APPLIED DATA ANALYSIS (BA)

The Applied Data Analysis major gives students broad training in the following core areas of data science: computer programming and data management, data analysis, data visualization, and data ethics. Students with this major obtain a Bachelor of Arts (B.A.) degree. The major can be tailored for a student's interest in a domain area of concentration. In order to apply to the Applied Data Analysis major, students must have:

- A GPA of 3.2 or higher in the following classes: MATH 1131Q Calculus I; STAT 1000Q Introduction to Statistics I/STAT 1100Q Elementary Concepts of Statistics, and an introductory programming course (CSE 1010 Introduction to Computing for Engineers, CSE 1729 Introduction to Principles of Programming; STAT 2255 Statistical Programming; COGS 2500Q Coding for Cognitive Science).
- Completed at least 24 credits, 15 of which must be at the University of Connecticut, with a cumulative GPA of 3.2 or higher.

After entry into the majors, students must maintain a 3.2 cumulative GPA.

Students receiving a B.A. in Applied Data Analysis are required to take 36 credits, with one or more courses in four core areas, a nine-credit domain concentration sequence, STAT 3255 Introduction to Data Science (Introduction to Data Science), and a Capstone course of at least three credits. Students meet the "writing in the major" requirement in a domain concentration-specific W course, or in a Capstone W course.

Requirements

The four core area requirements are:

Course	Title	Credits
Programming and Data Management		
STAT 2255	Statistical Programming	3
or COGS 2500Q	Coding for Cognitive Science	
Basic Data Analysis		
STAT 3215Q	Applied Linear Regression in Data Science	3
Data Ethics		
PHIL 3202	Data Ethics	3
Data Visualization		
Select at least three credits:		
STAT 3675Q	Statistical Computing	3-4
or GEOG 3510	Cartographic Techniques	
Domain Concentration		
Students must select one of the following domain concentration areas:		15
American Political Institutions (p. 1)		
American Political Representation (p. 1)		
Earth Data Science (p. 1)		
Public Management and Policy (p. 2)		
Survey Research Methods (p. 2)		
Population Dynamics (p. 2)		
Additional Credits		
To reach 36 credits, additional credits may be taken from approved domain concentrations or the following:		8-9
GEOG 2500	Introduction to Geographic Information Systems	
GEOG 3500Q	Geographic Data Analysis	
STAT 2215Q	Introduction to Statistics II	
STAT 3025Q	Statistical Methods	
STAT 3515Q	Design of Experiments	
STAT 3375Q	Introduction to Mathematical Statistics I	
Total Credits		**35-37**

Domain Concentrations

American Political Institutions Domain Concentration

Course	Title	Credits
Select three of the following:		9
POLS 3600	Making the Modern American Presidency	
POLS 3601	Modern American Presidency	
POLS 3604	Congress in Theory and Practice	
POLS 3606	How to Fix an Election: The Politics of Election Administration in the United States	
DSDA 4815	Applied Data Analysis Capstone (Capstone)	3
POLS 3603WQ	Congressional Apportionment and Redistricting (W course)	3
Total Credits		**15**

American Political Representation Domain Concentration

Course	Title	Credits
Select three of the following:		9
POLS 2607	American Political Parties	
POLS 3612	Electoral Behavior	
POLS 3617	American Political Economy	
POLS 3618	Politics of Inequality	
POLS 3625	Public Opinion	
DSDA 4815	Applied Data Analysis Capstone (Capstone)	3
POLS 3608	The Art, Science, and Business of Political Campaigns	3
Total Credits		**15**

Earth Data Science Domain Concentration

Course	Title	Credits
Select three of the following:		9
ERTH 2800	Our Evolving Atmosphere	
ERTH 3020	Earth Surface Processes	
ERTH 3710	Engineering and Environmental Geology	
ERTH 4230	GIS and Remote Sensing for Geoscience Applications	
ERTH 4810	Modeling the Changing Atmosphere and Ocean	
ERTH 4150	Applied Data Analysis in Earth Science (Capstone)	3
ERTH 2050W	Communicating Earth and Environmental Science (W course)	3
Total Credits		**15**

Public Management and Policy Domain Concentration

Course	Title	Credits
Select three of the following:		9
PP 3032	Budgeting in Public Service Organizations	
PP 3033	Race and Policy	
PP 3098	Public Policy Issues	
PP 4031		
PP 4034	Social Policy	
DSDA 4815	Applied Data Analysis Capstone (Capstone)	3
PP 3020W	Cases in Public Policy (W course)	3
Total Credits		**15**

Survey Research Methods Domain Concentration

Course	Title	Credits
PP 2100	Survey Research Methods	3
PP 3030	Public Opinion	3
PP 3098	Public Policy Issues	3
DSDA 4815	Applied Data Analysis Capstone (Capstone)	3
PP 3020W	Cases in Public Policy (W course)	3
Total Credits		**15**

Population Dynamics Domain Concentration

Course	Title	Credits
Select three of the following:		9
SOCI 2110/2110W		
SOCI 2651/2651W	Sociology of the Family	
SOCI 2660/2660W	Sociology of Health	
SOCI 2820/2820W	Sociological Perspectives on Poverty	
SOCI 2901/2901W	Urban Sociology	
SOCI 3971/3971W	Population	
DSDA 4815	Applied Data Analysis Capstone (Capstone)	3
W course: One of the W versions in the domain concentration list		3
Total Credits		**15**

University General Education Requirements

Every student must meet a set of core requirements to earn a baccalaureate degree, in addition to those required by the student's major course of study and other requirements set by the student's school or college. For more information about these requirements, please see General Education Requirements (https://catalog.uconn.edu/undergraduate/gen-ed-requirements/).

College of Liberal Arts and Sciences Degree Requirements

Students must meet a set of requirements established by the college in addition to the University's General Education requirements. For more information, see the College of Liberal Arts and Sciences (https://catalog.uconn.edu/undergraduate/liberal-arts-sciences/#requirementstext) section of this catalog.