Bachelor of Science in Data Sciences for Justice, Law, and Criminology

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.

Introduction to Systems of Justice

An overview of the formal mechanisms of social control as manifested by the components of the criminal justice system (legislatures, planning agencies, law enforcement, courts, and corrections), civil justice systems, and such other mechanisms as civil commitment. Alternatives to formal processing including diversion, pretrial screening and dispute-settlement programs.

Introduction to Criminology

Development of theories of criminology and criminal justice over the course of history with special attention to the period from 1700 to the present. Review and evaluation of contemporary knowledge and theories of crime.

Introduction to Justice Research

Social research methods as applied to justice research. The function and role of justice research and the nature and form of research designs, methods, and tools.

Introduction to Legal Studies Research

Offers a wide array of methodologies employed in legal studies related to the humanities and social sciences. It provides the knowledge and skills necessary to design, conduct, and present a scholarly research project. The research questions that motivate scholars in legal studies, as well as the different methods used to collect and analyze the evidence systematically and logically are discussed.

SPA's **BS in Data Sciences for Justice, Law, & Criminology** allows students to analyze the foundations, functions, and data at the heart of the policies and procedures of justice. With the explosive growth of large scale data sources in today's technology-driven world, data science can provide unique insights on the nature of crime, terrorism, law, and the workings of the justice system.

Graduates of the BS in Data Sciences for Justice, Law & Criminology Program usually work in cybersecurity, law enforcement, homeland security, and counterterrorism.

Read on to find out if this undergraduate major can help you work towards your career goals.

SCHOOL of PUBLIC AFFAIRS
AMERICAN UNIVERSITY • WASHINGTON, DC

Students engage in meaningful discussions during class on a regular bases.

Study Abroad Opportunities

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

- BS in Justice, Law, & Criminology majors can count up to 6 credit hours of preapproved study abroad courses, toward their upper-level major course requirements.

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

- Some popular study abroad destinations are:
  » Australia » China » Denmark » England » Italy » Netherlands » New Zealand

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: » National Institute of Justice » FBI » American Bar Association » D.C. Courts » U.S. Customs » Public Defender Service » Secret Service » Department of Homeland Security

Scholarly Research Opportunities

- Take introductory research methods courses before moving into more advanced upper-level courses.

- Students learn research design, quantitative analysis, and how to apply analytical and statistical techniques to contemporary problems.

- Students have opportunities to work with faculty mentors on their original research projects.

- Students will present their original research through research symposiums on campus or at national conferences.

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?

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