# **Statistics and Analytics Master of Science**

### **Quantitative Social Science Concentration Course Requirements**

#### Required Core Areas (12 hours)

### Statistical Methods Core (One of the following)

- ♦ PLSC 59103 Research Methods in Political Science
- ♦ PSYC 51303 Inferential Statistics for Psychology (CC)
- ♦ SOCI 50103 Advanced Social Research

#### Regression Analysis Core (One of the following)

- ♦ PLSC 59403 Advanced Research Methods in Political Science (CC)
- ♦ SOCI 53103 Applied Data Analysis
- ♦ PSYC 51403 Advanced Descriptive Statistics for Psychology (CC)

## Multivariate Analysis Core (One of the following)

- ♦ PSYC 51403 Advanced Descriptive Statistics for Psychology (CC)
- ♦ PLSC 59403 Advanced Research Methods in Political Science (CC)
- ♦ STAT 53503 Methods of Multivariate Analysis

#### **Experimental Design Core** (One of the following)

- ♦ PSYC 51303 Inferential Statistics for Psychology (CC)
- ♦ ESRM 64103 Experimental Design in Education

Note: (CC) Indicates courses listed across different core course areas. Such courses satisfy only one core area. For more detail, students are recommended to consult with their concentration advisor.

## **Required Concentration Courses (12 hours)**

- ♦ ISYS 57203 Advanced Multivariate Analysis
- ♦ ECON 66203 Econometrics II
- ♦ ECON 57503 Forecasting
- ♦ ECON 66303 Econometrics III

## **Electives** (6 hours)

Electives are chosen by the student in consultation with the Quantitative Social Science advisor. Electives may be any graduate course approved by the Advisor. Students who plan to continue their education beyond an MS degree should consider completing an MS Thesis. Suggested electives include:

♦ STAN 6000V Master's Thesis

♦ ECON 44303 Experimental Economics

♦ STAT 54103 Spatial Statistics

♦ GEOS 46503 GIS Analysis and Modeling

♦ PADM 59103 Policy Analysis

♦ ISYS 58303 Data Management Systems

♦ CSCE 50603 Machine Learning

- ♦ MGMT 62103 Seminar in Research Meth.
- GEOS 55503 Spatial Analysis Using Arc-GIS
- ♦ INEG 66103 Computational Research Appl.
- ♦ GEOS 54403 Geospatial Applications and Information Science
- ♦ SOCI 40103 Special Top. in Sociology Social Network Analysis
- ♦ ISYS 58403 Business Intelligence and Knowledge Management