Naveen Jindal School of Management

Master of Science in Financial Technology and Analytics

36 semester credit hours minimum

Faculty

Professors: Alain Bensoussan, Umit G. Gurun, Vikram Nanda, Suresh Radhakrishnan, Michael J. Rebello, Harold Zhang, Zhiqiang (Eric) Zheng

Associate Professors: Nina Baranchuk, Zhonglan Dai, Michael Hasler, Robert L. Kieschnick Jr., Harpreet Singh, Han (Victor) Xia, Yexiao Xu, Feng Zhao

Assistant Professor: Hongchang Wang

Clinical Professor: John Barden

Clinical Associate Professor: Carolyn Reichert

Clinical Assistant Professor: Liping Ma

Degree Requirements

The Master of Science in Financial Technology and Analytics (MS FTEC) at the Naveen Jindal School of Management is a STEM (Science, Technology, Engineering and Mathematics) cohort degree program that requires a minimum of 36 semester credit hours. This Fintech program provides students with the practical and theoretical knowledge needed to pursue careers involving digital financial technologies and financial data analytics. The program is designed for students with or without previous educational background in finance, but with a proclivity toward more computer-based approaches to financial issues.

Students completing this program will gain a knowledge of both finance and the key digital and analytical technologies used in finance. For example, students completing the program will know how use robotic process agents, build blockchains with smart contracts, create cryptocurrencies or tokens for payment systems, use statistical methods for analyzing financial data, and apply machine learning to financial issues. While the full-time program is a cohort program, a part-time program for working professionals is also offered. Both programs only begin each fall. Special tuition, fees and admissions requirements apply since the program is supported entirely by participant tuition/fees.

To apply for this degree program, an undergraduate degree is required (all majors are considered). Students must maintain a cumulative 3.0 grade-point average (GPA) in all graduate courses taken in the degree program, excluding program prerequisites, to qualify for the MS degree.
Prerequisites

Students pursuing the Master of Science in Financial Technology and Analytics degree program are required to have completed course work covering calculus, linear algebra, probability/statistics, and programming with a grade of “B” or better. Applicants who have not satisfied these requirements will be considered on a case-by-case basis.

Course Requirements

Core Courses: 36 semester credit hours

Program director develops a program of study for students each term based on courses listed below.

- FTEC 6002 Financial Analytics Training and Internship
- FTEC 6301 Financial Accounting Information and Analysis
- FTEC 6302 Financial Markets and Institutions
- FTEC 6303 Asset Pricing and Management
- FTEC 6304 Corporate Finance and Risk Management
- FTEC 6305 Mathematics in Finance
- FTEC 6306 Advanced Mathematics in Finance
- FTEC 6310 Financial Information and Analytics
- FTEC 6311 Robotics and Financial Technology
- FTEC 6312 Financial Applications of Blockchain Technology
- FTEC 6313 Cloud Computing and Cyber Security
- FTEC 6319 Mathematics for Financial Analytics
- FTEC 6320 Statistical Methods for Financial Analytics
- FTEC 6321 Advanced Statistical Methods for Financial Analytics
- FTEC 6324 Financial Applications of Natural Language Processing
- FTEC 6325 Algorithmic Trading and Robo-Advising
- FTEC 6331 Risk Evaluation and Management
- FTEC 6334 Financial Applications of Machine Learning
- FTEC 6V98 Financial Technology and Analytics Internship
- FTEC 6V99 Special Topics in Financial Technology and Analytics
Graduate Certificate in Fintech

15 semester credit hours

Faculty

Overview

The Graduate Certificate in Fintech (Financial Technology) focuses on certain key financial technologies: blockchain technologies and various types of robotic technologies. These technologies are becoming ever more important in financial markets. Students learn how to apply these technologies to provide various financial services.

Requirements

Students interested in just the Graduate Certificate in Fintech can enroll in the Master of Science of Financial Technology and Analytics program as a part-time student. However, they would need to identify this interest in their application. Students earn this certificate by completing the following courses with a "B" or better.

- **FTEC 6310** Financial Information and Analytics
- **FTEC 6311** Robotics and Financial Technology
- **FTEC 6312** Financial Applications of Blockchain Technology
- **FTEC 6324** Financial Applications of Natural Language Processing
- **FTEC 6325** Algorithmic Trading and Robo-Advising

Academic certification programs follow the same application and admission processes as graduate degree programs. All dates and deadlines can be located in the UTD Academic Calendar. Failure to register in advance and on-time results in a late fee. Students may contact the JSOM advising office for details.

Graduate Certificate in Financial Data Science

15 semester credit hours

Faculty

Overview

The Graduate Certificate in Financial Data Science focuses on the analytical technologies applied to the analysis of financial data for decision making. These technologies include SQL and NoSQL databases, Natural Language Processing, Econometrics, and Machine Learning. These technologies are becoming ever more important in the provision of financial services. Students learn how to use these technologies to
analyze financial data in support of financial decisions.

Requirements

Students interested in just the Graduate Certificate in Financial Data Science can enroll in the Master of Science of Financial Technology and Analytics program as a part-time student. However, they would need to identify this interest in their application. Students earn this certificate by completing the following courses with a "B" or better.

- **FTEC 6310** Financial Information and Analytics
- **FTEC 6319** Mathematics for Financial Analytics
- **FTEC 6320** Statistical Methods for Financial Analytics
- **FTEC 6324** Financial Applications of Natural Language Processing
- **FTEC 6325** Algorithmic Trading and Robo-Advising

Academic certification programs follow the same application and admission processes as graduate degree programs. All dates and deadlines can be located in the UTD Academic Calendar. Failure to register in advance and on-time results in a late fee. Students may contact the JSOM advising office for details.