BENCHMARK II

*Must be completed within the first 60 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

**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

**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 INST126; and minimum grade of C- in one of the following (AASP101, ANTH210, ANTH260, ECON200, ECON201, GEOG202, GVPT170, PSYC100, or SOCY100)

**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**

*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 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, PSYC200, 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

*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*

[Continue with the rest of the courses listed in the document]