

# DATA SCIENCE (MINOR)

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

## Program Description

The minor in Data Science provides students with practical knowledge and foundational principles of the field while offering opportunities to engage with its broader issues.

The minor has three pathways. Each of them requires two core data science courses; one elective in data science; and two computer science courses tailored to each student's level of programming experience.

Students may contact [cds-undergraduate@nyu.edu](mailto: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 Principles of Data Science I or DS-UA 112 Principles of Data Science II (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.

Course	Title	Credits
<b>Required Courses</b>		
DS-UA 111	Principles of Data Science I (offered every semester)	4
DS-UA 112	Principles of Data Science II (offered every semester)	4
<b>Electives</b>		
Select one of the following:		3-4
DS-UA 201	Causal Inference (offered every semester)	
DS-UA 202	Responsible Data Science (offered every spring)	
DS-UA 301	Advanced Topics in Data Science (offered every semester)	
ECON-UA 266	Intro to Econometrics	
ECON-UB 251	Econometrics I	
<b>Department of Computer Science (Courant) Courses:</b> <sup>1</sup>		
Select one of the following pathways:		8
<i>Students Entering the Minor with No Prior Programming Experience</i>		
CSCI-UA 2	Introduction to Computer Programming (No Prior Experience)	
CSCI-UA 60 or CSCI-UA 381	Database Design and Implementation Programming Tools for the Data Scientist	
<i>Students Entering the Minor with Limited Prior Programming Experience</i>		
CSCI-UA 3	Introduction to Computer Programming (Limited Prior Experience)	
CSCI-UA 60	Database Design and Implementation	

or CSCI-UA 381	Programming Tools for the Data Scientist
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*Students Entering the Minor with Extensive Prior Programming Experience*

CSCI-UA 60 or CSCI-UA 479	Database Design and Implementation Data Management and Analysis
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CSCI-UA 381	Programming Tools for the Data Scientist
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**Total Credits** **20**

<sup>1</sup> 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 Principles of Data Science I or DS-UA 112 Principles of Data Science II with a grade of C or better before declaring the minor in Data Science. This policy applies to all NYU students, not just to those matriculated in CAS.

Students may declare at any time during the academic year using the links below. Any questions or concerns regarding the declaration process should be directed to [cds-undergraduate@nyu.edu](mailto:cds-undergraduate@nyu.edu).

- Data Science Major or Minor ([https://docs.google.com/forms/d/e/1FAIpQLSdvU0oTPxa\\_c8DPzyywxw7LnmofGbfoSaVhz0Dcx4SuksgixA/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSdvU0oTPxa_c8DPzyywxw7LnmofGbfoSaVhz0Dcx4SuksgixA/viewform?usp=sf_link))
- Joint Major in Computer and Data Science ([https://docs.google.com/forms/d/e/1FAIpQLSfq5ZHkrnd0jvST5Mq\\_dF1bEfHYVolAxJ\\_y-9pMuPgGdZoZpQ/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSfq5ZHkrnd0jvST5Mq_dF1bEfHYVolAxJ_y-9pMuPgGdZoZpQ/viewform?usp=sf_link)) (all NYU students must complete both DS-UA 111 Principles of Data Science I and CSCI-UA 101 Introduction to Computer Science with a grade of C or better before declaring this major)
- Joint Major in Data Science and Mathematics ([https://docs.google.com/forms/d/e/1FAIpQLSffk8dTgivZTNrToggDAX0tniEwPMr82EqSxOcSPZExReaUg/viewform?usp=sf\\_link](https://docs.google.com/forms/d/e/1FAIpQLSffk8dTgivZTNrToggDAX0tniEwPMr82EqSxOcSPZExReaUg/viewform?usp=sf_link))

College of Arts and Science students cannot enter their junior year undeclared and must begin their data science (and, if applicable, computer 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 (CDS) and CAS both advise that students begin their data science courses earlier and declare in the spring of their sophomore year. Although students may begin their data science courses later than this point, there is no guarantee they will finish all requirements in time to complete the program within four years. Students cannot declare any major or minor with CDS after completion of their junior year.

### Policies Applying to the Minor

- 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/>).