN SCIENCE

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

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

### First Year

|☐ MATH 100 (or equiv.) |☐ BIOL 112 |☐ PHYS 101 or 107 or 117 |☐ CHEM 121 (or 111) |☐ Communication (See page 2) |
|☐ MATH 101 (or equiv.) |☐ BIOL 121 + BIOL140 |☐ PHYS 118 + 119 (or 102, or 108+109) |☐ CHEM 123 |☐ Communication (See page 2) |

### Second Year

|☐ STAT 200 (or equiv.) |☐ Computing req. (see page 2) |☐ BIOL 200 |☐ (PHYS 219 + 229, or BIOL 2XX recom.) |☐ EES* elective |☐ PHYS 200 |☐ Arts (See page 2) |
|☐ (PHYS 219 + 229, or BIOL 2XX recom.) |☐ MATH 217 (or 200) |☐ Arts (See page 2) |

*EES Elective: students pursuing the LSC package will automatically fulfill this req. by virtue of completing their 1st year BIOL courses.

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

|☐ SCIE 300 |☐ LSC pkg Course 1 |☐ EOSC 340 |☐ PHYS pkg Course 1 |☐ Arts (See page 2) |
|☐ LSC pkg Course 2 |☐ EOSC 326, or 355, or 372 |☐ PHAS pkg Course 1 |☐ Arts (See page 2) |
|☐ LSC pkg Course 3 |☐ EES pkg course |☐ |☐ PHAS pkg Course 2 |☐ |
|☐ Lab req. (See page 2) |☐ |☐ |☐ |☐ |

### Third and Fourth Years

1. 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.

2. EARTH AND ENVIRONMENTAL SCIENCES (EES) CMS PKG COURSES:
   - Specific prerequisites required from the EES electives*

3. PHYSICS (PHYS) CMS PKG COURSES:
   - All PHYS courses at the 300- or 400-level, except PHYS 348
4. PHYSICS & ASTRONOMY (PHAS) CMS PKG COURSES:
   - All PHYS and ASTR courses at the 300- or 400-level, except PHYS 348

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 205, CHEM 208, CHEM 211
- 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, STAT 241, STAT 251, BIOL 300
- BIOL 342 (2 cr) - Prerequisite: BIOL 121, 140
- PHYS 309 (3 cr) - Prerequisite: PHYS 219 and PHYS 229 (PHYS 219 has multiple prerequisites). 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: one of: CPSC 100, CPSC 103, CPSC 110 (or 111), CPSC 301, EOSC 211, MATH 210, PHYS 210
- Generalist Requirement: only required for students who entered the CMS program prior to 2019S. These students, if pursuing the EES/LSC/PHYS curriculum, automatically fulfill their generalist requirement by virtue of completing their second year MATH courses.

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>Total Credits: 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>
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<tr>
<td>Science Credits: 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>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</td>
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<tr>
<td>Arts Credits: includes arts courses at all year levels.</td>
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<td>12</td>
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<tr>
<td>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.).</td>
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<td>48</td>
</tr>
<tr>
<td>Upper-Level Science Credits: 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