Fintech, MS

The Master of Science in Fintech program is strategically structured to equip students with expertise in data-centric financial modeling, advanced analytics, and a suite of fintech tools. UMSL’s program is uniquely designed to address the significant demands of an emerging market, providing students with the essential competencies to leverage the ever-expanding opportunities. This 30-credit-hour master’s degree program offers a comprehensive skill set aligned with the industry’s requirements. It achieves a crucial balance by integrating foundational finance principles with cutting-edge financial technology courses, including blockchain, data analytics, and artificial intelligence. Furthermore, a diverse selection of elective courses empowers students to explore specific areas of interest, such as security analysis, financial institutions, venture capital, real estate, and various other specialized domains.

Career Outlook
The finance industry is undergoing a significant transformation due to fintech, which streamlines financial services for speed, cost-efficiency, and security. Fintech’s rapid expansion offers lucrative career prospects in both financial and non-financial corporate sectors. The UMSL MS in Fintech stands out for its fintech focus, preparing graduates for diverse career opportunities in established financial firms, various corporate sectors, and fintech startups.

Future Career Options
- Financial Data Analyst/Data Scientist
- Quantitative Analyst
- Algorithmic Trader/High Frequency Trader
- Digital Payment Specialist
- Robo-Advisor Specialist
- Financial Planner
- Compliance Officer
- Cybersecurity Analyst
- Financial Product Manager
- Smart Contract Engineer
- Blockchain Developer
- Financial App Developer

Skills developed through degree completion
- Develop fintech applications for both financial and non-financial enterprises
- Formulate a viable business plan for a blockchain-based asset, critically assessing its use-case and value proposition in terms of risk or reward
- Create a robo-advisory strategy initially for wealth management and expand it to encompass P2P lending and algorithmic trading
- Showcase expertise in data science for financial data analysis, including utilizing APIs to automate data retrieval, working with various data formats, performing essential data cleansing, and producing insightful data visualizations
- Implement AI/ML technologies across financial and non-financial sectors and proficiently interpret model inputs and outputs

Successful alumni have gone on to fulfill many of the opportunities above. Additional possibilities are taken from the Bureau of Labor Statistics. Contact an advisor to discuss additional future career options.
Fintech, MS

Year 1

SUMMER SEMESTER (6 credit hours)
FIN 6500: Financial Management (3)
FIN 6503: Financial Modeling & Computer Applications (3)

FALL SEMESTER (9 credit hours)
FIN 6570: Introduction to Fintech (3)
FIN 6576: Blockchain: Applications in Finance (3)
FIN 6572: Financial Data Analytics (3)

SPRING SEMESTER (6 credit hours)
FIN 6521: Financial Forensics: The Science of Derivatives (3)
FIN 6574: Artificial Intelligence & Machine Learning in Finance (3)

SUMMER SEMESTER (3 credit hours)
FIN 6540: Financial Institutions & Markets (3)

Year 2

FALL SEMESTER (6 credit hours)
FIN 6520: Securities Analysis (3)
FIN 6590: Seminar in Finance: Fintech (3)

Degree completed!

2023-2024
2-YEAR ACADEMIC MAP

This is a sample academic map for the courses to take each academic semester/session. This map is not a substitute for academic advisement. Contact your advisor when making final selections.

- Summer and Intersession courses
Don’t forget that summers and winter breaks are a way to fast-track your route to degree completion – and lighten your load during fall and spring!

- Apply for Graduation
Don’t forget that students should apply for graduation one year prior to the intended graduation date, so apply prior to the deadline!

Ready to be an UMSL Triton? Apply today.
umsl.edu
888-GO-2-UMSL
314-516-5451
umsl.edu/gradschool/

Last Updated October 2023