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

*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)

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
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 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

CORE COURSES CONTINUED

**GVPT320**  
*Advanced Empirical Research*  
Pre-requisite: GVPT201

TRACK II COURSES

*Choose 6 credits in Track II*