Dalhousie University Department of Mathematics and Statistics

List of accredited courses that may be used towards the A.Stat. designation.

Module	Accredited Courses
Mathematics Modules	
1. Calculus I	Math 1000 (Calculus I) AND Math 1010 (Calculus II) OR Math 1215 (Calculus I for Life Sciences) AND Math 1010
2. Calculus II	Math 2001 (Intermediate Calculus I)
3. Linear Algebra	Math 1030 (Matrix Theory and Linear Algebra I) AND Math 2040 (Linear Algebra II) OR Math 2135 (Linear Algebra)
Statistics and Probability Modules (7 courses)	
4. Mathematical Statistics	Stat 3360 (Probability) AND {Stat 3460 (Intermediate Statistical Theory) OR Stat 4066 (Advanced Statistical Theory I)}
5. Linear Regression	Stat 3340 (Regression and Analysis of Variance)
6. Design of Experiments	Stat 3350 (Design of Experiments)
7. Survey Sampling	Stat 3380 (Sample Survey Methods)
Note	If only one of Stat 3350/3380 is taken, the other must be replaced by a course from the elective list.
8,9,10. Statistical Electives (Select three from)	Stat 3450 (Statistical Learning with R) Stat 3703 (Actuarial Models I) Stat 3720 (Life Contingencies I) Stat 3740 (Predictive Analytics) Stat 4100/5100 (Survival Analysis) Stat 4130/5130 (Bayesian Data Analysis) Stat 4350/5350 (Applied Multivariate Analysis) Stat 4370/5370 (Stochastic Processes) Stat 4390/5390 (Time Series Analysis I) Stat 4300/5300 (Topics in Statistics and Probability) Stat 4620/5620 (Data Analysis) Stat 4690/5690 (Computational Statistics) Stat 4703 (Actuarial Models II) Stat 4720 (Life Contingencies II) Stat 5500 (Topics in Advanced Statistics) Stat 5630 (Statistical Methods in Molecular Evolution) Stat 5750 (Statistical Data Mining)
Computer Skills (11,12)	Stat 2450 (Introduction to Data Mining with R) AND {CSCS 2202 (Computer Modeling for Scientists) OR CSCI 1105 (Introduction to Computer Programming) OR

	CSCI 1110 (Introduction to Computer Science)}
Communication Skills	Completion of the Dalhousie Writing Requirement
Substantive Area	A Minor in any subject other than Statistics OR Three courses in one subject other than Statistics, at least two of which are at the 3000+ level OR Two courses at the 2000+ level in each of two subjects other than Statistics

Notes:

1. Courses shall not be simultaneously counted towards the requirements for Statistics Electives and the Substantive Area. For example, Stat 3720 (Life Contingencies I) can be counted as a Statistics elective, or towards a Minor in Actuarial Science, but not both.
2. Stat 4300 and Stat 5500 are topics courses. Topics change from year to year, and credit will need to be approved on a case by case basis.

Renewal date: 2031-05-29