



VANCOUVER ISLAND  
UNIVERSITY

Bachelor of Science, Major in Mathematics, Minor in Computer Science  
Program Grid

**Note:** This program grid is provided for guidance only. Degree completion is based on courses completed successfully and is subject to all applicable requirements and procedures in effect. Students should consult the B.Sc. Degree Advisor to confirm program requirements for their chosen degree.

Course Number	Course Name	Credits	Upper-Level Credits	Notes
English 1	100-level English	3		1
English 2	100-level English	3		1
MATH 100 or 121	Calculus I	3		
MATH 101 or 122	Calculus II	3		
Non-Science 100-499	Non-Science Elective I	3		2
Non-Science 100-499	Non-Science Elective II	3		2
Science 100-299	Lower-Level Science Elective	4		3
Science 100-299	Lower-Level Science Elective	4		3
MATH 123	Logic and Foundations	3		
MATH 221	Calculus III	3		
MATH 223	Discrete and Combinatorial Math	3		
MATH 241	Linear Algebra	3		
MATH 254	Statistics I	3		4
MATH 222 or 251	200-Level Mathematics Option	3		
MATH 330	Introduction to Abstract Algebra	3	3	
MATH 335	Numerical Analysis I	3	3	
MATH 371	Introductory Real Analysis	3	3	
MATH 372	Introductory Complex Variables	3	3	
MATH 300-499	Upper-Level Mathematics Elective I	3	3	5
MATH 300-499	Upper-Level Mathematics Elective II	3	3	5
MATH 300-499	Upper-Level Mathematics Elective III	3	3	5
MATH 300-499	Upper-Level Mathematics Elective IV	3	3	5
MATH 400-499	400-Level Mathematics Elective I	3	3	6
MATH 400-499	400-Level Mathematics Elective II	3	3	6
CSCI 160	Computer Science I	4		
CSCI 161	Computer Science II	4		
CSCI 162	Topics in Computer Science	4		
CSCI 260	Data Structures	3		
CSCI 265	Software Engineering	3		
CSCI 370	Database Systems	3	3	
CSCI 300-499	Upper-Level Computing Sci. Elective I	3	3	7
CSCI 300-499	Upper-Level Computing Sci. Elective II	3	3	7
CSCI 300-499	Upper-Level Computing Sci. Elective III	3	3	7
CSCI 300-499	Upper-Level Computing Sci. Elective IV	3	3	7
CSCI 300-499	Upper-Level Computing Sci. Elective V	3	3	7
Elective 100-499	General Elective I	3		8
Elective 100-499	General Elective II	3		8
Elective 100-499	General Elective III	3		8
Elective 100-499	General Elective IV	3		8
Elective 100-499	General Elective V	3		8
<b>TOTAL:</b>		<b>125</b>	<b>48</b>	

See notes on the next page /...

## NOTES:

1. The Degree English Requirement can be met as follows:
  - Two of ENGL 115, 125, 135, 204, or INTR 100; or,
  - LBST 111 and 112.
2. Non-Science Electives can be any courses outside of the Science discipline numbered 100-499. The following courses may not be counted to meet this requirement, although they may be counted as general electives:
  - Any course beginning with the following discipline identifiers: AQUA, ASTR, BIOL, CHEM, CSCI, ENGC, ENGE, ENGM, ENGR, FISH, FRST, GEOL, MATH, PHYS, RMOT, QUME, and SCIE.
  - Anthropology: ANTH 111, 213, 214, 341B, 342, 343, 344, 350, 351, 352, 353 361, 401, 430, 449, 460.
  - Geography: GEOG 211, 212, 221, 226, 228, 326, 328, 372, 373, 374, 376, 428.
  - Psychology: PSYC 204, 205, 300A, 300B, 301, 302, 305, 315, 316, 318, 319, 323, 324, 345, 365, 400, 415, 419, 445, 490, 491, 498A.
  - Physical Education: PHED 201, 220, 301, 302, 400, 401.
3. Lower-Level Science Electives can be courses numbered 100-299 in any science discipline, except MATH and CSCI courses. These courses are required to satisfy the Lower-Level Sciences Requirement of the Bachelor of Science degree. Options of science disciplines include:
  - AQUA, ASTR, BIOL, CHEM, ENGC, ENGE, ENGM, ENGR, FISH, FRST, GEOL, PHYS, RMOT and SCIE.
  - Some 100-level science courses are worth 4 credits. Each 4-credit first year course taken increases the total credit requirement of the degree by one additional credit.
4. Students interested in advanced courses in statistics (MATH 325, 326, or 421) are recommended to also take MATH 255.
5. Upper-Level Mathematics Electives can be any course selected from the following options:
  - CSCI 320, 340; MATH 300, 310, 317, 320, 325, 326, 331, 340, 341, 345, 346, 350, 360, 362, 370, 421, 430, 441, 443, 450, 451, 465, 470, 471, or 472.
6. The 400-Level Mathematics Electives can be any MATH course selected from the following options:
  - MATH 421, 430, 441, 443, 450, 451, 465, 470, 471, or 472.
7. Upper-Level Computer Science Electives can be any CSCI course numbered 300-499.
  - Students should check upper-level course prerequisites to guide second-year course selection. Some upper-level CSCI courses may require completion of a greater number of second-year courses than is required by the Minor.
8. General Electives can be courses in any discipline numbered 100-499.