

FTA 4005: Introduction to Financial Data Analytics

3 Credit Hours

This course provides the foundation for financial data analytics used in business and FinTech applications. The objective of this course is for students to gain experience in analyzing financial data using modern machine learning techniques, statistical methods, and prediction models. Students will develop computational skills to perform data analysis using a modern statistical programming environment, and apply these skills to address a range of problems encountered by business firms, including those in the FinTech industry. The topics discussed include an introduction to R language, visualization of financial data, cluster analysis, simple and multiple linear regression, classification models, high dimension data analysis using Lasso, tree regression, and model assessment and selection using cross validation. Students will have hands-on experience in the development of data analytics applications to analyze real world financial problems.

FTA 4100: Introduction to Information Security for FinTech

3 Credit Hours

The purpose of this course is to introduce students to the rapidly evolving and critical international arenas of Privacy, Information Security, and Critical Infrastructure for FinTech. This course is designed to develop knowledge and skills for security of information and information systems within FinTech organizations. It focuses on concepts and methods associated with security across several systems platforms, including internal and Internet-facing systems. The course utilizes a world view to examine critical infrastructure concepts as well as techniques for assessing risk associated with accidental and intentional breaches of security in a FinTech network. It introduces the associated issues of ethical uses of information and of privacy considerations.

FL 1001: Elementary Foreign Language and Culture I

3 Credit Hours

Introduction to a foreign language and culture, stressing progressive acquisition of effective communication skills in both the written and spoken language and an understanding of the practices and products of the culture being studied.