COMBINED MAJOR IN SCIENCE
http://www.cms.science.ubc.ca/home
Mathematical sciences - Statistics (STAT), Earth and Environmental
Sciences (EES), Physics & Astronomy – Astronomy (ASTR)

First Year	☐ MATH 100 (or equiv.)	☐ CHEM 121 or 120+115 or CHEM 111 or 110+115	☐ EES* elective	☐ PHYS 101 or 107 or 117 or 131	☐ Communication (See page 2)
	☐ MATH 101 (or equiv.)	☐ _____	☐ *(EOSC 114 recom.)*	☐ 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	☐ *Arts* (See page 2)
	☐ Computing req. (see page 2)	☐ MATH 220 OR 226	☐ MATH 215	☐ PHYS 203	☐ *Arts* (See page 2)

*EES Elective: one of ATSC 201, BIOL 111, BIOL 112, BIOL 121, GEOB/ GEOS 103, 200 **or** EOSC 110 and 111

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

Third and Fourth Years	☐ SCIE 300	☐ STAT 300	☐ EOSC 340	☐ PHYS 216	☐ *Arts* (See page *2*)
	☐ *(PHYS 219 + 229 recom.)*	☐ STAT 302 or MATH 302	☐ EOSC 326, or 355 or 372	☐ ASTR pkg Course 1 (3 cr)	☐ *Arts* (See page *2*)
	☐ Generalist req. (see page 2)	☐ STAT 306 or STAT 344	☐ EES pkg course	☐ ASTR pkg Course 2 (3 cr)	☐ _____
	☐ _____	☐ Lab req. (See page 2)	☐ _____	☐ PHYS pkg Course 1	☐ _____

1. **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[*]

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:

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), or BIOL 121, 343, 345, 346, 438

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 credits & advance credits. DO NOT count paired courses, COOP credits, or courses "not for credit in the Faculty of Science".				**120**
Science Credits: includes all required & elective Science courses at all year levels.				**72**
Communication Credits: six credits from ENGL 100, 110, 111, 120, 121; SCIE 113 (recommended); CHEM 300; APSC 176; ASTU 100, 150; or WRDS 150 (recommended); their equivalents; SCIE 300 is required for the CMS program				**6**
Arts Credits: includes arts courses at all year levels.				**12**
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.).				**48**
Upper-Level Science Credits: includes all Science courses at the 300-level and 400-level required for program.				**32 – 38***

* 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