University of Toronto
Department of Statistical Sciences
Accredited courses that may be used towards the A.Stat. designation

Module	Course	
Mathematics Modules		
1. Calculus I	MAT157 – Analysis I; or MAT137– Calculus with Proofs; or MAT135 – Calculus I; MAT136 – Calculus II; or MAT133 – Calculus and Linear Algebra for Commerce	
2. Calculus II	MAT257 – Analysis II; or MAT237 – Multivariable Calculus with Proofs; or MAT235 – Multivariable Calculus	
3. Linear Algebra	MAT223 – Linear Algebra I; or MAT224 – Linear Algebra II; or MAT240 – Algebra I; or MAT247 – Algebra II	
Statistics and probability modules		
4. Mathematical Statistics	STA220 – Practice of Statistics I and STA255 – Statistical Theory; or STA237 and STA238 – Probability, Statistics and Data Analysis I and II; or STA257 and STA261 – Probability and Statistics I and II; or STA355 – Theory of Statistical Practice; or STA452 and 453 – Mathematical Statistics I and II	
5. Linear Regression	STA302 – Methods of Data Analysis I	
6. Design of Experiments	STA305 – Design & Analysis of Experiments	(If only one of these two courses is taken, the other must be replaced by a course from the list below.)
7. Survey Sampling	STA304 – Surveys, Sampling and Observational Data; or	

8. Electives	**Select three from** STA130 – Introduction to Statistical Reasoning & Data Science STA272 – Statistical Models for Data Science, STA303 – Methods of Data Analysis II, STA313 – Data Visualization, STA314 – Statistical Methods for Machine Learning I, STA347 – Probability, STA365 or CHL5226 – Applied Bayesian Statistics, STA410/2102 – Statistical Computation, STA414/2104 – Statistical Methods for Machine Learning II, STA422/2162 – Theory of Statistical Inference, STA437/2005 – Methods for Multivariate Data, STA442/2101 – Methods of Applied Statistics, STA447/2006 – Stochastic Processes, STA457/2202 – Time Series Analysis, STA465/2016 – Spatial Data Analysis, STA475 or CHL5209 – Survival Analysis, STA490 – Statistical Consultation, Communication, & Collaboration, STA492 – Seminar in Statistics, JSC270 – Data Science I, JSC370 – Data Science II, JSC470 – Data Science III, JAS1101H – Topics in Astrostatistics, STA2101H – Methods of Applied Statistics I, STA2201H – Methods of Applied Statistics II, STA2111H – Probability Theory I, STA2211H – Probability Theory II, STA2112H – Introduction to Statistical Theory for Data Science, STA2212H – Advanced Statistical Theory for Data Science, STA2311H – Advanced Computational Methods for Statistics I, STA2312H – Advanced Computational Methods for Statistics II, CHL5222H – Analysis of Correlated Data CHL5226H – Mathematical Foundations of Biostatistics ACT (Actuarial Mathematics) courses at 300+ level

Computer Skills	
9. Computer skills I	CSC 108 – Introduction to Computer Programming; or CSC 148 – Introduction to Computer Science
10. Computer skills II	CSC 260 – Introduction to Scientific, Symbolic, and Graphical Computation; or STA 410 – Statistical Computation Common statistical packages are integrated throughout the STA courses. For example, taking both STA237 and 238 or taking both STA 302 and 303 can meet this requirement.
Communication Skills	
11. Communication skills	Any Writing Intensive course offered at UofT (Writing intensive courses offered by the Department of Statistics: STA 130 – An Introduction to Statistical Reasoning and Data Science; STA 490 – Statistical Consultation, Communication, and Collaboration; Additionally, courses with research/project assignments would also qualify: JSC270, JSC370, STA272, STA299, STA302, STA304, STA305, STA313, STA399, STA465, STA475, STA492, STA496, STA497, STA2016)
Substantive Area	
12. Course 1	A minor from another Department following the University of Toronto calendar. Please contact the SSC if you have a minor in mathematics to ensure that it will be acceptable; or Three courses at 300+ level from one area other than STA and MAT.
13. Course 2	
14. Course 3	

Renewal Date: 2031-05-29