BENCHMARK II

*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*

CORE COURSES

BSOS23
*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
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 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-requisites: Minimum grades of C- or higher in all of the Core Courses

CORE COURSES CONTINUED

TRACK II COURSES

HLTH200
Introduction to Research in Community Health

*Choose 9 credits in Track II*