Learning Analytics

The goal of learning analytics is to better understand and improve learning for students, teachers, administrators, and other stakeholders and to better comprehend, organize, and provision educational data. Learning analytics is strongly focused on providing in-time information to inform interventions and teaching methodologies through predictive modeling. The end result is more effective educational systems.

Through this certificate, students will gain foundational skills and knowledge to analyze learner data from educational datasets; be introduced to basic programming languages for analyzing data; learn the essential principles for collecting, organizing, analyzing, and interpreting educational data; use text analysis strategies and natural language processing techniques to extract information from educational related text; and explore advanced concepts in machine learning to conceptualize educational problems from an algorithmic perspective.

QUICK FACTS

Required Hours: 12 credit hours are needed to earn this certificate. See the certificate website for course details.

Prerequisites: Completed bachelor's degree and current enrollment in a Vanderbilt graduate or professional degree program

Certificate Director: Scott Crossley, Professor of Special Education

Home Academic Department: Special Education

Best Suited For: Master's and doctoral students across programs in Peabody

To Enroll: Let us know of your interest in this certificate by completing the form at vu.edu/pbdy-certs. You may also email peabodycertificates@vanderbilt.edu.

> Graduates equipped with this certificate will be able to take large caches of data and find patterns that further explore the human presence in educational data, as well as what we can make out of that presence to better inform curriculum, interventions, and educational designs,"

Scott Crossley, Certificate Director
Professor of Special Education

CAREER OPPORTUNITIES

Research Positions • Academic Appointments • Industry Jobs in Educational Technology Companies

Administrative Employment at the School, District, State, and Federal Level

REQUIRED COURSES

» Special Topics, Fundamentals of Learning Analytics (SPED 7500a)
» Learner Database Management (in development)
» Special Topics, Educational Language Analysis (SPED 7500b)
» Machine Learning for Educational Applications (in development)

Note: Not all Peabody professional programs include enough elective credits to make earning an additional certificate possible. Students are encouraged to confer with their program director as well as with certificate directors to ensure they can meet all requirements for both degree and certificate programs. Courses listed are subject to change.