

UMBC UGC Program Changes & Other Request: B.S. in Financial Economics

Date Submitted: 9/2020

Proposed Effective Date: Spring 2021

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Specifics (see instructions):

The Economics Department wants to add ECON 310 – Data Analysis for Economics, to the list of courses that satisfy the statistics requirement for the FIEC B.S. Please see the following pages for the current and proposed FIEC B.S. requirements, respectively. They differ only in the statistics requirement provided in the top section.

Rationale (see instructions):

Currently, FIEC B.S. majors are required to take one of the following courses to fulfill a statistics requirement: STAT 350, STAT 351, STAT 355, STAT 453, or CMPE 320. The UGC approved ECON 310 on March 5, 2020. ECON 310 was designed to give FIEC (and Economics B.A. majors) an additional option for fulfilling this requirement, an option that surveys the theoretical and applied statistical tools that are directly relevant to empirical economics. As we delineated in our application to create ECON 310, we believe that ECON 310 is a valuable addition to the list for multiple reasons. Compared to the courses already on the list, the content of ECON 310 focuses more on the theories, tools, and applications used specifically in economics, ECON 310 will be taught by full-time Economics Department faculty rather than adjunct faculty, and the addition of ECON 310 provides students with greater flexibility in fulfilling the statistics requirement.

To be clear, the Economics Department wants to add ECON 310 to the list of courses that satisfy the statistics requirement for the FIEC B.S. All five courses already on the list will continue to be accepted for the requirement – this is an addition only, not a replacement. No courses will be discontinued, so no accommodations for current students are required. This does not change the number of credits required for the FIEC B.S.

FINANCIAL ECONOMICS (FIEC) B.S. REQUIREMENTS -- CURRENT

61-64 total credits required

A grade of "C" or better is required in each course to fulfill major requirements. Students must take a minimum of 21 credits from UMBC (not transferred) ECON courses.

I. General Core Requirements (40-43 credits)

Grade Course Number and Title

- _____ ECON 101 – Principles of Microeconomics
- _____ ECON 102 – Principles of Macroeconomics
- _____ ECON 121 – Principles of Accounting I
- _____ ECON 122 – Principles of Accounting II
- _____ One of the following:
 - _____ MATH 151 – Calculus and Analytic Geometry I
 - _____ MATH 155 – Applied Calculus
- _____ One of the following:
 - _____ STAT 350 – Statistics with Applications in the Biological Sciences
 - _____ STAT 351 – Applied Statistics for Business and Economics
 - _____ STAT 355 – Introduction to Probability and Statistics for Scientists and Engineers
 - _____ STAT 453 – Introduction to Mathematical Statistics
 - _____ CMPE 320 – Probability, Statistics, and Random Processes
- _____ ECON 311 – Intermediate Microeconomic Analysis
- _____ ECON 312 – Intermediate Macroeconomic Analysis
- _____ ECON 374 – Financial Management
- _____ One of the following:
 - _____ ECON 320 – Quantitative Methods for Management
 - _____ ECON 421 – Introduction to Econometrics
 - _____ ECON 423 – Time Series and Forecasting
- _____ One of the following:
 - _____ COMP 101 – Computational Thinking and Design
 - _____ CMSC 104 – Problem Solving and Computer Programming
 - _____ CMSC 201 – Computer Science I for Majors
 - _____ IS 101 – Introduction to Computer Based Systems
 - _____ IS 125 – Information Systems Logic and Structured Design
 - _____ IS 147 – Introduction to Computer Programming
 - _____ IS 295 – Intermediate Business Applications
- _____ One of the following:
 - _____ ECON 490 – Analytic Methods in Economics
 - _____ MATH 152 – Calculus and Analytic Geometry II
 - _____ MATH 215 – Applied Finite Mathematics
 - _____ MATH 221 – Introduction to Linear Algebra
- _____ One of the following:
 - _____ PHIL 248 – Introduction to Scientific Reasoning
 - _____ PHIL 253 – Business Ethics
 - _____ PHIL 346 – Deductive Logic
 - _____ PHIL 350 – Ethical Theory
 - _____ CMSC 203 – Discrete Structures
 - _____ MGMT 385 – Business Ethics and Society

II. Financial Economics Core Requirements (12 credits)

Four courses (12 credits) are required. One of the four must be either ECON 471 or ECON 475.

Grade Course Number and Title

Four of the following, at least one of which must be either ECON 471 or ECON 475:

_____	ECON 301 – Intermediate Accounting I
_____	ECON 410 – Topics in Financial Economics
_____	ECON 453 – Household Economics
_____	ECON 463 – Public Finance
_____	ECON 471 – Financial Markets and Institutions
_____	ECON 472 – Monetary Theory and Policy
_____	ECON 474 – Intermediate Financial Management
_____	ECON 475 – Financial Investment Analysis
_____	ECON 476 – Applied Portfolio Management
_____	ECON 477 – Analysis of Derivative Securities
_____	ECON 478 – Real Estate Economics and Finance
_____	ECON 479 – Venture Capital and Capital Market Imperfections
_____	ECON 482 – International Finance

III. Upper-level Economics Electives (9 credits)

Three courses (9 credits) numbered ECON 314 or higher are required. ECON 600 may not be counted as an upper-level elective for the major.

Grade Course Number and Title

_____	_____
_____	_____
_____	_____

Up to two of the following courses (6 credits) may be substituted for upper-level ECON electives:

- ECON 302 – Intermediate Accounting II
- ECAC 329 – Cost Accounting
- ECAC 330 – Principles of Taxation
- CMSC 202 – Computer Science II for Majors
- CMSC 331 – Principles of Programming Language
- CMSC 341 – Data Structures
- IS 247 – Computer Programming II
- IS 320 – Advanced Business Applications
- MATH 225 – Introduction to Differential Equations
- MATH 251 – Multivariable Calculus
- MATH 302 – Introduction to Mathematical Analysis II
- MATH 341 – Computational Methods
- MATH 381 – Linear Methods in Operations Research
- STAT 417 – Introduction to Time Series Data Analysis
- STAT 433 – Statistical Computing
- STAT 453 – Introduction to Mathematical Statistics
- STAT 454 – Applied Statistics
- POLI 353 – Governmental Budgeting and Financial Administration

FINANCIAL ECONOMICS (FIEC) B.S. REQUIREMENTS -- PROPOSED

61-64 total credits required

A grade of "C" or better is required in each course to fulfill major requirements. Students must take a minimum of 21 credits from UMBC (not transferred) ECON courses.

I. General Core Requirements (40-43 credits)

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- _____ ECON 122 – Principles of Accounting II
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 - _____ MATH 155 – Applied Calculus
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 - _____ ECON 310 – Data Analysis for Economics
 - _____ STAT 350 – Statistics with Applications in the Biological Sciences
 - _____ STAT 351 – Applied Statistics for Business and Economics
 - _____ STAT 355 – Introduction to Probability and Statistics for Scientists and Engineers
 - _____ STAT 453 – Introduction to Mathematical Statistics
 - _____ CMPE 320 – Probability, Statistics, and Random Processes
- _____ ECON 311 – Intermediate Microeconomic Analysis
- _____ ECON 312 – Intermediate Macroeconomic Analysis
- _____ ECON 374 – Financial Management
- _____ One of the following:
 - _____ ECON 320 – Quantitative Methods for Management
 - _____ ECON 421 – Introduction to Econometrics
 - _____ ECON 423 – Time Series and Forecasting
- _____ One of the following:
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MGMT 385 –Business Ethics and Society

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- _____ ECON 463 – Public Finance
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- _____ ECON 474 – Intermediate Financial Management
- _____ ECON 475 – Financial Investment Analysis
- _____ ECON 476 – Applied Portfolio Management
- _____ ECON 477 – Analysis of Derivative Securities
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- _____ ECON 479 – Venture Capital and Capital Market Imperfections
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- POLI 353 – Governmental Budgeting and Financial Administration