3.4.2.7 Second Major in Statistics

Host Department: Statistics

To be awarded a B.Sc. with a second major in Statistics, candidates must satisfy the following:
<table>
<thead>
<tr>
<th>MODULE LEVEL</th>
<th>SECOND MAJOR REQUIREMENTS</th>
<th>CUMULATIVE MAJOR MCS</th>
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<tr>
<td><strong>Level-1000</strong>&lt;br&gt;(14 – 16 MCs)</td>
<td>Pass&lt;br&gt;ST1131  Introduction to Statistics&lt;br&gt;or&lt;br&gt;ST1232  Statistics for Life Sciences&lt;br&gt;MA1101R  Linear Algebra I&lt;br&gt;or&lt;br&gt;MA1508E  Linear Algebra for Engineering&lt;br&gt;or&lt;br&gt;MA1513  Linear Algebra with Differential Equations (2 MCs) &lt;sup&gt;▲&lt;/sup&gt;&lt;br&gt;MA1102R  Calculus&lt;br&gt;or&lt;br&gt;MA1505  Mathematics I&lt;br&gt;or&lt;br&gt;MA1507  Advanced Calculus&lt;br&gt;or&lt;br&gt;MA1511  Engineering Calculus (2 MCs) &lt;sup&gt;and&lt;/sup&gt;&lt;br&gt;MA1512  Differential Equations for Engineering (2 MCs)&lt;br&gt;or&lt;br&gt;MA1521  Calculus for Computing&lt;br&gt;CS1010  Programming Methodology&lt;br&gt;or&lt;br&gt;CS1010E  Programming Methodology&lt;br&gt;or&lt;br&gt;CS1010J  Programming Methodology&lt;br&gt;or&lt;br&gt;CS1010S  Programming Methodology&lt;br&gt;or&lt;br&gt;CS1010X  Programming Methodology&lt;br&gt;or&lt;br&gt;IT1007  Introduction to Programming with Python and C</td>
<td>14 – 16</td>
</tr>
<tr>
<td>MODULE LEVEL</td>
<td>SECOND MAJOR REQUIREMENTS</td>
<td>CUMULATIVE MAJOR MCS</td>
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| **Level-2000** (16 – 17 MCs) | Pass  
ST2131/MA2216 Probability  
ST2132 Mathematical Statistics  
ST2137 Computer Aided Data Analysis  
MA2311 Techniques in Advanced Calculus  
or  
MA2104 Multivariable Calculus  
or  
MA2108 Mathematical Analysis I  
or  
MA2108S Mathematical Analysis I (S) | 30 – 33 |
| **Level-3000 & Level-4000** (16 – 20 MCs) | Pass  
ST3131 Regression Analysis*  
- Three other modules from ST32xx (except ST328x) or ST4xxx modules  
- One additional module from ST32xx (except ST328x) or ST4xxx modules ^ | 48 – 51 |

* Students who have passed EC3303 Econometrics I need not read ST3131. They are allowed to read and pass an additional module from ST32xx (except ST328x) or ST4xxx modules in lieu of ST3131. However, where a module from ST32xx or ST4xxx modules requires ST3131 as pre-requisite, the pre-requisite may not be fulfilled by EC3303.

^ Applicable only to students who use MA1513 Linear Algebra with Differential Equations (2 MCs) to fulfil the second major requirements.

This second major is **not** offered with a primary major in Statistics, Data Science and Analytics, and minor in Statistics.