# University of Manitoba
## Department of Statistics

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

<table>
<thead>
<tr>
<th>Module</th>
<th>Course number, name (All STAT courses listed are 3 credit hours)</th>
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<tbody>
<tr>
<td><strong>Mathematics Modules</strong></td>
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<tr>
<td>1. Calculus I</td>
<td>MATH 1690(6) Calculus, or MATH 1500(3) Introduction to Calculus and MATH 1700(3) Calculus 2</td>
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<tr>
<td>2. Calculus II</td>
<td>MATH 2750(6) Intermediate Calculus, or MATH 2720(3) Multivariable Calculus and MATH 2730(3) Sequences and Series. MATH 3740(6) Methods of Advanced Calculus</td>
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<tr>
<td>3. Linear Algebra</td>
<td>MATH 1300(3) Vector Geometry and Linear Algebra. MATH 2300(3) Linear Algebra 2</td>
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<tr>
<td><strong>Statistics and probability modules</strong></td>
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<tr>
<td>5. Linear Regression</td>
<td>STAT 3120 Topics in Regression Analysis STAT 3470 Statistical Methods for Research Workers 1</td>
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<tr>
<td>6-10. Five courses past an introductory course in statistics. One of which must be either Design of Experiment or Survey Sampling. Both are recommended.</td>
<td>STAT 3130 Statistical Analysis of Designed Experiments STAT 3170 Statistical Quality Control STAT 3380 An Introduction to Nonparametric Statistics STAT 3480 Statistical Methods for Research Workers 2 STAT 3490 Time Series Analysis STAT 4170 Lifetime Data Analysis STAT 4520 Sampling Techniques 1 STAT 4580 Sampling Techniques 2</td>
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<tr>
<td>Course Code</td>
<td>Course Title</td>
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<tr>
<td>STAT 4530</td>
<td>Design of Experiments 1</td>
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<tr>
<td>STAT 4590</td>
<td>Design of Experiments 2</td>
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<tr>
<td>STAT 4630</td>
<td>Stochastic Processes</td>
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<tr>
<td>STAT 4690</td>
<td>Applied Multivariate Analysis</td>
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<td>STAT 4700</td>
<td>Statistical Consulting</td>
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<tr>
<td>STAT 7060</td>
<td>Advanced Theory of Probability</td>
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<td>STAT 7080</td>
<td>Advanced Statistical Inference</td>
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<tr>
<td>STAT 7140</td>
<td>Linear Models</td>
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<tr>
<td>STAT 7200</td>
<td>Multivariate Analysis 1</td>
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<tr>
<td>STAT 7240</td>
<td>Advanced Topics 1 (Lifetime Data Analysis)</td>
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<tr>
<td>STAT 7250</td>
<td>Advanced Topics 2 (Stochastic Processes)</td>
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<tr>
<td>STAT 7260</td>
<td>Time Series</td>
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**Computer Skills**

<table>
<thead>
<tr>
<th>11. Computer skills 1</th>
<th>COMP 1010 Introductory Computer Science</th>
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<tbody>
<tr>
<td>12. Computer skills 2</td>
<td>COMP 1020 Introductory Computer Science 2</td>
</tr>
<tr>
<td></td>
<td>COMP 1260 Introductory Computer Usage 1</td>
</tr>
<tr>
<td></td>
<td>COMP 1270 Introductory Computer Usage 2</td>
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**Communication Skills**

<table>
<thead>
<tr>
<th>13. Communication skills</th>
<th>STAT 7220 Seminar in Statistics</th>
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<tr>
<td></td>
<td>Any University of Manitoba course requiring significant a writing component as designated by (W)</td>
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**Substantive Area:**

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<tr>
<td></td>
<td>The Honours program in Statistics at the University of Manitoba requires 18 credit hours of courses in an area of application (other than Mathematics or Computer Science)</td>
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Approved by the Accreditation Committee 2007-06-01.