**Economics & Statistics (BS)**

**Major Academic Director: Rebecca Nugent; Academic Advisor: Paige Houser (BH 132A)**

The major in Economics and Statistics provides an interdisciplinary course of study aimed at students with a strong interest in the empirical analysis of economic data. Jointly administered by the Department of Statistics and the Undergraduate Economics Program, the major's curriculum provides students with a solid foundation in the theories and methods of both fields. Students in this major are trained to advance the understanding of economic issues through the analysis, synthesis and reporting of data using the advanced empirical research methods of statistics and econometrics. Graduates are well positioned for admission to competitive graduate programs, including those in statistics, economics and management, as well as for employment in positions requiring strong analytic and conceptual skills - especially those in economics, finance, education, and public policy.

Because this curriculum is highly sequenced, it is important to plan out each semester’s courses with your advisor.

This is a suggested schedule for a Primary Major. The remainder of the Major and GenEd can be completed in the junior and senior year.

### 1st semester (49 units)
- 36-201, Statistical Reasoning*
- Complete 1:
  - 76-101, Interpretation & Argument
  - 79-104, Global Histories
  - Freshman Seminar
- 99-101 or 99-102, C@CM
- 21-120, Diff. & Integral Calculus***
- 73-100, Principles of Economics
- xx-xxx, Elective**

### 2nd semester (45 units)
- Complete 2:
  - 76-101, Interpretation & Argument
  - 79-104, Global Histories
  - Freshman Seminar
  - 21-256, Multivariate Analysis***
- 36-202, Statistical Methods****
- 73-160, Microeconomics: Foundations & Applications**
- xx-xxx, Elective**

### 3rd semester (46 units)
- 36-225, Intro. to Probability Theory
- 21-122 (or 21-127 or 21-257)
- 73-230, Intern. Microeconomics
- 36-350, Statistical Computing
- 73-450, Economics Colloquium
- xx-xxx, Elective**

### 4th semester (48 units)
- 73-240, Intern. Macroeconomics
- 73-3xx, Adv. Economics Elective
- 21-240, Matrix Algebra+
- xx-xxx, Elective**

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*Acceptable equivalents for 36-201 are: 36-207, 36-247 or 36-220

**73-160 and 73-450 are highly recommended but not required. This space can be used for a pre-requisite course, another GenEd course, major course, or for a course you are interested in.

***If required to start with 21-111, complete 21-112, then 21-256. Note: 21-256 is the co-requisite for 36-225.

****Other Intermediate Data Analysis courses are: 36-208 (spring) or 36-309 (fall)

+Or 21-241 or 21-242; these courses are prerequisites for 36-401

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*Academic Advisory Center (6/2/2016)*
<table>
<thead>
<tr>
<th>General Education Program (GenEd)</th>
<th>Economics &amp; Statistics Courses for the Major (&amp; prerequisite courses) with highlighted GenEd courses</th>
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<tr>
<td>Communicating 76-101 Interpretation &amp; Argument</td>
<td>21-120 Differential and Integral Calculus (see GenEd: Modeling Math.)</td>
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<tr>
<td>Communicating 73-270 Writing for Economists</td>
<td>73-100 Principles of Economics (see GenEd: Deciding)</td>
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<tr>
<td>Reflecting 79-104 Global Histories</td>
<td>73-230 Intermediate Microeconomics (see GenEd: Addtnl GenEd)</td>
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<td>Reflecting 73-375 Hist. of Money &amp; Monetary Policy</td>
<td>73-375 Advanced Economics Elective</td>
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<td>Modeling: Math. Sciences 21-120 Differential and Integral Calculus</td>
<td>21-256 Multivariate Analysis (see GenEd: Modeling Other)</td>
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<td>Modeling: Natural Science —____ (9 units)</td>
<td>73-240 Intermediate Macroeconomics</td>
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<tr>
<td>Modeling: Other 21-256 Multivariate Analysis</td>
<td>36-300 to 495 Advanced Statistics Elective</td>
</tr>
<tr>
<td>Deciding 36-201 Statistical Reasoning</td>
<td>21-240 Matric Algebra with Applications</td>
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<tr>
<td>Deciding 73-100 Principles of Economics</td>
<td>73-300 to 495 Advanced Economics Elective</td>
</tr>
<tr>
<td>Creating <strong><strong>-</strong></strong> (9 units)</td>
<td>36-302 (or 208 or 309) Statistical Reasoning</td>
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<tr>
<td>Creating <strong><strong>-</strong></strong> (9 units)</td>
<td>36-270 Writing for Economists (see GenEd: Communicating)</td>
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<tr>
<td>Addtnl GenEd 21-127 or 21-122 or 21-257</td>
<td>73-374 Econometrics II</td>
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<tr>
<td>Addtnl GenEd 73-230 Intermediate Microeconomics</td>
<td>36-225 Introduction to Probability Theory</td>
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<tr>
<td>Addtnl GenEd 21-127 or 21-122 or 21-257</td>
<td>36-226 Introduction to Statistical Inference</td>
</tr>
<tr>
<td>Freshman Seminar <em><strong>-</strong></em>_ (9 units)</td>
<td>Computing @ Carnegie Mellon 99-101 or 99-102 (3 units)</td>
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B.S. in Economics and Statistics Sequenced Core Curriculum Rowchart
Class of 2020

Economics Core Sequence
73-300 Principles of Economics
73-230 Intermediate Microeconomics
73-240 Intermediate Macroeconomics

Math Core Sequence
21-120 Differential and Integral Calculus
21-256 Multivariate Analysis
21-122, 21-127, or 21-256
21-240 Matrix Algebra with Applications

Quantitative Analysis Core Sequence
36-201 Statistical Reasoning and Practice
36-302-9 Statistical Methods
36-225-9 Introduction to Probability Theory
36-226 Introduction to Statistical Inference
36-225 Modern Regression
36-461 Econometrics 2
36-402 Advanced Data Analysis

Computing
99-101 or 99-102 (3 units)

Only sequenced core courses are shown. Students should consult the undergraduate catalog and their academic advisor for a complete list of required courses.

Arrows indicate prerequisites
*: Fall Only Courses
^*: Spring Only Courses
#: See catalog for acceptable substitutes

Revised: 6/24/2016 (KC)