

**Checklist of Educational Requirements  
University of Toronto  
Department of Statistics**

**Accredited courses that may be used towards the A.Stat.  
designation**

Module	Accredited Course	
<b>Mathematics Modules</b>		
1. Calculus I	MAT 157 – Analysis I; or MAT 137– Calculus!; or MAT 135 – Calculus I; or MAT 133 – Calculus and Linear Algebra for Commerce	
2. Calculus II	MATH 257 – Analysis II; or MATH 237 – Multivariable Calculus; or MATH 235 – Calculus II	
3. Linear Algebra	MAT 223 – Linear Algebra I; or MAT 240 – Algebra I	
<b>Statistics and probability modules (7 courses)</b>		
4. Mathematical statistics	STA 250 – Statistical Concepts and STA 255 – Statistical Theory; or STA 257 and STA 261 – Probability and Statistics I and II; or STA 352 – Introduction to Mathematical Statistics; or STA 2112 and 2212 – Mathematical Statistics I and II (graduate)	
5. Linear Regression	STA 302/1001 – Methods of Data Analysis I	
6. Design of Experiments	STA 305/1004 (was STA 332) or STA 2004	At least one of STA 305/1004 (was STA 332) – Design and Analysis of Experiments / STA 2004 – Design of Experiments or STA 304/1003 – Surveys, Sampling and Observational Data must be taken. An alternate from the list below may be substituted for the other.
7. Survey Sampling	STA 304/1003	
8. Stat Elective	Select three from STA 303/1002 – Methods of Data Analysis II, STA 347 – Probability, STA 410/2102 – Statistical Computation, STA 412/2105 – Nonparametric Methods of	
9. Stat Elective		
10. Stat Elective		

	<p>Inference,          STA 414/2104 – Statistical Methods for Data Mining and Machine Learning          STA 437/1005 – Methods for Multivariate Data,          STA 442/2101 – Methods of Applied Statistics,          STA 447/2006 – Stochastic Processes,          STA 457/2202 – Time Series Analysis,          STA 490 – Statistical Consultation, Communication, and Collaboration,          STA 2201 – Methods of Applied Statistics II          STA 2542 – Linear Models          CHL 5209 – Survival Analysis          CHL 5210 – Categorical Data Analysis          CHL 5223 – Applied Bayesian Methods          ACT (Actuarial Mathematics) courses at 300+ level</p>
<b>Computer Skills</b>	
11. Computer skills 1	CSC 108 – Introduction to Computer Programming; or CSC 148 – Introduction to Computer Science
12. Computer skills 2	<p>CSC 260 – Introduction to Scientific, Symbolic, and Graphical Computation; or          STA 410 – Statistical Computation</p> <p>Common statistical packages are integrated throughout the STA courses. For example, taking both STA 302 and 303 can meet this requirement.</p>
<b>Communication Skills</b>	
13. Communication skills	<p>Any Writing Intensive course offered at UofT (Writing intensive courses offered by the Department of Statistics:          STA 490 – Statistical Consultation, Communication, and Collaboration          or          STA 2453 – Statistical Consulting)</p>
<b>Substantive Area</b>	
14. Course 1	<p>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.</p>
15. Course 2	
16. Course 3	