COMBINED MAJOR IN SCIENCE

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

Chemistry (CHEM), Life Sciences (LSC), Physics & Astronomy – Astronomy (ASTR)

First Year	MATH 100 (or equiv.) MATH 101 (or equiv.)	CHEM 121 or 120+115 or CHEM 111 or 110+115 CHEM 123 or 130+135	BIOL 112 BIOL 121 + BIOL 140/ 180	PHYS 101 or 106 or 107 or 117 or 131 PHYS 118 + 119 or 108+109	Communication (See page 2) Communication (See page 2)				
Second Year	STAT 200 (or equiv.)	CHEM 233 +235 or CHEM 203 or 223+225	☐ BIOL 200	☐ PHYS 200	Computing req. (see p. 2)				
	☐ MATH 221 or 223	CHEM 205 or 208 or 213 or 211 or 210+215	(or 200 + 317)	FIII3 203	(See page 2)				
Third and Fourth Year – See below for specific information on packages									
Third	□ SCIE 300	☐ CHEM 341	LSC pkg	☐ PHYS 216	☐ Arts (See page 2)				
and Fourth Years	☐ MATH 215	CHEM pkg Course 1	LSC pkg Course 2	☐ ASTR pkg Course 1 (3 cr)	☐ Arts (See page 2)				
		CHEM pkg	LSC pkg Course 3	ASTR pkg Course 2 (3 cr)	☐ Arts (See page 2)				
		_ Lab req. (See page 2)	PHYS pkg Course 1 (3cr)					

1. CHEMISTRY (CHEM) CMS PKG COURSES:

6 credits CHEM courses 300- or 400-level (except: CHEM 300, CHEM 348)

2. 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.

3. ASTRONOMY (ASTR) CMS PKG COURSES:

ASTR 300, 333, 403, 406, 407

4. PHYSICS (PHYS) CMS PKG COURSES:

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

NOTE: THIS IS A VERY HEAVY AND AMBITIOUS COMBINATION OF PACKAGES

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 or 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, if pursuing the LSC/ASTR/CHEM 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