## Suggested Electives for the Graduate Portfolio in Applied Statistical Modeling

Courses with an asterisk (\*) are crosslisted. Courses offered in Fall 2022 are highlighted below.

- EDP 380C.4: Correlation and Regression Methods
- M 384E: Design and Analysis of Experiments\*
- M 384G: Regression Analysis
- ORI 390R: Regression and Analysis of Variance
- PSY 384K: Advanced Statistics: Experimental Design
- PSY 394T: Regression Analysis
- SDS 384.6: Design and Analysis of Experiments\*
- SDS 384.4: Regression Analysis
- SDS 385: Applied Regression
- STA 380: Mathematical Statistics for Applications
- STA 380: Statistical Computer Packages
- BIO 384K: Bayesian Modeling
- BIO 384K: Muddyboots Statistics
- CE 387T: Decision, Risk, and Reliability
- CE 392R: Discrete Choice Theory Modeling
- CE 397: Acquisition and Analysis of Transport Data
- CH 382L: Advanced Physical Chemistry: Statistical Mechanics
- CS 380N: Data Mining: A Statistical Learning Perspective
- EDP 380C.12: Survey of Multivariate Methods\*
- EDP 380C.18: Applied Bayesian Analysis\*
- EDP 380C.22: Analysis of Categorical Data
- EDP 380D.4: Psychometric Theory and Methods\*
- EDP 380D.8: Item Response Theory
- EDP 380D.12: Computerized-Based Testing
- EDP 381D: Advanced Statistical Modeling
- EDP 381C.12: Meta-Analysis
- EDP 381C.14: Causal Inference
- EDP 382K: Factor Analysis
- ECE 380L: Introduction to Pattern Recognition and Computer Vision
- ECE 380L: Data Mining
- ECE 380N: Stochastic Control Theory\*
- ECE 381J: Probability and Stochastic Processes I
- CS 391D: Data Mining: Mathematical Perspective
- CS 395T: Computational Statistics with Application to Bioinformatics
- EDP 380C.14: Structural Equation Modeling\*
- EDP 380C.16: Hierarchical Linear Modeling
- ECE 381M: Probability and Stochastic Processes II
- GEO 383D: Numerical Methods I: Computational Methods Geological Sciences
- ME 388H: Nuclear Safety and Security\*
- NEU 385L: Bootstrap Statistics
- ORI 390R: Time Series Analysis\*
- ORI 390R: Reliability Theory and Modeling

- ORI 390R: Applied Stochastic Processes\*
- ORI 390R: Queueing Theory
- ORI 390R: Systems Simulation
- ORI 390R.16: Markov Decision Processes
- ORI 391Q: Stochastic Optimization
- ORI 397: Decision Analysis
- ORI 397: Nuclear Safety and Security
- PA 388K: Evaluation of Social Policy and Programs
- PSY 394T: Advanced Applied Statistics I
- PSY 394T: Advanced Applied Statistics II
- PSY 394T: Structural Equation Modeling
- PSY 394U: Bootstrap Statistics
- SOC 384M: Evaluation of Social Policy in Latin America
- SOC 385K: Social Statistics: Discrete Multivariate Models
- SOC 386L: Social Statistics: Dynamic Models and Longitudinal Data Analysis\*
- SOC 395J: Structural Equation Models of Health and the Life Course
- SDS 383C: Statistical Modeling I
- SDS 385: Analysis of Categorical Data
- SDS 385: Hierarchical Linear Models
- SDS 385: Survival Analysis/Duration Modeling
- SDS 385: Social Statistics: Discrete Multivariate Models
- SDS 385: Social Statistics: Dynamic Models and Longitudinal Data Analysis
- SDS 385: Modern Statistical Methods
- SDS 385: Longitudinal Analysis\*
- SDS 386C: Probabilistic Graphical Models
- SDS 386D: Monte Carlo Methods in Statistics\*
- SDS 387: Linear Models
- SDS 389: Time Series and Dynamic Models
- SDS 395: Applied Microeconometrics
- STA 380: Applied Multivariate Methods
- STA 380: Bayesian Econometrics
- SW 388R-5: Structural Equation Modeling
- SW 388R-12: Hierarchical Linear Modeling\*