Social Science Analytics Certificate

Requirements:

A. **Intro to Data & the Social Sciences, 3 s.h.**
   Complete the following:
   ___POLI:1050 Big Ideas: Intro to Info & Society

B. **Science Res. Design & Data Analysis 3 s.h.**
   Choose one of the following:
   ___POLI:2000 Designing Political Research
   ___SOC:2170 Research Methods

C. **Core Statistics, 6-8 s.h.**
   Two of the following: not both STAT:1020 and SOC:2160
   ___POLI:3000 Analyzing Political Data
   ___SOC:2160 Applied Statistics for Social Scientists.
   ___STAT:1020 Elementary Statistics and Inference
   ___STAT:3120 Probability and Statistics
   ___STAT:3200 Applied Linear Regression
   ___STAT:4143 Introduction to Statistical Methods
   ___STAT:6513 Intermediate Statistical Methods

D. **Applied Research Experience, 3 s.h.**
   At least 3 s.h. from the following:
   ___GEOG:4030 Senior Project Seminar.
   ___GHS:3010 Identifying & Devel. a Globl.Health Proj.
   ___POLI:3001 Hawkeye Poll
   ___POLI:3127 Legislative Policy Seminar
   ___POLI:4600 Honors Research Project
   ___POLI:4701 Undergraduate Research Tutorial
   ___POLI:4702 Senior Research Project/Paper
   ___SOC:4998 Honors Research
   ___STAT:6220 Statistical Consulting

E. **Building Skills and Data Science, 3 s.h.**
   One of the following:
   ___CS:1210 Computer Science I: Fundamentals.
   ___CS:2110 Programming for Informatics
   ___CS:2520 Human-Computer Interaction
   ___CS:3980 Topics in Computer Science I
   ___ECON:4800 Econometrics Analysis
   ___GEOG:1050 Foundations of GIS
   ___GEOG:1065 Intro to Spatial Anal.: Patterns & Proc.
   ___GEOG:3540 Intro to Geographic Visualization
   ___GEOG:4580 Introduction to Geographic Databases
   ___MSCI:3200 Database Management (CS:2110 or MSCI:3005)
   ___MSCI:3250 Data Wrangling (MSCI:3200)
   ___MSCI:3500 Data Mining (STAT:2020 with a minimum grade of “B” or ECON:2800 or STAT:4101 or ECON:4800)
   ___POLI:3050 Problems in Methods,
   ___SOC:3880 The Sociology of Networks
   ___SOC:4000 Data Science for Social Good
   ___STAT:4520 Bayesian Statistics
   ___STAT:4540 Statistical Learning
   ___STAT:4580 Data Visualization & Data Technologies
   ___STAT:6510 Applied Generalized Regression
   ___STAT:6560 Applied Time Series Analysis.

**Total Hours Required for the Social Science Analytics Certificate:**

18 s.h.