

**Graduate Program in Operations Research & Industrial Engineering  
The University of Texas at Austin**

**Concentration in Decision Analysis  
Approved Electives**

The courses listed below are pre-approved electives for the Concentration in Decision Analysis. Electives not listed will be considered by Prof. Bickel. Some of the courses listed below as electives are required to obtain the PhD Concentration.

The timing listed (i.e., the semester) is not a guarantee. Some courses are not offered every year. The student must check to see when courses are offered. ORIE does not maintain a calendar for courses offered outside of ORIE.

Some of the courses listed below many require instructor approval.

Operations Research & Industrial Engineering

Nonlinear Programming (ORI 391Q.1, Spring) – Required for PhD  
Applied Stochastic Processes (ORI 390R.5, Spring) – Required for PhD  
Markov Decision Processes (ORI 390R.16, Spring) – Required for PhD  
Stochastic Optimization (ORI 391Q.10)  
System Simulation (ORI 390R.9)  
Computational Optimization (ORI 397)  
Time Series Modelling, Analysis & Control (ORI 390R.3)

Business

Business Analytics and Decision Modeling (STA 287, Fall)  
Decision-Support Modeling (MIS 383N, Spring)  
Financial Management (BA 285T, 3 hours, Fall)  
Introduction to Risk Management (RM 375E, Fall)  
Managing International Risk (RM 395.7, Fall)  
Statistics (BA 386T, Fall)  
Valuation (FIN 286, Fall)  
Organizational Decision Making (MAN 390.6)  
Strategic Processes and Decision Making (MAN 393)  
Financial Accounting (BA 284T, Fall)

Economics

Microeconomics I (ECO 387L.1, Fall) – Required for PhD  
Microeconomics II (ECO 387L.3, Spring) – Required for PhD  
Macroeconomics I (ECO 387L.2, Fall)  
Macroeconomics II (ECO 387L.4, Spring)  
Mathematical Economics (ECO 387L.24, Fall)  
Econometrics I (ECO 392M.2)  
Introduction to Game Theory (ECO 387L.27, Fall)

DA Concentration  
Prof. J. Eric Bickel

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Electrical Engineering, Mechanical Engineering, Aerospace Engineering  
Linear Systems Analysis (ASE 381.P1, Fall)  
Introduction to System Theory (EE 380K)

Statistics

Statistical Modeling I (SDS 383C, Fall)  
Statistical Modeling II (SDS 383D, Spring) – Required for PhD  
Bayesian Statistical Methods (SSC 384.7, Spring)  
Time Series and Dynamic Modelling (SSC 389)