DATA SCIENCE (MINOR)

Department Website (http://cds.nyu.edu/)

Program Description

The minor in data science allows students to learn foundational computational analysis concepts and use data science methods and tools to answer important questions. Students will be able to apply those concepts to a range of domain-specific issues that relate to their major course of study.

Students completing the minor will gain a robust introduction to data science principles, while specializing in other liberal arts fields. They will have opportunities for hands-on experience working with real world datasets, and they will cultivate knowledge about the ethical issues related to data science.

The minor has three pathways. Each pathway shares the same three data science courses; the two computer science courses will be determined by your level of programming experience.

Students may contact cds-undergraduate@nyu.edu with questions.

Minor Declaration

All students who wish to minor in data science must complete a minor registration form, and must consult a minor adviser prior to any registration. Non-CAS students should fill out the minor declaration form via Albert, and can declare during any point of the academic year. Please see Cross-School Minors (http://cas.nyu.edu/academic-programs/majors-and-minors/cross-school-minors/) for information detailing policies and procedures for cross-school minors.

Program Requirements

The prerequisite for declaring this minor is completion of either DS-UA 111 Data Science for Everyone or DS-UA 112 Principles of Data Science (depending on placement) with a C or better. The minor requires five 4-credit courses (20 credits). All students in the minor will take the two required courses offered by the Center for Data Science.

Students Entering the Minor with No Prior Programming Experience

Select one of the following pathways:

- CSCI-UA 2 Introduction to Computer Programming (No Prior Experience)
- DS-UA 111 Data Science for Everyone (offered every semester)
- DS-UA 112 Principles of Data Science (offered every semester)
- DS-UA 201 Causal Inference (offered every fall)
- DS-UA 202 Responsible Data Science (offered every spring)
- DS-UA 301 Advanced Topics in Data Science (offered every spring)
- ECON-UA 266 Intro to Econometrics
- ECON-UB 251 Econometrics I

Electives

Select one of the following: 3-4

- DS-UA 201 Causal Inference (offered every fall)
- DS-UA 202 Responsible Data Science (offered every spring)
- DS-UA 301 Advanced Topics in Data Science (offered every spring)
- ECON-UA 266 Intro to Econometrics
- ECON-UB 251 Econometrics I

Department of Computer Science (Courant) Courses: 1

Select one of the following pathways: 8

- Students Entering the Minor with No Prior Programming Experience
  - CSCI-UA 2 Introduction to Computer Programming (No Prior Experience)

- Students Entering the Minor with Limited Prior Programming Experience
  - CSCI-UA 3 Introduction to Computer Programming (Limited Prior Experience)
  - CSCI-UA 60 Database Design and Implementation

- Students Entering the Minor with Extensive Prior Programming Experience
  - CSCI-UA 60 Database Design and Implementation
  - CSCI-UA 479 Data Management and Analysis

Total Credits 20

1 Consult that departmental section in this bulletin for prerequisites and descriptions.

Policies

Program Policies

Policy on Declaration of Minor

Students must complete either DS-UA 111 Data Science for Everyone or DS-UA 112 Principles of Data Science (depending on placement) with a grade of C or better before they can declare the minor in data science. This policy applies to all NYU students, not just to those matriculated in CAS. Students may declare during the declaration period in the fall and spring semesters and the summer sessions. During the fall semester, the declaration period is the month of October; during the spring semester, the declaration period is mid-February to mid-March; and in the summer, the declaration period is mid-June to mid-July. For the joint computer science and data science major, students may declare anytime throughout the academic year. Please write to cds-undergraduate@nyu.edu to request the declaration form during the proper time frames.

It is an official policy in CAS that students cannot enter their junior year undeclared. In order to comply with this policy, students must begin their data science course sequence no later than the spring semester of their sophomore year, which will allow them to declare the major or minor during the summer before their junior year. The Center for Data Science and CAS both advise that students begin their data science courses earlier, and, consistent with the usual practice in CAS, declare the major or minor in the spring of their sophomore year. While students may begin their data science courses later than this point, there is no guarantee they will finish their major requirements in time to graduate within four years.

Policies Applying to the Minor

1. A grade of C or better is required in all courses used to fulfill minor requirements; courses graded Pass/Fail do not count toward the minor. This policy applies to all NYU students, not just to those matriculated in CAS.
2. Students must check the prerequisites for each course before enrolling. See the section on course offerings for all prerequisites.
3. No more than one course may be double-counted between the data science minor and any other major or minor. Students should consult
the guidelines of their major or minor for any additional restrictions and policies.

4. In accordance with the cross-school minor policy, CAS students may not minor in data science at NYU Shanghai. They may, however, take applicable Shanghai courses and count them toward the CAS data science major or minor. Shanghai courses do not count toward the 64-credit UA residency requirement required of internal and external transfers to the College.

NYU Policies
University-wide policies can be found on the New York University Policy pages (https://bulletins.nyu.edu/nyu/policies/).

College of Arts and Science Policies
A full list of relevant academic policies can be found on the CAS Academic Policies page (https://bulletins.nyu.edu/undergraduate/arts-science/academic-policies/).