

Financial Technology MS

Admission Requirements

Students must meet the general admission requirements for the Graduate School.

Degree Requirements

Required Courses

FINANCE 6500	Financial Management ¹	3
FINANCE 6503	Computer Applications in Finance	3
FINANCE 6521	Financial Forensics: The Science of Derivatives	3
FINANCE 6570	Introduction to Fintech	3
FINANCE 6572	Financial Data Analytics	3
FINANCE 6574	Artificial Intelligence and Machine Learning in Finance	3
FINANCE 6576	Blockchain: Applications in Finance	3
FINANCE 6590	Seminar in Finance	3

Electives **6**

Choose two of the following courses:

FINANCE 6520	Security Analysis
FINANCE 6540	Financial Institutions and Financial Markets
FINANCE 6542	Real Estate
FINANCE 6545	Venture Capital and Private Equity
FINANCE 6580	International Financial Management

Total Hours **30**

¹ FINANCE 6500 course may be waived depending on the candidate's previous educational experience. If so, the candidate will need to take an extra course from the elective course list. In total, a student is required to take a minimum of 30 credit hours. The 30-credit-hour program is tailored for students with an undergraduate degree in business or other degree that satisfies the FINANCE 6500 pre-requisites; otherwise, they need to take additional courses to meet the requirements for the FINANCE 6500 class.

Learning Outcomes

Upon graduation students will be able to:

- Describe the technical aspects of blockchain technology and distinguish between different types of consensus mechanisms.
- Identify the characteristics of various digital assets and critically evaluate the use-case and value proposition of the assets with respect to both risk and return.
- Develop a viable business plan around a blockchain-based asset.
- Summarize the robo-advising options that are offered from the financial industry.
- Compare and contrast the differences between modern peer-to-peer (P2P) lending platforms and traditional lending.
- Explain the structure of a trading bot and can design/develop an algorithm to implement a trading bot.
- Demonstrate a proficiency in data science within the context of financial data analysis including utilizing various APIs to automate data

retrieval, working with various data formats, performing essential data cleansing, and producing insightful data visualizations.

- Describe and implement use cases of AI/ML techniques in financial applications and interpret the inputs/outputs of the models.
- Communicate both financial and technical aspects of a fintech project.