

# Major in Applied Statistics Module (20.0 courses)

This is a guide only. For complete information, see the [online Academic Calendar](#)

Last updated June 21, 2019

<p><b>Year 1 (5.0 Courses)</b></p> <p>Calculus 1000A/B or 1500A/B</p> <p>Calculus 1501A/B (<b>recommended</b>) or Calculus 1301B with a mark of 85%+</p> <p>Mathematics 1600A/B</p> <p>1.0 courses from Psychology 1000, Biology 1001A or 1201A, Biology 1002B or 1202B, or Sociology 1020</p> <p>0.5 other principal course</p> <p>2.0 options</p> <p><b>NOTE:</b> At least 1.0 course must be chosen from two of Category A, B, and C as listed in the Academic Calendar(e.g. 1.0 from A and 1.0 from C)</p>	<p><b>Graduation Requirements</b></p> <p><b>Breadth Requirement:</b></p> <ul style="list-style-type: none"> <li>At least 1.0 course from each of Category A, B, and C as listed in the Academic Calendar</li> </ul> <p><b>Essay Requirement:</b></p> <ul style="list-style-type: none"> <li>2.0 essay courses (1.0 must be senior course). Note that any modular essay course taken can be used towards this requirement</li> </ul> <p><b>Senior Courses:</b></p> <ul style="list-style-type: none"> <li>13.0 senior courses (numbered 2000-4999)</li> </ul> <p><b>Average Requirements- for a 4 yr general degree **:</b></p> <ul style="list-style-type: none"> <li>Minimum overall average of 60% on the 20.0 courses</li> <li>Minimum cumulative modular average of 60% in the major module</li> <li>Passing grade in each course</li> <li>Minimum cumulative modular average of 60% in any additional Major or Minor module completed</li> </ul> <p><b>Residency Requirement:</b></p> <ul style="list-style-type: none"> <li>The majority of your modular courses must be completed at Western University. Please check academic calendar for any other residency requirements</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li><b>** honors degree(with double major) requires a 70% average within each of the 2 modules</b>, with no Ds in any required course</li> <li><b>To graduate with either a 4 year general or Honors BSc degree</b>, at least 11.0 of your 20.0 courses must be taken from the Faculty of Science.</li> </ul>
<p><b>Admission to the Major Module:</b></p> <p>Complete first year (5.0 courses) with no failures including:</p> <ul style="list-style-type: none"> <li>Minimum grade of 60% in each of: <ul style="list-style-type: none"> <li>Calculus 1000A/B or Calculus 1500A/B</li> <li>Calculus 1501A/B or Calculus 1301B with a mark of at least 85%</li> <li>Mathematics 1600A/B</li> <li>1.0 courses from Psychology 1000, Biology 1001A or 1201A, Biology 1002B or 1202B, or Sociology 1020</li> <li>0.5 other principal course</li> </ul> </li> </ul> <p><b>Recommended (but not required) first year courses:</b> Statistical Sciences 1024A/B and/or Statistical Science 1023A/B.</p> <p><b>NOTE 1:</b> If not taken in first year, Math 1600A/B must be completed prior to the second term of second year.</p> <p><b>NOTE 2:</b> AM1413 may be substituted for the 1.0 Calculus course requirements and AM1411 A/B may be substituted for Mathematics 1600 A/B.</p>	<p><b>Department Recommendation for order in which modular courses should be taken:</b></p> <p><b>Second Year</b></p> <p><b>Calculus 2402A</b> Calculus with Analysis for Statistics  <b>SS2857A</b> Probability and Statistics I  <b>SS2858B</b> Probability &amp; Statistics II  <b>SS2864B</b> Statistical Programming (now offered both terms)</p> <p>One of:  <b>Biology 2290F/G</b>-Scientific Methods in Biology or  <b>Sociology 2206A/B</b>-Research Methods in Sociology, or  <b>Psych2800E</b>- Research methods in Psychology</p>
<p><b>MODULE (6.0 courses) @</b></p> <p><b>3.5 courses:</b> Statistical Science 2857A, 2858B, 2864A/B, 3843A/B, 3850F/G, 3859A/B, 3860A/B.</p> <p><b>0.5 course:</b> Calculus 2402A/B **</p> <p><b>0.5 course</b> from: Biology 2290F/G, Sociology 2206A/B, Psych 2800E #</p> <p><b>0.5 course:</b> Epidemiology 2200B.</p> <p><b>1.0 course</b> from: Applied Math 2402A, 3615A/B, Financial Modelling 3817A/B; Psychology 3800F/G, 3840F/G; Sociology 2236A/B, 4441A/B; Statistical Sciences 4846A/B,4850F/G, 4853A/B, or any approved Statistics course at the 3000<sup>+</sup> level</p> <p>** Calculus 2402A/B may be replaced by (Calculus 2502A/B + 2503A/B). When such a replacement occurs, the module will increase by 0.5 courses.</p> <p># If Psych 2800E is taken, the module will increase by 0.5 courses.</p> <p>@ <b>Module shown is as per current calendar year.</b> You may complete module using current calendar year <u>or</u> using calendar in effect in year of module entry</p>	<p><b>Third Year</b></p> <p><b>SS3843A</b> Introduction to Study Design  <b>SS3859A</b> Regression  <b>SS3850G</b> Statistical Learning  <b>SS3860B</b> Generalized Linear Models</p> <p><b>Epidemiology 2200B*</b> Introduction to Epidemiology  1.0 Courses from modular selection list(s).  * this course can be taken concurrently with Stats 2858b</p>
<p><b>OPTIONS(9.0)Courses: 4 year general/honors degree only</b></p> <p>These may also include any additional module, <i>excluding Data Science</i>.</p> <p><b>If taking another module that includes an intro stats course (anti-req to SS2858), please consult with other department regarding course substitution.</b></p> <p>Also, you must complete any additional module with a minimum 60% average.</p> <p><b>Notes:</b></p> <p>Courses common to more than one module taken require substitution. However, if both modules are from faculty of science, a maximum of 1.0 courses <i>explicitly required for each module</i> can be counted towards both modules.</p> <p><b>2<sup>nd</sup> Degree students should meet with</b> a faculty counsellor to review other degree requirements (e.g other than modular courses needed).</p>	<p><b>Fourth Year</b></p> <p>Any modular courses not yet completed</p>
<p><b>Progression Requirements</b></p> <ul style="list-style-type: none"> <li>Satisfy the progression requirements for the University (Level 1 and Level II as described in the Academic Calendar)</li> <li>See graduation requirements for honors degree (with double major)</li> <li><b>Note:</b> many modular course pre-requisites stipulate min. grade of 60%</li> </ul>	