Bachelor of Science in Data Sciences for Political Science

Basic Statistics
Data presentation, display, and summary, averages, dispersion, simple linear regression, and correlation, probability, sampling distributions, confidence intervals, and tests of significance. Use of statistical software both to analyze real data and to demonstrate and explore concepts.

Intermediate Statistics
Methods include techniques for estimation and inference with qualitative and quantitative data focusing on simple linear and multiple regression, correlation, logistic regression, and analysis of variance.

Introduction to Computer Science I
Problem solving and algorithm development. Structured programming, basic data types, and canonical structures; arrays and subprograms; recursion. Social implications of computing. Elementary applications from business and science.

Introduction to Data Mining
This course presents the main machine learning algorithms and evaluation methods developed to date in an intuitive way suitable for a non-specialized audience. It also introduces current research developments in the field and initiates students to the solving of applied programs in an innovative way, using existing machine learning tools.

Politics in the United States
Study of major philosophical concepts that shaped government in the United States combined with an analysis of contemporary political institutions and behavior, focusing on the American governmental system.

Political Power & American Public Policy
Offers an introduction to American public policy and written communication in political science. Students explore political power and public policy, and refine their written communication and information literacy skills. Through examination of the American public policymaking system and prominent issues in American public policy, as well as instruction on problem definition, issue analysis, and policy proposal, students come to understand how policy is made and how to participate effectively in the process.

Introduction to Political Research
An introduction to political science research, including the logic of analysis, research design, and the basics of quantitative analysis. Application of gathering data and of analytic and statistical techniques to contemporary political problems.

SPA's **BS in Data Sciences for Political Science** program focuses on data sciences and public affairs as an aspect of a broad liberal arts education. With the explosive growth of large scale data sources in today's technology-driven world, data science can provide unique insights for politics, business, and social good. Data sciences for political science prepares the student to use algorithms, statistics, and formal theory to extract knowledge from data and help predict, explain, or analyze political phenomena and behavior.

Graduates of the Data Sciences for Political Science Program usually hold positions such as Data Scientist, Political Analyst, Counter-Intelligence Officer, Business Intelligence Officer, and Polling Analyst.

SCHOOL of PUBLIC AFFAIRS
AMERICAN UNIVERSITY • WASHINGTON, DC

Graduates of the data sciences for political science undergraduate program could hold positions as a social scientist or data scientist at political consulting firms, polling firms, and on Capitol Hill, just to name a few.

Study Abroad Opportunities

- Students may study abroad between their second semester of sophomore year through their senior year.

- It is strongly recommended that students complete the majority of their university requirements before studying abroad

- Some popular study abroad destinations are: » Australia » Belgium » Canada » China » Denmark » England » Ireland » Israel » Netherlands » New Zealand » Scotland

- The number of study abroad credits accepted into the major will vary. Students should work with their academic advisor to discuss individual programs.

Internship Opportunities

- Students can earn up to 12 credits from internships toward their degree.

- Students can apply a maximum of 6 credits to their major requirements.

- Students must complete at least 30 credit hours at AU before registering an internship for credit.

- Sample internships include: » Brookings Institution » White House » Human Rights Campaign» Washington Monument » Center for Education Reform

Scholarly Research Opportunities

- In Introduction to Political Research, students learn research design and methods of quantitative analysis used toward the empirical study of contemporary political problems.

- Students will have opportunities to engage in scholarly research in advanced courses, to work with faculty members on research projects, and to present their original research at campus symposia or national conferences.

- Publication opportunities for original student research papers abound, with multiple peer-reviewed journals published at American University.

WE KNOW SUCCESS

Graduates from Public Affairs have gone on to employers and graduate/ law schools like:

- Campaign Legal Center
- Goldman Sachs
- Public Defenders
- NJI Media
- The Washington Post
- U.S. Department of Defense
- American Gaming Association
- NBCUniversal, Inc.
- National Wildlife Federation
- U.S. Department of Justice
- National Republican Congressional Committee
- D.C. Public Schools
- American University Washington College of Law
- Columbia University
- Fordham University
- George Washington University
- Georgetown University
- Harvard University
- Johns Hopkins University
- London School of Economics
- Pennsylvania State University
- University of Chicago
- University of Virginia

QUESTIONS?

Contact

School of Public Affairs Student Services

202-885-6200

Email: aupublicaffairs@american.edu