SURVEY AND DATA SCIENCE, MASTER OF SCIENCE (M.S.)

Non-thesis option only: 46 credits required

SURV offers a non-thesis program, however students in all three tracks the statistical science, social and psychological science and data science concentrations must fulfill a research experience requirement, yielding a scholarly paper. This paper must be the result of either original research conducted by the student, critical analysis, or evaluation of existing surveys.

Students choose from one of the following concentrations:

Statistical Science

Course	Title	Credits
Required courses:		
SURV615	Statistical Modeling and Machine Learning I	3
SURV616	Statistical Modeling and Machine Learning II	3
SURV720	Total Survey Error and Data Quality I	2
SURV721	Total Survey Error and Data Quality II	2
SURV772	Survey Design Seminar	3
SURV617	Applications of Statistical Modeling	3
Fundamentals of Data Collection I		3
Fundamentals of Data Collection II		3
Fundamentals of Computing and Data Display		3
Specialization requirements:		
SURV410	Introduction to Probability Theory	3
SURV420	Theory and Methods of Statistics	3
SURV440	Sampling Theory	3
SURV742	Inference from Complex Surveys	3
Electives		9
Total Credits		**46**

Social and Psychological Science

Course	Title	Credits
Required courses:		
SURV615	Statistical Modeling and Machine Learning I	3
SURV616	Statistical Modeling and Machine Learning II	3
SURV720	Total Survey Error and Data Quality I	2
SURV721	Total Survey Error and Data Quality II	2
SURV772	Survey Design Seminar	3
SURV617	Applications of Statistical Modeling	3
Fundamentals of Data Collection I		3
Fundamentals of Data Collection II		3
Fundamentals of Computing and Data Display		3
Specialization requirements:		
SURV625	Applied Sampling	3
SURV630	Questionnaire Design and Evaluation	3
SURV632	Cognition, Communication and Survey Measurement	3
SURV701	Analysis of Complex Sample Data	3
Fundamentals of Inference		3
Electives		6
Total Credits		**46**

Data Science

Course	Title	Credits
Required courses:		
SURV615	Statistical Modeling and Machine Learning I	3
SURV616	Statistical Modeling and Machine Learning II	3
SURV720	Total Survey Error and Data Quality I	2
SURV721	Total Survey Error and Data Quality II	2
SURV772	Survey Design Seminar	3
SURV617	Applications of Statistical Modeling	3
Fundamentals of Data Collection I		3
Fundamentals of Data Collection II		3
Fundamentals of Computing and Data Display		3
Specialization requirements:		
SURV625	Applied Sampling	3
SURV701	Analysis of Complex Sample Data	3
Fundamentals of Inference		3
Electives		12
Total Credits		**46**