



# Fintech MS

The Master of Science in Fintech program is specifically structured to equip students with expertise in data-centric financial modeling, advanced analytics, and a suite of fintech schools. 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 sectors. The UMSL MS in Fintech stands out for its fintech focus, preparing graduates for diverse career opportunities in financial firms, various corporate sectors, and fintech startups.

## Future Career Options

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

## Skills Developed By 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 various APIs to automate data retrieval, working with various data formats, performing essential data cleansing, and producing insightful data visualizations
- Implement AL/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.



# IT STARTS RIGHT NOW

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.



## 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.

**umsl.edu**

**888-GO-2-UMSL**

**314-516-5451**

**[umsl.edu/gradschool](https://umsl.edu/gradschool)**

## 2024-2025 2-YEAR ACADEMIC MAP

Year  
**1**

### Master of Science in Fintech

#### SUMMER SEMESTER (6 credit hours)

FIN 6500: Financial Management (3)

FIN 6503: Financial Modeling and Computer Applications (3)

#### FALL SEMESTER (9 credit hours)

FIN 6570: Introduction to Fintech (3)

FIN 6572: Financial Data Analytics (3)

FIN 6576: Blockchain: Applications in Finance (3)

#### SPRING SEMESTER (6 credit hours)

FIN 6521: Financial Forensics: The Science of Derivatives (3)

FIN 6574: Artificial Intelligence and Machine Learning in Finance (3)

#### SUMMER SEMESTER (3 credit hours)

FIN 6540: Financial Institutions and Markets (3)

Year  
**2**

#### FALL SEMESTER (6 credit hours)

FIN 6520: Security Analysis (3)

FIN 6590: Seminar in Finance: Fintech (3)

Check once completed



Last updated May 2024