

Data, Learning, and Society (Online)

Department of Human Development

M.S. PROGRAM

Major Code: DLS



**Teachers College, Columbia University
2025-2026**

The online Masters of Science in Data, Learning, and Society offers students an opportunity to acquire basic techniques in statistics and data science as they apply to the study of learning in the context of the growing reliance on data as a foundation for the operation of the learning sector.

The program aims to equip students with the skills, techniques, and perspectives for the socially responsible application of data to understand and support learning in contemporary society. The program prepares students for positions as analysts of learning programs and activities in public and private institutions. Graduates will be able to approach their work with a solid grounding in contemporary data techniques, an understanding of the unique aspects of empirical work on learning, and an appreciation of the social and ethical issues presented by the growing availability of data on learners and learning.

The program: 1) introduces students to statistical and data science fundamentals, 2) provides a solid understanding of the study of learning in its various forms, and 3) allows students to consider both the possibilities and the problems attendant to the growing use of learning data.

The program is particularly attractive to students who are recent college graduates, early career professionals, and established educators who wish to develop a more sophisticated understanding of the potential of the growing availability of data on learning.

Required courses

Core Requirements (12 credits)

HUD4120 – Methods of Empirical Research (3 credits)

HUDM4122 – Probability and Statistical Inference (3 credits)

HUDK4029 – Human Cognition and Learning (3 credits)

HUDK4052 – Data, Learning, and Society (3 credits)

Additional courses

Two Additional Courses in Data (6 credits)

HUDK4050 – Core Methods in Educational Data Mining (3 credits)

HUDK4053 – Managing Educational Data (3 credits)

HUDM5026 – Intro to Data Analysis in R (3 credits)

HUDM5059 – Psychological Measurement (3 credits)

HUDM5122 – Applied Regression Analysis (3 credits)

One Additional Course in Learning (3 credits)

HUDK4011 – Networked and Online Learning (3 credits)

HUDK5053 – Cognitive Development (3 credits)

HUDK5037 – The Psychology of E-Learning in Business and Industry (3 credits)

One Additional Course in Social Impact (3 credits)

HUDK4031 – Data, Testing and Meritocracy (3) credits

HUDK5025 - Cross-Cultural Psychology

HUDK5035 – Poverty, Inequality, and Child Development (3 credits)

HUDK5040 - Development and Psychopathology: Atypical Contexts and Populations

Breadth requirement:

College Breadth Requirement (6 credits)

Two courses approved by program advisor drawn from online courses across the College

Masters culminating requirement: Integrated Project

Capstone Project (2 credits)

HUDK5324 – Research Practicum (2 credits)

Students will complete an independent project drawing on their studies in the program.

For the M.S. degree, no transfer credit is granted for work completed at other universities.

Satisfactory Progress

Students are expected to make satisfactory progress toward the completion of degree requirements. If satisfactory progress is not maintained, a student may be dismissed from the program. Program faculty annually review each student's progress. Where there are concerns about satisfactory progress, students will be informed by the program faculty. If a student is performing below expectations, remedial work within an appropriate timeline may be required. If satisfactory progress is not maintained, a student may be dismissed from the program. Further policy details can be found in the Teachers College Student Handbook: <https://www.tc.columbia.edu/student-handbook/>

Sample student schedules

Full Time Student

Fall 1

HUD4120 – Methods of Empirical Research (3 credits)
 HUDK4029 – Human Cognition and Learning (3 credits)
 HUDK4052 – Data, Learning, and Society (3 credits)
 HUDM4122 – Probability and Statistical Inference (3 credits)

Spring 1

HUDK4053 – Managing Educational Data (3 credits)
 HUDK5053 – Cognitive Development (3 credits)
 HUDM5122 – Applied Regression Analysis (3 credits)
 XXXXxxxx– College Breadth Course Selected in Consultation with Advisor (3 credits)

Fall 2

HUDK5035 – Poverty, Inequality, and Child Development (3 credits)
 XXXXxxxx– College Breadth Course Selected in Consultation with Advisor (3 credits)
 HUDK5324 – Research Practicum (2 credits)

Part-Time Student

Fall 1

HUD4120 – Methods of Empirical Research (3 credits)
 HUDK4052 – Data, Learning, and Society (3 credits)

Spring 1

HUDK4029 – Human Cognition and Learning (3 credits)
 HUDM4122 – Probability and Statistical Inference (3 credits)

Fall 2

HUDK5053 – Cognitive Development (3 credits)
 HUDM5122 – Applied Regression Analysis (3 credits)

Spring 2

HUDK4053 – Managing Educational Data (3 credits)

XXXXxxxx– College Breadth Course Selected in Consultation with Advisor (3 credits)

Fall 3

HUDK5035 – Poverty, Inequality, and Child Development (3 credits)

XXXXxxxx– College Breadth Course Selected in Consultation with Advisor (3 credits)

Spring 3

HUDK5324 – Research Practicum (2 credits)

In your last semester, you will need to submit an “Intent to Graduate” form early in the semester.