# **COMBINED MAJOR IN SCIENCE**

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

Life Sciences (LSC), Earth and Environmental Sciences (EES), Mathematical Sciences – statistics (STAT)

First Year	MATH 100 (or equiv.)  MATH 101 (or equiv.)	☐ BIOL 112 ☐ BIOL 121 + BIOL 140/ 180	☐ PHYS 101 or 107 or 117 or 131 ☐ (EOSC 114 recom.)	CHEM 121 or 120+115 or CHEM 111 or 110+115  CHEM 123 or 130+135	Communication (See page 2)  Communication (See page 2)				
Second Year	STAT 200 (or equiv.)	☐ BIOL 200	☐ EES* elective	☐ MATH 152 or 221 or 223	☐ <i>Arts</i> (See page 2)				
	Computing req. (see page 2)	☐ (Relevant BIOL 200-level)		☐ MATH 200 or 226	☐ <i>Arts</i> (See page 2)				
*EES Elective: students pursuing the LSC package will automatically fulfill this requirement b virtue of completing their 1 <sup>st</sup> year BIOL courses.									
Third and Fourth Year – See below for specific information on packages									
Third and Fourth Years	□ SCIE 300	LSC pkg Course 1	□ EOSC 340	☐ STAT 300	☐ Arts (See page 2)				
		LSC pkg Course 2	☐ EOSC 326, or 355, or 372		☐ Arts (See page 2)				
	Generalist req. (see page 2	LSC pkg Course 3	EES pkg course	STAT 306 or STAT 344					
		Lab req.							

## 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\*, 329, 330, 355, 372, 373, or GEOS 300\*
Specific prerequisites required from the EES electives\*

# 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). 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: 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 take one (at least 3 cr) from: any CHEM 200-level or higher (except: CHEM300); 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 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.				

<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