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.

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>
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<tr>
<td></td>
<td>Sequence 1:</td>
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<tr>
<td></td>
<td>STAT 250 Introductory Statistics I (Mason Core)</td>
<td>6</td>
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<tr>
<td></td>
<td>or STAT 350 or STAT 435 Analysis of Experimental Data</td>
<td></td>
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<td>Sequence 2:</td>
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<td></td>
<td>STAT 344 Probability and Statistics for Engineers and Scientists I</td>
<td></td>
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<td></td>
<td>STAT 354 Probability and Statistics for Engineers and Scientists II</td>
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<td>Sequence 3: ¹</td>
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<td></td>
<td>MATH 351 Probability</td>
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<td></td>
<td>MATH 352 Statistics</td>
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<tr>
<td>Total Credits</td>
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<td>6</td>
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¹ Provided the 9 elective credits are all STAT courses, mathematics majors may substitute these courses.

Electives

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<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>
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<tr>
<td></td>
<td>STAT 362 Introduction to Computer Statistical Packages</td>
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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