

MASTER OF SCIENCE IN SURVEY & DATA SCIENCE



3 AREAS OF SPECIALIZATION



Social Science

Designed for students who wish to specialize in areas such as questionnaire design, design of interviewing systems, computer assistance in data collection, effects of mode of data collection, cognitive psychological insights into survey measurement, and effforts to reduce various nonsampling errors in data collection.



Survey Statistics

Designed for students who wish to specialize in areas such as sample design, estimation in complex samples, variance estimation, statistical measurement error models, and statistical adjustment for missing data.



Science

Designed for students who wish to specialize in areas such as computational aspects of survey methodology, data visualization, management and analysis of large and complex data sets, human-computer interaction in survey research, and machine learning algorithms.



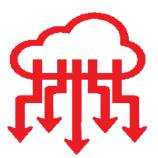
AREAS OF SPECIALIZATION



Social Science



Survey Statistics



Data Science YEAR 1 (FALL)

Fundamentals of Data Collection I

Statistical Methods I

Cognition, Communication and Survey Measurement

Elective/Cognate

(12 Credit Hours)

YEAR 1 (SPRING)

Fundamentals of Data Collection II

Statistical Methods II

Applied Sampling

Questionnaire Design or advisor approved Elective/Cognate

(12 Credit Hours)

Fundamentals of Data Collection I

Statistical Methods I

Introduction to Probability
Theory

Elective/Cognate

(12 Credit Hours)

Fundamentals of Data Collection II

Statistical Methods II

Sampling Theory

Theory and Methods of

Statistics

(12 Credit Hours)

Fundamentals of Data Collection I

Statistical Methods I

Elective/Cognate

Elective/Cognate

(12 Credit Hours)

Fundamentals of Data Collection II

Statistical Methods II

Applied Sampling

Elective/Cognate

(12 Credit Hours)

JPSM M.S. DEGREE REQUIREMENTS

46 Total Credit Hours



YEAR 1 (SUMMER)

YEAR 2 (FALL)

YEAR 2 (SPRING)

Internship Completed

Internship Paper

Internship Focus Group

Total Survey Error and Data Quality I

Applications of Statistical Modeling

Fundamentals of Inference

Fundamentals of Computing and Data Display

(11 Credit Hours)

Total Survey Error and Data Quality II (Masters Capstone Project)

Design Seminar

Analysis of Complex Sample Survey Data

Elective/Cognate

(11 Credit Hours)

Internship Completed

Internship Paper

Internship Focus Group

Total Survey Error and Data Quality I

Applications of Statistical Modeling

Fundamentals of Inference OR advisor approved Elective/Cognate

Fundamentals of Computing and Data Display

(11 Credit Hours)

Total Survey Error and Data Quality II (Masters Capstone Project)

Design Seminar

Inference from Complex Samples OR advisor approved Elective/Cognate

Elective/Cognate

(11 Credit Hours)

Internship Completed

Internship Paper

Internship Focus Group Total Survey Error and Data Quality I

Applications of Statistical Modeling

Fundamentals of Inference

Fundamentals of Computing and Data Display

(11 Credit Hours)

Total Survey Error and Data Quality II (Masters Capstone Project)

Design Seminar

Analysis of Complex Sample Survey Data

Elective/Cognate

(11 Credit Hours)

ELECTIVE EXAMPLES:

- ATTITUDES IN PUBLIC OPINION
- HUMAN COMPUTER INTERACTION
- BAYESIAN ANALYSIS
- MARKET RESEARCH DESIGN AND ANALYSIS
- DATA MINING AND STATISTICAL LEARNING
- INFORMATION / DATA VISUALIZATION
- BIG DATA MANAGEMENT: TECHNIQUES & TOOLS
- CROSS-CULTURAL & MULTI-POPULATION DESIGN
- ECONOMIC MEASUREMENT



1218 LEFRAK HALL 7751 PREINKERT DRIVE COLLEGE PARK, MD 20742

301.314.7911 jpsm-contact@umd.edu

JPSM.UMD.EDU



The Joint Program in Survey Methodology is one of the College of Behavioral and Social Sciences' 10 diverse, interdisciplinary departments and programs, all committed to investigating and improving the human condition.