LEARNING ANALYTICS, MSED

The Learning Analytics Online Master's Degree will empower you to leverage data to drive high-quality decisions within the educational context. The program prepares data scientists to build highly functional and ethically sound ways to perform measurement, analysis, and predictive modeling and to identify algorithmic bias. Technically valid and responsible data collection and analysis practices are critical to developing impactful educational systems.

This fully online program prepares graduates to work as data scientists in research and development in areas such as at-risk prediction, intelligent tutoring systems, and educational recommender systems. You will emerge understanding when and why to use different methods for a range of applications in order to make a real-world impact. The program teaches you both the latest learning analytics algorithms and tools as well as how to engineer data streams to turn raw data into interpretable and valuable features. Your use of contemporary methods will be grounded in the rich history of educational thought, with an understanding of how this grounding can support efforts to address challenges such as algorithmic bias to improve educational outcomes at scale.

For more information: https://www.gse.upenn.edu/academics/programs/learning-analytics-online-masters (https://www.gse.upenn.edu/academics/programs/learning-analytics-online-masters/)

Curriculum

This program requires a total of 10 CUs. Seven of these will involve core required courses. The other three CUs will involve concentration courses. These credits would be earned over the course of four semesters, which would allow students to complete the program with 16 months of continuous enrollment (e.g., Fall, Spring, Summer, Fall). The content will be delivered through a mix of synchronous and asynchronous delivery, with multiple sections/time slots for synchronous activities to accommodate students around the world.

The program includes the equivalent of 9 CUs of instruction and 1 CU of a capstone project, where students will develop projects with real-world relevance and of a quality that can be submitted as a demo or short papers to international conferences. The Learning Analytics Capstone Seminar course provides the foundation leading to the Capstone project.

Code	Title	Course Units
Required Courses		
EDUC 5144	Dashboards for Discovery and Learning Applications	1
EDUC 5183	Adaptive Learning Systems	1
EDUC 6116	Master's Foundations of Teaching and Learning	1
EDUC 6123	Big Data, Education, and Society	1
EDUC 6139	Design of Learning Environments	1
EDUC 6191	Core Methods in Educational Data Mining	1
Additional Requirements		
Take 4 CU of addition course units enrolled by program		4
Total Course Units		**10**

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2024 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.