




## ENVL Technical Elective List – Winter 2023


**Guidelines:**

- Students can now pick any TE courses from the two lists below to fulfill their Tech Elective requirements (with exception, see below)
- COMR courses with (\*\*) are only available to students who're enrolled in the Commerce Minor program, and only a max of 3-cr can be taken from the (\*\*) list, towards the Tech Elective requirements
- If you're interested in courses that are not included in the pre-approved technical elective lists, please contact the ENVL office at [environmental.engineering@ubc.ca](mailto:environmental.engineering@ubc.ca) for further discussion.











**Disclaimer:** Departments may reschedule courses so students will still need to check at registration for potential conflicts.

**Code:**

 - Pre-requisites can be/have been fulfilled

 - Missing pre-requisites.

## APSC courses

Course	Name	Term	Compatibility to STT		Pre-req Check
			Y3	Y4	
APSC 367 ++	<a href="#">Humanitarian Engineering: Politics and Practice</a>	1	Yes	Yes	
CHBE 344	<a href="#">Introduction to Unit Operations</a>	1	No	No	
CHBE 352	<a href="#">Transport Phenomena II</a>	1	No	No	
CHBE 355	<a href="#">Kinetics and Reactor Design</a>	2	No	No	
CHBE 381	<a href="#">Biological Engineering and Bio-Manufacturing I</a>	2	VALE, VANE VASE	No	 *
CHBE 473	<a href="#">Environmental Engineering and Sustainability Leadership</a>	2	VALE, VANE VASE	VATE, VAVE, VAZE	
CHBE 476	<a href="#">Advanced Process Engineering and Simulation</a>	1	VALE, VANE VASE	VAVE, VAZE	
CHBE 477	<a href="#">Fuel Cell and Electrochemical Engineering</a>	2	VALE, VANE VASE	VATE, VAVE, VAZE	
CHBE 487	<a href="#">Interfacial Phenomena</a>	2	No	VATE, VAVE, VAZE	
CHBE 488	<a href="#">Carbon Capture, Conversion and Sequestration Technologies</a>	2	No	No	



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CIVL 300	<a href="#">Construction Engineering and Management</a>	2	VALE, VANE VASE	VATE, VAVE, VAZE	
CIVL 301	<a href="#">Modelling and Decision-Making in Civil Engineering</a>	1	VALE, VANE	VAVE	*
CIVL 311	<a href="#">Soil Mechanics II</a>	1	No	VAVE, VAZE	
CIVL 340	<a href="#">Transportation Engineering</a>	2	VALE, VANE, VASE	No	
CIVL 408	<a href="#">Geo-Environmental Engineering</a>	2	VALE, VANE, VASE	VATE, VAZE	
CIVL 413	<a href="#">Design of Earth Dams and Containment Structures</a>	2	No	VATE, VAVE, VAZE	
CIVL 415	<a href="#">Water Resource Engineering</a>	2	VALE, VANE, VASE	VATE, VAVE, VAZE	
CIVL 417	<a href="#">Coastal Engineering</a>	1	VALE, VANE, VASE	VATE, VAVE, VAZE	
CIVL 418	<a href="#">Engineering Hydrology</a>	1	No	No	
CIVL 440	<a href="#">Transportation Engineering II</a>	1	No	No	*
CIVL 441	<a href="#">Transportation Planning and Analysis</a>	2	No	No	*
CIVL 475	<i>Environmental Stewardship in Civil Engineering – Not offered in Winter 2023</i>				
CIVL 478	<a href="#">Building Science</a>	1	VALE, VANE, VASE	VATE, VAVE, VAZE	
CIVL 498Q	<i>Topics in Civil Engineering - ENV MICROBIO ENG – Not offered in Winter 2023</i>				
MECH 469	<a href="#">Dynamic System Modelling</a>	1	VALE, VANE	VATE, VAVE, VAZE	
MECH 470	<i>Energy Conversion Systems - Not offered in Winter 2023</i>				
MECH 495	<a href="#">Industrial Engineering</a>	2	VALE, VANE, VASE	No	
MECH 496	<a href="#">Engineering Management</a>	2	Yes	Yes	
MINE 455	<a href="#">Mine Water Management</a>	2	No	No	
MINE 486	<a href="#">Mining and The Environment</a>	2	No	No	

\*Please reach out to the instructor for registration permission.

### Non-APSC Courses

Course	Name	Term	Compatibility to STT		Pre-req Check
			Y3	Y4	



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ANTH 360	<i>Introduction to Ecological Anthropology – Not offered in Winter 2023</i>				
APBI 402	<a href="#">Sustainable Soil Management</a>	2	No	No	
ARCL 309	<i>Archeology Collapse &amp; Sustainability – Not offered in Winter 2023</i>				
ATSC 313	<a href="#">Renewable Energy Meteorology</a>	2	Hybrid	Hybrid	
CHEM 301	<a href="#">Aqueous Environmental Chemistry</a>	1	No	No	
CHEM 302	<a href="#">Atmospheric Environmental Chemistry</a>	2	No	VATE, VAVE, VAZE	
CHEM 341	<a href="#">Global Challenges: A Chemical Perspective</a>	1	No	VATE, VAVE, VAZE	
COMM 487	<i>Environmental Management - Not offered in Winter 2023</i>				
COMR 329**	<a href="#">Principles of Organizational Behavior</a>	1 or 2	Please self-check	Please self-check	-
COMR 457**	<a href="#">Fundamentals of Financial Accounting</a>	1	Please self-check	Please self-check	-
COMR 458**	<a href="#">Fundamentals of Managerial Accounting</a>	2	Please self-check	Please self-check	-
COMR 465**	<a href="#">Marketing Management</a>	1 or 2	Please self-check	Please self-check	-
CONS 330	<a href="#">Conservation Science and Sustainability</a>	2	No	VATE, VAZE	
CONS 340	<a href="#">Introduction to Geographic Information Systems for Forestry and Conservation</a>	2	No	VATE, VAZE	
CONS 370	<a href="#">Indigenous Forestry</a>	2	VALE, VANE, VASE	No	
CONS 425 ++	<a href="#">Sustainable Energy: Policy and Governance</a>	2	VALE, VANE, VASE	No	
CONS 486	<a href="#">Fish Conservation and Management</a>	2	No	No	
ECON 371	<a href="#">Economics of the Environment</a>	1 or 2	VALE, VANE, VASE	VATE, VAZE	-
ENST 311	<a href="#">Urban Environments</a>	2	VALE, VANE, VASE	No	
ENVR 410	<a href="#">Energy, Environment, and Society</a>	1	No	VATE, VAVE, VAZE	
ENVR 420	<a href="#">Ecohydrology of Watersheds and Water Systems</a>	1 or 2	VALE, VANE, VASE	VAVE, VAZE	
EOOSC 340	<a href="#">Global Climate Change</a>	1 or 2	VALE, VANE, VASE	VATE, VAVE, VAZE	
EOOSC 350	<a href="#">Environmental, Geotechnical, and Exploration Geophysics I</a>	1	No	VATE, VAVE, VAZE	
EOOSC 372	<a href="#">Introductory Oceanography: Circulation and Plankton</a>	1	No	No	



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EOSC 373	<a href="#">Introductory Oceanography: Climate &amp; Ecosystems</a>	1	VALE, VANE, VASE	VATE, VAZE	
EOSC 426	<i>Fundamentals of Geomicrobiology – Not offered in Winter 2023</i>				
EOSC 428 +	<a href="#">Field Techniques in Groundwater Hydrology</a>	2	Yes	Yes	
EOSC 429	<a href="#">Groundwater Contamination</a>	2	VALE, VANE	VATE, VAZE	
EOSC 442	<a href="#">Climate Measurement and Analysis</a>	2	No	VATE, VAZE	
EOSC 474	<a href="#">Marine Pollution</a>	1	No	VATE, VAVE, VAZE	
FRST 385	<a href="#">Watershed Hydrology</a>	1	No	No	
FRST 386	<a href="#">Aquatic Ecosystems and Fish in Forested Watersheds</a>	2	VALE, VANE, VASE	No	
FRST 411	<a href="#">Aquatic Ecosystems and Fish in Forested Watersheds</a>	1	VALE, VANE, VASE	VAVE, VAZE	
FRST 443	<a href="#">Complex Adaptive Systems, Global Change Science, and Ecology Sustainability</a>	2	No	No	
GEOG 310	<a href="#">Environment and Sustainability</a>	2	VALE, VANE, VASE	VATE, VAVE, VAZE	
GEOG 312	<a href="#">Climate Change: Science and Society</a>	1	No	No	
GEOG 313	<a href="#">Environmental Justice and Social Change</a>	2	No	No	
GEOG 314	<a href="#">Analysing Environmental Problems</a>	2	VALE, VANE, VASE	No	
GEOG 350 ++	Urban Worlds	1 or 2	VALE, VANE	VATE, VAZE	
GEOG 497	<i>The Artic – Not offered in Winter 2023</i>				
GEOS 300	<a href="#">Microscale Weather &amp; Climate</a>	2	VALE, VANE, VASE	No	
GEOS 401	<a href="#">Urban Meteorology</a>	2	No	VATE, VAZE	
ISCI 360	<a href="#">Systems Approaches to Regional Sustainability</a>	1	VALE, VANE, VASE	VAVE, VAZE	
LAW 387C	<a href="#">Environmental Law</a>	2	No	No	
MICB 301	<a href="#">Microbial Ecophysiology</a>	1	No	No	
MICB 405	<a href="#">Bioinformatics</a>	1	VALE, VASE	No	
MICB 425	<a href="#">Microbial Ecological Genomics</a>	2	No	VATE, VAZE	
PHYS 333	<a href="#">Energy and Climate</a>	1	VALE, VANE, VASE	VALE, VANE, VASE	



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PLAN 351 ++	<a href="#">Green Cities</a>	2	TBD	TBD	○
PLAN 425 ++	<a href="#">Urban Planning Issues and Concepts</a>	1	VALE, VANE	VAVE	○
POLI 351	<a href="#">Environmental Politics and Policy</a>	2	No	No	○
POLI 375A	<a href="#">Global Environmental Politics</a>	2	VALE, VANE, VASE	No	○
SCIE 420	<a href="#">Sustainability for Community and the World</a>	2	No	No	○
UFOR 330	<a href="#">Environmental Justice and Urban Green Equity</a>	2	VALE, VANE, VASE	No	○

\*\* A max of 3 credits can be taken towards the technical electives, and it is only for students who are enrolled in the Commerce Minor program.

+ EOSC 428 has limited capacity, with priority given to GEOE students. ENVL students must first register for the Waiting List, and be screened for significantly restricted seats.

++ Students may take only one of APSC 367, CONS 425, GEOG 350, PLAN 351 and PLAN 425 as a Technical Elective, while the others may be taken as Humanity courses. For example: A student has decided to take PLAN 425 as a Technical Elective, and will be allowed to take two of APSC 367, CONS 425, GEOG 350 and PLAN 351 to fulfill the Humanities requirement or as extra credits.