COMPUTER SCIENCE - STATISTICS JOINT, B.SC. HONOURS

Degree Requirements

Joint Honours (Including Co-operative Option if Selected)

Course	Title	Hours
Year 1		
COMP 1010	Introductory Computer Science 1 [1]	3
COMP 1020	Introductory Computer Science 2 (B)	3
STAT 1150	Introduction to Statistics and Computing [1]	3
STAT 2150	Statistics and Computing (B)	3
MATH 1220	Linear Algebra 1 [1]	3
MATH 1230	Differential Calculus [1]	3
MATH 1232	Integral Calculus [1]	3
MATH 1240	Elementary Discrete Mathematics	3
6 credit hours from the Faculty of Arts, which could include the required 3 credit hour "W" course		6
	Hours	**30**
Year 2		
COMP 2080	Analysis of Algorithms	3
COMP 2140	Data Structures and Algorithms	3
COMP 2150	Object Orientation	3
COMP 2160	Programming Practices	3
STAT 2300	Principles of Data Collection	3
STAT 2400	Introduction to Probability 1	3
STAT 2800	Introduction to Probability 2	3
MATH 2080	Introduction to Analysis	3
MATH 2150	Multivariable Calculus [1]	3
3 credit hours of electives [2]		3
	Hours	**30**
Year 3		
COMP 3170	Analysis of Algorithms and Data Structures	3
COMP 3380	Databases Concepts and Usage	3
STAT 3030	Introduction to Stochastic Processes	3
STAT 3100	Introduction to Statistical Inference	3
STAT 3150	Statistical Computing	3
STAT 3450	Linear Models	3
12 credit hours of electives [2,3]		12
	Hours	**30**
Years 3-4		
Co-op Requirements (if selected): [4]		
SCI 3980	Co-operative Education Work Term 1	0
SCI 3990	Co-operative Education Work Term 2	0
SCI 4980	Co-operative Education Work Term 3	0
SCI 4990	Co-operative Education Work Term 4 (if 4th work term selected)	0
	Hours	**0**
Year 4		
STAT 4100	Statistical Inference	3
27 credit hours of electives [2,5]		27
	Hours	**30**
	Total Hours	**120**

[1] The following substitutions are allowed:
- COMP 1012 may be taken in place of COMP 1010;
- MATH 1500 (B) or MATH 1510 (B) may be taken in place of MATH 1230;
- MATH 1210 (B) or MATH 1300 (C+) may be taken in place of MATH 1220;
- MATH 1700 (B) or MATH 1710 (B) may be taken in place of MATH 1232;
- MATH 2720 may be taken in place of MATH 2150;
- STAT 1000 and STAT 2000 (B) may be taken in place of STAT 1150.

[2] The following courses are not to be used for credit in this program: STAT 3000, STAT 4000.

[3] These must include 3 credit hours of COMP courses at the 3000 level. The following courses are suggested: COMP 3020, COMP 3350, COMP 3490, STAT 3490, STAT 3550, STAT 3690.

[4] Students in the Co-operative Option are required to complete COMP 3380, STAT 2300, STAT 3150, and STAT 3450 before their first employment term.

[5] These must include 3 credit hours of COMP courses at the 3000 or 4000 level, 6 credit hours of COMP courses at the 4000 level, and 9 credit hours of STAT courses at the 4000 level. The following courses are suggested: COMP 4380, COMP 4710, STAT 4150, STAT 4250, STAT 4630.

(Letters in brackets indicate minimum prerequisite standing for further study.)