



UNDERGRADUATE MAJOR IN SOCIAL DATA SCIENCE

SOCIAL DATA SCIENCE - ECONOMICS

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

MATH120 (OR HIGHER)

Elementary Calculus I

Pre-requisite: 1 course with a minimum grade of C- from (MATH112, MATH113, MATH115). Or must have math eligibility of MATH120 or higher; and math eligibility is based on the Math Placement Test

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

ECON200

Principles of Microeconomics

Pre-requisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher

ECON201

Principles of Macroeconomics

Pre-requisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher

ECON230

Applied Economic Statistics

Pre-requisite: MATH107 or MATH110; or must have math eligibility of MATH113 or higher; or 1 course with a minimum grade of C- from (MATH107, MATH110); and a minimum grade of C- in ECON200 and ECON201

CORE COURSES

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)

Choose only 1 between INST326, BSOS326, or GEOG376

INST326

Object-Oriented Programming for Information Science

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

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



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CORE COURSES CONTINUED

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 STAT100; minimum grade of a C- from one of the following (INST201, INST301, or BSOS233); minimum grade of C- in INST126 or GEOG276; 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

TRACK I COURSES

Choose 3 credits in Track I

ECON305

Intermediate Macroeconomic Theory and Policy

Pre-requisite: Minimum grade of C- in ECON201 and ECON200. And 1 course from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-

ECON306

Intermediate Microeconomic Theory and Policy

Pre-requisite: 1 course with a minimum grade of C- from (ECON200, AREC250); and minimum grade of C- in ECON201. And 1 course with a minimum grade of C- from (MATH120, MATH130, MATH136, MATH140); or must have completed MATH220 with a minimum grade of C-

TRACK II COURSES

Choose 6 credits in Track II