# COMBINED MAJOR IN SCIENCE

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

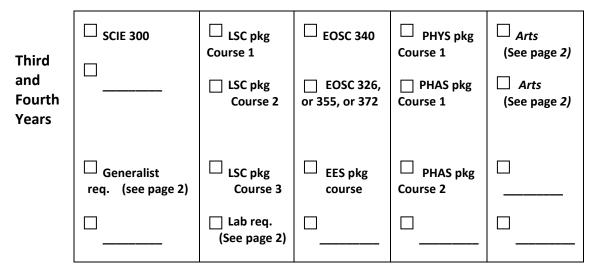
Life Sciences (LSC), Earth and Environmental Sciences (EES),

Physics & Astronomy – Physics (PHYS)

First Year	<ul> <li>MATH 100 (or equiv.)</li> <li>MATH 101 (or equiv.)</li> </ul>	☐ BIOL 112 ☐ BIOL 121 + BIOL 140/ 180	<ul> <li>PHYS 101</li> <li>or 107 or 117</li> <li>or 131</li> <li>PHYS 118</li> <li>+ 119 or</li> <li>108+109</li> </ul>	CHEM 121 or 120+115 or CHEM 111 or 110+115 CHEM 123 or 130+135	Communication (See page 2)
Second Year	□ STAT 200 (or equiv.)	🗌 BIOL 200	EES* Elective	□ <sub>PHYS 200</sub>	□ <i>Arts</i> (See page 2)
	Computing req. (see page 2)	☐ (PHYS 219 + 229, or BIOL 2XX recom.)	☐ (MATH 215 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 1<sup>st</sup> year BIOL courses.

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



## 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 GEOS 307, 407, EOSC 470, 471, 474, 475, 478, PSYC 360-371 and 460 - 472.

#### 2. EARTH AND ENVIRONMENTAL SCIENCES (EES) CMS PKG COURSES:

Earth and Environmental Science courses 300- or 400-level: ATSC, ENVR, GEOS (except: GEOS 307, 407), EOSC (except: EOSC 310, 311, 312, 314, 315, 371, 470, 471, 474, 475, 478).
 Recommended: another one of EOSC 324, 326<sup>\*</sup>, 329, 330, 355, 372, 373, or GEOS 300<sup>\*</sup>
 Specific prerequisites required from the EES electives<sup>\*</sup>

#### 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
 Recommended: PHYS 301\*, 304, 305, 309\*, 312\*, 314\*, 315\*, 318, 319\*, 330, 333, 404, 405, 420; ASTR 300, 333, 403, 406, 407 (\*have additional pre-requisites)

# 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, CPSC111, CPSC 301, EOSC 211, PHYS 210, MATH 210, and one of STAT 200, STAT241, STAT251, BIOL300
- BIOL 342 (2 cr) Prerequisite: BIOL 121, 140/ 180
- 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:**

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				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, 120, 121; SCIE 113 (recommended);				
CHEM 300; APSC 176; ASTU 100, 150; or WRDS 150				6
(recommended); their equivalents; SCIE 300 is				
required for the CMS program				
Arts Credits: includes arts courses at all year levels.				12
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.				

\* 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