**UNDERGRADUATE MAJOR IN
SOCIAL DATA SCIENCE**

**SOCIAL DATA SCIENCE - SOCIOLOGY**

A MINIMUM GRADE OF C- MUST BE EARNED IN ALL BENCHMARKS, SDSC CORE COURSES, AND SDSC MAJOR ELECTIVES.

### MATH REQUIREMENT

*Must be completed within the first 30 credits after declaring the major*

**STAT100**

*Elementary Statistics and Probability*

Pre-requisite: MATH110, MATH112, MATH113, or MATH115; or permission of CMNS-Mathematics department; or must have math eligibility of STAT100 or higher and math eligibility is based on the Math Placement Exam or the successful completion of Math 003 with appropriate eligibility

**MATH115 (OR HIGHER)**

*Precalculus*

Pre-requisite: Must have math eligibility of MATH115 or higher; and math eligibility is based on the Math Placement Exam or the successful completion of MATH003 with appropriate eligibility. Or MATH113.

### BENCHMARK I

*Choose only 1 between INST126 and GEOG276*

**INST126**

*Intro to Programming*

Pre-requisite: Math placement of STAT100 or higher

Equivalent courses approved by the iSchool may fulfill this requirement; please see an advisor

**GEOG276**

*Principles of Python Programming and Geocomputing*

### BENCHMARK II

*Must be completed within the first 60 credits after declaring the major*

**SOCY100**

*Introduction to Sociology*

**SOCY201**

*Introduction to Statistics for Sociology*

Pre-requisite: SOCY100; and (MATH107 or MATH111)

### CORE COURSES

*Choose only 1 between INST326, BSOS326, or GEOG376*

**BSOS233**

*Data Science for the Social Sciences*

Pre-requisite: Minimum grade of C- in MATH115 or higher

**INST327**

*Database Design and Modeling*

Pre-requisite: Minimum grade of C- in INST126 or GEOG276

**INST366**

*Privacy, Security, and Ethics for Big Data*

Pre-requisite: Minimum grade of C- in INST126 or GEOG276; and minimum grade of C- in STAT100; and minimum grade of C- in one of the following (AASP101, ANTH210, ANTH260, ECON200, ECON201, GEOG202, GVPT170, PSYC100, or SOCY100)

**BSOS326**

*Python Programming for the Social Sciences*

Pre-requisite: Minimum grade of C- in MATH115 or higher

**GEOG376**

*Introduction to Computer Programming*

Pre-requisite: GEOG276 and GEOG373; Must have completed or be concurrently enrolled in MATH120, MATH130, or MATH140; or must have completed MATH220
COURSE SEQUENCE REQUIREMENTS

TRACK I COURSES

INST414
Advanced Data Science
Pre-requisite: Minimum grade of C- in MATH115 (or higher) and STAT100; and a minimum grade of C- from INST126 or GEOG276; and a minimum grade of C- from one of the following (INST201, INST301, or BSOS233); and a minimum grade of C- from one of the following (AASP101, ANTH210, ANTH260, ECON200, ECON201, GEOG202, GVPT170, PSYC100, or SOCY100); and a minimum grade of C- from one of the following (ECON230, GEOG306, GVPT201, INST314, PSYC200, or SOCY201)

INST447
Data Sources and Manipulation
Pre-requisite: Minimum grade of C- in STAT100 and INST327; and a minimum grade of C- from one of the following (INST201, INST301, BSOS233); and a minimum grade of C- from one of the following (AASP101, ANTH210, ANTH260, ECON200, ECON201, GEOG202, GVPT170, PSYC100, or SOCY100); and a minimum grade of C- from one of the following (ECON230, GEOG306, GVPT201, INST314, PSYC200, or SOCY201); and a minimum grade of C- from one of the following (BSOS331, GEOG273, or INST326)

INST462
Intro to Digital Visualization
Pre-requisite: Minimum grade of C- in INST126 or GEOG276; and a minimum grade of C- from one of the following (INST201, INST301, or BSOS233); and a minimum grade of C- from one of the following (AASP101, ANTH210, ANTH260, ECON200, ECON201, GEOG202, GVPT170, PSYC100, or SOCY100); and a minimum grade of C- from one of the following (ECON230, GEOG306, GVPT201, INST314, PSYC100, or SOCY201)

SURV400
Fundamentals of Survey and Data Science
Pre-requisite: Minimum grade of C- in STAT100; or permission of BSOS-Joint Program in Survey Methodology department

SURV430
Fundamentals of Questionnaire
Requirement: Permission of BSOS-Joint Program in Survey Methodology department

INST492
Capstone
Pre-requisite: Minimum grades of C- or higher in all of the Core Courses

CORE COURSES CONTINUED

TRACK II COURSES

SOCY202
Introduction to Research Methods in Sociology

*Choose 9 credits in Track II*