

The coursework for the SCMA Ph.D. program includes foundational courses in economics and statistics, along with seminars on key topics in SCMA, and additional electives and method courses selected based on each student's research interests.

Required Courses

Foundational Courses

- Analytical Methods in Economics and Business
- Advanced Microeconomic Theory I and II
- Mathematical Statistics I
- Econometrics I

SCMA Seminars (Half-Semester Courses)

- Mathematical Programming
- Logistics and Transportation Modeling
- Stochastic Models for Operations and Supply Chain Management
- Simulation Modeling and Analysis
- Decision Theory
- Service Systems Design
- Revenue Management
- Inventory and Procurement

Methods Electives

All students must complete at least three methods electives from outside of the Department of Supply Chain Management and Analytics. These courses are subject to the approval of the SCMA Ph.D. Committee based on a student's research interests. Examples include:

- Ph.D. courses offered by the Department of Economics, including topics such as Advanced Econometrics
- Ph.D. courses offered by the Departments of Mathematics and Statistics, including topics such as operations research, probability theory, stochastics processes, statistical learning and computational statistics
- Ph.D. courses offered by the Departments of Sociology and Psychology, including topics such as social research methods and qualitative methods
- Ph.D. courses offered by the Department of Computer Science and Engineering, including topics such as data mining and machine learning

Other Electives

All students must complete at least two additional electives from outside of the Department of Supply Chain Management and Analytics. These courses are subject to the approval of the SCMA Ph.D. Committee based on student's research interests. Examples include:

- Ph.D. seminars offered by other Ph.D. programs in the College of Business, such as Management, Finance, Accounting and Marketing
- Ph.D. courses offered by the Department of Economics, including topics such as macroeconomics
- Ph.D. courses offered by the Departments of Sociology and Psychology, including topics such as social network analysis