

PHYSICAL SCIENCES

View on YouTube (<https://www.youtube.com/watch?v=ssCVDTIFLBM>)

Make considerable contributions to society and create substantial advancements in technology with a degree in a mathematically related field. Offered over two terms, our Physical Science Program is the complete first year for a physics, chemistry, mathematics, computer science, or geoscience degree. Gain credits that transfer to a degree program at institutions across BC and Canada.

Combining calculus, physics, chemistry, computer programming, linear algebra and English, our program provides experiential learning opportunities to complete projects, perform experiments and develop computer programs.

Apply to CMTN

Visit Apply to CMTN (<https://www.coastmountaincollege.ca/admissions/apply-to-cmntn/>) for an Admissions Checklist and to apply online.

Our Educational Advisors (<https://www.coastmountaincollege.ca/student-services/student-support/educational-advising/>) are here to help if you have any questions or need guidance along the way.

Dates and locations

Note: International students interested in taking University Credits Science options are encouraged to apply to the fall intake

Intake	Location
Fall 2025	Terrace

The following is a full list of all courses and students do not need to take all the courses. The courses they take depend on their intended degree.

Fall Semester		Credits
CHEM 111	Fundamentals of Chemistry I	3
CPSC 123	Computer Programming	3
ENGL 101	Introduction to Composition	3
MATH 101	Calculus I: Differential Calculus	3
PHYS 121	Advanced Physics I	3
Credits		15
Winter Semester		Credits
CHEM 122	Principles of Chemistry II	3
CPSC 124	Data Structures	3
ENGL 151	Technical Writing I	3
MATH 102	Calculus II: Integral Calculus	3
MATH 235	Linear Algebra	3
PHYS 122	Advanced Physics II	3
Credits		18
Total Credits		33

Physical Sciences Courses by Intended Degree

Term	Course	Intended Degree				
		Physics	Chemistry	Computer Science	Earth Science	Math
Fall	CHEM 111 (https://catalogue.coastmountaincollege.ca/courses/chem111/)	X	X		X	
Fall	CPSC 123 (https://catalogue.coastmountaincollege.ca/courses/cpsc123/)	X		X	X	X
Fall	ENGL 101 (https://catalogue.coastmountaincollege.ca/courses/engl101/)	X	X	X	X	X
Fall	MATH 101 (https://catalogue.coastmountaincollege.ca/courses/math101/)	X	X	X	X	X
Fall	PHYS 121 (https://catalogue.coastmountaincollege.ca/courses/phys121/)	X	X or 101		X	X
Winter	CHEM 122 (https://catalogue.coastmountaincollege.ca/courses/chem122/)	X	X		X	
Winter	CPSC 124 (https://catalogue.coastmountaincollege.ca/courses/cpsc124/)			X		X
Winter	ENGL 151 (https://catalogue.coastmountaincollege.ca/courses/engl151/)	X	X	X	X	X
Winter	MATH 102 (https://catalogue.coastmountaincollege.ca/courses/math102/)	X	X	X	X	X



Winter	PHYS 122 X (https://catalogue.coastmountaincollege.ca/courses/phys122/)	X or PHYS 102	X	X	
Winter	MATH 235 (https://catalogue.coastmountaincollege.ca/courses/math235/)	X or elective*	X		X
Any	Elective	X	X	X**	X
Credits	30	30	30	30	30

*MATH 235 (<https://catalogue.coastmountaincollege.ca/courses/math235/>) is highly recommended but not required for the first year of a Chemistry degree and students may take another elective instead. We recommend taking it during this course of study as it is required in the second year of a chemistry degree at most universities.

**It is recommended that the elective for a Geoscience degree be either Statistics (MATH 131 (<https://catalogue.coastmountaincollege.ca/courses/math131/>)) or a Biology course.

- English 12 with a minimum grade of C
- Pre-Calculus 12 with a minimum grade of C
- Physics 12 with a minimum grade of C; outstanding candidates missing Physics 12 or equivalent are encouraged to apply and will be reviewed on a case-by-case basis.
- Chemistry 12 with a minimum grade of C; outstanding candidates missing Chemistry 12 or equivalent are encouraged to apply and will be reviewed on a case-by-case basis.
- Recommended: Calculus 12 (if available); Programming 12 (if available).

Fees	Domestic	International
Full-time	30 Credits	30 Credits
Tuition	\$3,146.70	\$13,373.40
Mandatory fees	\$240.00	\$290.88
Lab fees (17.16 per credit) ¹	\$52.50	\$52.50
Student Union fees	\$109.28	\$109.28
Health and Dental Insurance*	\$285.00	\$602.04
Total Tuition: ²	\$3,833.48	\$14,428.10
Books & Supplies ³	\$2,000.00	\$2,000.00
Field School fees ⁴	\$900.00	\$900.00
Total:	\$6,733.48	\$17,328.10

Tuition and fees effective August 1, 2024 for the 2024/25 Academic Year.

1

Lab fees are mandatory. All associate degrees require a minimum of 3 credits in laboratory science, and students may take up to 42 lab credits.

2

These fees are an annual cost. Program takes one year to complete.

3

Please note that these are approximate costs and may vary depending on courses taken.

4

Field schools have additional costs between \$100 - \$900 per field school, depending on the location and the activities. Field schools are not a mandatory component of all associate degrees, however, students are strongly encouraged to attend a field school during the spring/summer semester. Associate Degrees specializing in Environmental Geoscience are encouraged to attend a minimum of two field schools. Field schools are subject to different deposit requirements and refund rules.

* The Coast Mountain Students Union (CMSU) is pleased to offer Extended Health and Dental Insurance to all qualifying members. The plan is mandatory for all students enrolled in 6 or more credits or a trades program of 26 weeks or longer. Some students, including those studying overseas and those with existing extended health coverage, are eligible to opt out. Visit <https://cmsu.studenthealthbc.ca/> to learn more about the plan or request to opt out. You will also receive a detailed introductory email no later than 6 weeks after your semester starts. For any inquiries about the plan, please contact the Students' Union Organiser : Bhushra Ansari, organiser@mycmsu.ca

* Basic Health insurance is mandatory for all international students. Health insurance costs will be charged every term until students provide proof of MSP.

Career opportunities

Potential career opportunities are listed below but possible achievements are only limited by the laws of physics and one's imagination.

- Algorithms engineer
- Geodesist
- Meteorologist
- Physicist
- Data scientist
- Mathematical modeler
- Chemist
- Quantitative financial analyst
- Professor
- Programmer
- Astronaut
- Mathematician
- Fraud investigator
- Energy analyst
- Operations research analyst



- Investment analyst
- Cryptographer
- Economist
- Medical technology developer
- Materials scientist
- Web Developer
- Laser Physicist
- Systems Analyst
- Software Developer
- High School Teacher

