University of Regina
Department of Mathematics and Statistics

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

<table>
<tr><th>Module</th><th colspan="2">Course</th></tr>
<tr><td colspan="3">Mathematics Modules</td></tr>
<tr><td>1. Calculus I</td><td colspan="2">MATH110 – Calculus I AND MATH111 – Calculus II</td></tr>
<tr><td>2. Calculus II</td><td colspan="2">MATH213 – Vector Calculus</td></tr>
<tr><td>3. Linear Algebra</td><td colspan="2">MATH122 – Linear Algebra I</td></tr>
<tr><td colspan="3">Statistics and probability modules</td></tr>
<tr><td>4. Mathematical Statistics</td><td colspan="2">STAT251 – Introduction to Probability AND
STAT252 – Introduction to Statistical Inference</td></tr>
<tr><td>5. Linear Regression</td><td colspan="2">STAT354 – Linear Statistical Methods</td></tr>
<tr><td>6. Design of Experiments</td><td>STAT485 – Design and Analysis of Experiments</td><td rowspan="2">(If only one of these two courses is taken, the other must be replaced by a course from the list below.)</td></tr>
<tr><td>7. Survey Sampling</td><td>STAT357 – Sampling Theory</td></tr>
<tr><td>8. Electives</td><td colspan="2">Select three from

STAT300 – Statistical Learning and Predictive Modeling
STAT301 – Introduction to Statistical Computing
STAT362 – Bayesian Statistics
STAT418 – Time Series Analysis and Forecasting
STAT426 – Survival Analysis
STAT441 – Stochastic Calculus with Applications to Finance
STAT451 – Advanced Probability
STAT452 – Advanced Statistical Inference
STAT456 – Applied Stochastic Processes
STAT470 – Bootstrap Methods
STAT495AE – Large Sample Methods</td></tr>
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Computer Skills	
9. Computer skills I	CS110 – Programming and Problem Solving AND CS115 – Object-Oriented Design
10. Computer skills II	CS210 – Data Structures and Abstractions Common statistical packages are integrated throughout the STAT300, 301, 354, 357, 362, 418 courses with directed computer laboratory sessions. Completion of any two of these courses would satisfy this requirement.
Communication Skills	
11. Communication skills	ENG110 – Critical Reading and Writing II
Substantive Area	
12. Course 1	A minor from another area other than MATH or STAT following the University of Regina calendar OR three courses at the 300+ level from an area other than MATH or STAT. Students who complete a co-op term may substitute work experience for some or all of these requirements. These courses are formally listed as: STAT051 – Statistics Co-Op Work Term #1 STAT052 – Statistics Co-Op Work Term #2 STAT053 – Statistics Co-Op Work Term #3 STAT054 – Statistics Co-Op Work Term #4
13. Course 2	
14. Course 3	

Note: A minimum final grade of 70% is required for every course listed above.

Date of Expiration: Dec 20, 2028.