B.S. Economics, Finance Concentration Checklist

Prerequisites to the Major

MATH REQUIREMENT
Successful completion or demonstrated proficiency required. Completion of higher-level math course demonstrates proficiency in lower-level math course.
- MATH 111L or MATH 105L and MATH 106L
- MATH 122/112L or MATH 122L
- MATH 202 or MATH 212 or MATH 219 or MATH 222 or any higher-level math course with MATH 212 as a prerequisite

STATISTICS REQUIREMENT

<table>
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<tr>
<th>Year of Matriculation</th>
<th>Permitted Courses</th>
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| Pre-Fall 2019         | • ECON 104 Statistical Foundations for Econometrics and Data Science  
                        • STA 111 Probability and Statistical Inference  
                        • STA 130 Probability and Statistics in Engineering*  
                        • STA 250/MATH 342 Statistics*  
                        • STA 230/MATH 230 Probability*  |
|                       | *Pre-fall 2019 students using STA 130, STA 250/MAT 342, or STA 230/MAT 230 for their major requirements must request a permission number to enroll in ECON 204, Econometrics and Data Science (old number ECON 208). |
| Fall 2019             | • ECO 104 Statistical Foundations for Econometrics and Data Science  
                        • STA 111 Probability and Statistical Inference  
                        • STA 130 Probability and Statistics in Engineering*  
                        • STA 250/MATH 342 Statistics*  |
|                       | *Fall 2019 students using STA 130 or STA 250/MAT 342 for their major requirements must request a permission number to enroll in ECON 204, Econometrics and Data Science (old number ECON 208). |
| Fall 2020             | • ECON 104 Statistical Foundations for Econometrics and Data Science  
                        • STAT 432/MATH 343 Theory and Methods of Statistical Learning and Inference |

Core Economics Courses
ECON 205D may be taken as a co-requisite with ECON 210D.
- ECON 101D Economic Principles (Those with AP Macro & Micro scores of 4 or higher may receive credit for ECON 101.)
- ECON 104 Statistical Foundations for Econometrics and Data Science
- ECON 201D Intermediate Microeconomics I
- ECON 205D Intermediate Microeconomics II (Prerequisites are enforced for ECON 205D.)
- ECON 204D (old number ECON 208D) Econometrics and Data Science (Must be taken before senior year.)
- ECON 210D Intermediate Macroeconomics

Core Finance Course
- ECON 372 Asset Pricing and Risk Management
  (This course may **not** be used as an elective for the finance concentration. Students pursuing the B.S. degree without this concentration may use this course as one of their five electives.)

Upper-Level Economics Electives
Five economics courses at the 300-level or above, with at least one course at the 300-level and one course at the 400-level. Courses 500-549 can only be counted toward the major with approval from the director of undergraduate studies.
- ECON 3 ___
- ECON 4 ___

Of the five electives for the B.S. degree, **three** must be from the following:
- ECON 305/3055 History of International Monetary & Financial Crisis
- ECON 307A Understanding Financial Bubbles and Crises
- ECON 333 Private Equity
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- ECON 353/353A Financial Institutions
- ECON 368/PSY 368 Behavioral Finance
- ECON 370/370A Global Capital Markets
- ECON 373 Corporate Finance
- ECON 376 Commodities Markets
- ECON 377/377A The Economics of Fin Derivatives & Fin Engineering
- ECON 378 Financial Risk Management
- ECON 379/ICS 379 Emerging Markets
- ECON 381S Inside Hedge Funds
- ECON 382/390 Asset Management
- ECON 383/383A Foreign Exchange Markets
- ECON 384 Investing in Emerging Markets
- ECON 390 Special Topics courses when Finance related, upon approval
- ECON 391 Private Equity Buyouts
- ECON 413 Forecasting Financial Markets
- ECON 455 International Finance
- ECON 451/490 Housing and the Economy
- ECON 461/490S How Markets Work Theory and Evidence
- ECON 471/471A Financial Markets and Investments
- ECON 472S/490S Goodner Equity Research Project
- ECON 476 Empirical Asset Pricing
- ECON 474S Eichel Securitization Project
- ECON 477/Econ 514 Fixed Income Markets and Quantitative Methods
- ECON 490 Special Topics courses when Finance related, upon approval
- ECON 512 Equity Valuation and Financial Analysis
- ECON 581 Investment Strategies
- ECON 590 Special Topics courses when Finance related, upon approval
- ECON 673/MATH 581 Mathematical Finance
- ECON 674/MATH 582 Financial Derivatives
- BME 385 Introduction to Business in Technology-Based Companies
- ENERGY 620 Energy Finance
- FINTECH 533 Financial Engineering (Previous number/name EGR 590 Financial Informatics)
- FINTECH 534 Quantitative Financial Analysis for Technology-Driven Investment
- FINTECH 536 Robo-Advising (Previous number EGRMGT 590)
- FINTECH 550 Emerging Trends for FinTech
- FINTECH 552/590 Fintech Business Models
- FINTECH 564 Blockchain
- FINTECH 520/590 Financial Institutions: Products & Services
- MATH 381K Intermediate Mathematical Finance (Duke Kunshan University only)

General Restrictions

1Certain independent studies and honors seminars may be used to satisfy the finance electives requirement, but they need advance approval from the director of undergraduate studies.
2Students are limited to counting a maximum of TWO Fintech courses toward the finance concentration requirements.