**DATA ANALYSIS MINOR**

Banner Code: DATA

Phone: 703-993-3645  
Email: statistics@gmu.edu  
Website: statistics.gmu.edu

The minor provides students with a background in data analysis and statistical methodology. It is intended to complement undergraduate degree programs such as computer science, economics, environmental engineering, geography, mathematics, nursing, psychology, public administration, sociology, and systems engineering.

### Admissions & Policies

**Policies**

For policies governing all minors, see AP.5.3.4 Minors.

**Program Requirements**

The minor requires 15 credits: a core sequence of 6 credits, plus 9 credits of electives. Grades of C or better are required in all courses. At least 9 of the 15 credits must be in STAT courses. At least 8 credits must be in courses not required by the student’s major.

### Requirements

#### Minor Requirements

Total credits: 15

**Core Sequence Credits**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Select one sequence from the following:</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Sequence 1:</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 250</td>
<td>Introductory Statistics I (Mason Core)</td>
<td></td>
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<tr>
<td>STAT 350</td>
<td>Introductory Statistics II</td>
<td></td>
</tr>
<tr>
<td>or STAT 435</td>
<td>Analysis of Experimental Data</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sequence 2:</strong></td>
<td></td>
</tr>
<tr>
<td>STAT 344</td>
<td>Probability and Statistics for Engineers and Scientists I</td>
<td></td>
</tr>
<tr>
<td>STAT 354</td>
<td>Probability and Statistics for Engineers and Scientists II</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Sequence 3:</strong></td>
<td></td>
</tr>
<tr>
<td>MATH 351</td>
<td>Probability</td>
<td></td>
</tr>
<tr>
<td>MATH 352</td>
<td>Statistics</td>
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</tbody>
</table>

Total Credits 6

1 Provided the 9 elective credits are all STAT courses, mathematics majors may substitute these courses.

#### Electives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td></td>
<td>Select 9 credits from the following:</td>
<td>9</td>
</tr>
<tr>
<td>STAT 362</td>
<td>Introduction to Computer Statistical Packages</td>
<td></td>
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</tbody>
</table>

STAT 455 | Experimental Design                                       |
STAT 456 | Applied Regression Analysis                                |
STAT 460 | Introduction to Biostatistics                             |
STAT 462 | Applied Multivariate Statistics                            |
STAT 463 | Introduction to Exploratory Data Analysis                  |
STAT 465 | Nonparametric Statistics and Categorical Data Analysis    |
STAT 472 | Introduction to Statistical Learning                       |
STAT 474 | Introduction to Survey Sampling                            |
STAT 499 | Special Topics in Statistics                               |
BENG 322 | Health Data Challenges                                    |
BINF 401 | Bioinformatics and Computational Biology I                 |
BIOL 214 | Biostatistics for Biology Majors                           |
BIOL 312 | Biostatistics for Bioinformatics                           |
BIOL 314 | Introduction to Research Design and Analysis               |
CDS 302 | Scientific Data and Databases                              |
CS 445  | Computational Methods for Genomics                         |
CS 450  | Database Concepts                                          |
CS 484  | Data Mining                                                |
CYSE 325 | Discrete Events Systems Modeling                          |
ECON 345 | Introduction to Econometrics                               |
ECON 445 | Design and Analysis of Experiments                         |
GOVT 300 | Research Methods and Analysis (Mason Core)                 |
GGS 300 | Quantitative Methods for Geographical Analysis            |
GGS 354 | Data Analysis and Global Change Detection Techniques       |
OR/SYST 335 | Discrete Systems Modeling and Simulation                  |
OR 441  | Deterministic Operations Research                          |
OR 442  | Stochastic Operations Research                             |
PSYC 300 | Statistics in Psychology                                  |
SOCI 313 | Statistics for the Behavioral Sciences (Mason Core)        |
SOCI 405 | Analysis of Social Data                                    |
SYST 469 | Human Computer Interaction                                |
SYST 473 | Decision and Risk Analysis                                 |