## **COMBINED MAJOR IN SCIENCE**

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

Mathematical sciences - Statistics (STAT), Life Sciences (LSC), Physics & Astronomy – Astronomy (ASTR)

First Year	MATH 100 (or equiv.)	CHEM 121 or 120+115 or CHEM 111 or 110+115	□ BIOL 112	PHYS 101 or 107 or 117 or 131	Communication (See page 2)				
	☐ MATH 101 (or equiv.)	CHEM 123 or 130+135	☐ BIOL 121 + BIOL 140/ 180	☐ PHYS 118 + 119 or 108+109	Communication (See page 2)				
Second Year	STAT 200 (or equiv.)	☐ MATH 152 OR 221 OR 223	☐ MATH 217 (or 200 + 317)	☐ PHYS 200	☐ <i>Arts</i> (See page 2)				
	☐ MATH 215	☐ MATH 220 OR 226	☐ BIOL 200	☐ PHYS 203	☐ <i>Arts</i> (See page 2)				
Third and Fourth Year – See below for specific information on packages									
Third	☐ SCIE 300	☐ STAT 300	LSC pkg	☐ PHYS 216	Computing req.				
and Fourth Years	☐ (PHYS 219 + 229 recom.)	STAT 302 or MATH 302	LSC pkg Course 2	☐ ASTR pkg Course 1 (3 cr)	(see page 2)  Arts (See page 2)				
	Generalist req. (see page 2	STAT 306 or STAT 344	LSC pkg	☐ ASTR pkg Course 2 (3 cr)	☐ Arts (See page 2)				
	<u> </u>	Lab req. (See page 2)		☐ PHYS pkg Course 1					

## 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. PHYSICS (PHYS) CMS PKG COURSES:

All PHYS courses at the 300- or 400-level, except PHYS 348

## 3. ASTRONOMY (ASTR) CMS PKG COURSES:

ASTR 300, 333, 403, 406, 407

### 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) of CHEM 200 or higher (except: CHEM 300), EOSC 340, 326, 477, 453, 354, 329

#### 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