

Statistics Pre-Major Program

For a college student wishing to proceed to the upper division of a Bachelor of Science Major in Statistics program at a British Columbia university, the Core courses and Additional courses that can be chosen to comprise a Statistics Pre-Major program are listed below. This information may also prove useful to institutions desiring to support the design of a Statistics Pre-Major program. The schematic on the next page shows how this suggested program fits into the specific Statistics Major requirements at four BC post-secondary institutions.

CORE Mathematics, Statistics, and Computer Science Courses

Calculus I, II, III
Linear Algebra
Statistics I, II
Computer Science I

ADDITIONAL Mathematics, Statistics, and Computer Science Courses

Mathematical Proof
Differential Equations
Computer Science II

CORE English/Writing Courses

English/Communication I

ADDITIONAL Science Courses

Lab-based Chemistry I, II
Lab-based Physics I, II
An Astronomy, Biology, Earth and Ocean Science, science credit Geography or Psychology course

Core Courses are those required by all of the institutions for their Statistics Major programs and can be considered a 'must' in any Statistics Pre-Major program. The Additional Courses are requirements by at least one institution. While institutions might wish to design a Statistics Pre-Major program satisfying local needs, students who are intent on moving to a particular institution at which to

complete their upper division courses would be wise to choose courses satisfying the requirements at that institution.

Post-Secondary Institutions in BC and the Suggested Statistics Pre-Major

This schematic lists by course number those Additional Mathematics, Statistics, and Computer Science lower-level courses beyond the Core courses that are required at each of the BC institutions indicated. The course numbers at respective Receiving institutions are in parentheses.

<u>Recommended CORE plus ADDITIONAL Courses at Each Institution</u>		
<u>UBC(V) Additional</u> Mathematical Proof (MATH 220) Software Construction (CPSC 210)		<u>SFU Additional</u> None
	<u>Core Courses</u> Calculus I, II, III Linear Algebra Statistics I, II Computer Science I	
<u>UBC(O) Additional</u> Mathematical Proof (MATH 220) Computer Programming II (COSC 121)		<u>UVic Additional</u> Differential Equations (201)

While the courses indicated above are sufficient to meet program requirements at the referenced institutions, it should be noted that, at some institutions, program flexibility permits a slight variation in the choice of courses as listed. Students are strongly advised to consult on-line calendars or to contact departmental advisors at their chosen institution to obtain further information about alternate course options or about any 'strongly recommended' courses in this particular Statistics Major program.

**Mathematics, Statistics, and Computer Science Lower-Level Requirements
in Statistics Major Programs
at British Columbia Post-Secondary Institutions**

Stat Major						
Requirements	UBC(O)	UBC(V)	SFU		UVic	Freq.
1st Year						
Calculus I	MATH 100	MATH 100	MATH 151		MATH 100	4
Calculus II	MATH 101	MATH 101	MATH 152		MATH 101	4
Comp Science	COSC 111	CPSC 110	CMPT 120	CMPT 126	CSC 110	4
Comp Science	COSC 121		CMPT 125			2/0
2nd Year						
Calculus III	MATH 200	MATH 200	MATH 251		MATH 200	4
Linear Algebra	MATH 221	MATH 221	MATH 232		MATH 211	4
Additional Math	MATH 220	MATH 220			MATH 201	3
Statistics I	STAT 230	STAT 200	STAT 270		STAT 260	4
Statistics II	STAT 240	MATH/ STAT 302	STAT 285		STAT 261	4
Comp Science		CPSC 210				1
Course Totals						
Mathematics	5	5	4		5	
Statistics	2	2	2		2	
Comp Science	2	2	2/1		1	
Total	9	9	8/7		8	