# SOCIAL DATA SCIENCE - GOVERNMENT & POLITICS & INTERNATIONAL RELATIONS

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\*

#### **GVPT170**

American Government

#### **GVPT200**

International Political Relations

#### **GVPT201**

Scope and Methods for Political Science Research

# **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

# **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

## **GVPT320**

Advanced Empirical Research

Pre-requisite: GVPT201

# TRACK II COURSES

\*Choose 6 credits in Track II\*