

Quantitative Economic Methods Certificate

What is the QEM?

Students who pursue an undergraduate degree in Economics and are interested in graduate degrees in Economics or highly quantitative careers should consider the Quantitative Economics Methods certificate (QEM). Students who complete this certificate will be far more likely to gain admission to selective Ph.D. programs and can hone their quantitative and analytical skills.

What's in it for me?

- Ability to integrate economic principles and apply to mathematical concepts
- Demonstrate area of focus to prospective employers
- Acquire sought after data analysis and forecasting skills

QEM Course Outline

QEM Required Courses (Choose 3)

- ECMT 475: Economic Forecasting
- ECON 460: Introduction to Mathematical Economics
- ECON 470: Data Science to Economic and Social Issues
- ECON 471: Data Science for Future Decision Maker

QEM Electives (Choose 3)

- MATH 221: Several Variable Calculus
 - Or MATH 251: Engineering Mathematics III
- MATH 300: Foundations of Mathematics
- MATH 304: Linear Algebra
 - Or MATH 309: Linear Algebra for Differential Equations
- MATH 311: Topics in Applied Mathematics
- MATH 323: Linear Algebra
- MATH 409: Analysis on the Real Line
- STAT 315: Computational Data Science
- STAT 335/CSCE 320: Principles of Data Science
- STAT 404: Statistical Computing
- STAT 414: Mathematical Statistics I
- STAT 415: Mathematical Statistics II
- STAT 421: Machine Learning