

COMBINED MAJOR IN SCIENCE

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

Chemistry (CHEM), Earth and Environmental Sciences (EES),
Mathematical Sciences – INTERFACE (any option)

First Year	<input type="checkbox"/> MATH 100 (or equiv.) <input type="checkbox"/> MATH 101 (or equiv.)	<input type="checkbox"/> CHEM 121 or 120+115 or CHEM 111 or 110+115 <input type="checkbox"/> CHEM 123 or 130+135	<input type="checkbox"/> PHYS 101 or 107 or 117 or 131 <input type="checkbox"/> (EOSC 114 <i>Recom</i>)	<input type="checkbox"/> EES* elective <input type="checkbox"/> CPSC 110 or 111 (Interface A, C, D)	<input type="checkbox"/> Communication (See page 2) <input type="checkbox"/> Communication (See page 2)
Second Year	<input type="checkbox"/> STAT 200 (or equiv.) <input type="checkbox"/> Computing req. (see p. 2) only Interface B	<input type="checkbox"/> CHEM 233 +235 or CHEM 203 or 223+225 <input type="checkbox"/> CHEM 205 or 208 or 213 or 211 or 210+215	<input type="checkbox"/> CPSC 121 AND 210 (Interface C only) <input type="checkbox"/> _____	<input type="checkbox"/> MATH 200 <input type="checkbox"/> MATH 221	<input type="checkbox"/> Arts (See page 2) <input type="checkbox"/> Arts (See page 2)

*EES Elective: one of ATSC 201, BIOL 111, BIOL 112, BIOL 121, GEOB 103, 200 or EOSC 110 and 111 (BIOL 111 appropriate for students who don't have Biology 11 or 12)

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

Third and Fourth Years	<input type="checkbox"/> SCIE 300 <input type="checkbox"/> _____ <input type="checkbox"/> Generalist req. (see page 2) <input type="checkbox"/> _____	<input type="checkbox"/> CHEM 341 <input type="checkbox"/> CHEM pkg Course 1 <input type="checkbox"/> CHEM pkg Course 2 <input type="checkbox"/> Lab req. (See page 2)	<input type="checkbox"/> EOSC 340 <input type="checkbox"/> EOSC 326, or 355, or 372 <input type="checkbox"/> EES pkg course <input type="checkbox"/> _____	<input type="checkbox"/> Interface pkg Course 1 <input type="checkbox"/> Interface pkg Course 2 <input type="checkbox"/> Interface pkg Course 3 <input type="checkbox"/> _____	<input type="checkbox"/> Arts (See page 2) <input type="checkbox"/> Arts (See page 2) <input type="checkbox"/> _____ <input type="checkbox"/> _____
-------------------------------	--	---	---	---	--

1. CHEMISTRY (CHEM) CMS PKG COURSES:

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

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

- Earth and Environmental Science courses 300- or 400-level: ATSC, ENVR, GEOB (except: GEOB 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 GEOB 300*

Specific prerequisites required from the EES electives*

3. MATHEMATICAL SCIENCES (MASC) – INTERFACES A – D CMS PKG COURSES:

Select one of the following Interface options:

- **Interface A** – Prerequisites: CPSC 110 or 111, MATH 200, 221; Package courses: two of: MATH/STAT 302, MATH 303, STAT 305; One of: CPSC 302, CPSC 303

- **Interface B**– Prerequisites: MATH 200, 221; Package courses: All of: MATH/STAT 302, MATH 303, STAT 305
- **Interface C** – Prerequisites: CPSC 110 or 111, 121, 210 or, 221, MATH 200, 221; Package courses: All of: CPSC 340, STAT 306, STAT 406
- **Interface D** – Prerequisites: CPSC 110 or 111, 121, 210 or, 221, MATH 200, 221; Package courses: All of: CPSC 302, 402, MATH 307

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
- **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, 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 BIOL 121, 343, 345, 346, 438, 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 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>