

# Executive Master in Financial Technology & Innovation

## Curriculum Structure and Study Plan



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## Curriculum Structure

The Executive Master in Financial Technology & Innovation (EMFTI) curriculum is composed of 39 credit hours divided as follows:

### Finance Core Requirements:

- Financial Innovation Ecosystem (3 credits)
- Corporate Finance & Modeling (3 credits)
- Financial Innovation, Money, & Investment (3 credits)
- Financial Risk Management & Compliance (3 credits)
- Financing, Valuation, & Venture Capital (3 credits)

### Managing Information System (MIS) Core Requirements:

- Data Management for Finance (3 credits)
- Enterprise Systems & IT Infrastructure for Finance (3 credits)
- AI & Machine Learning for Financial Applications (3 credits)
- Blockchain Innovation & Digital Currencies (3 credits)

### Two Elective Courses (to be selected from the following):

- Financial Innovation Leadership & Strategy (3 credits)
- Real Estates & PropTech (3 credits)
- Insurance & InsurTech (3 credits)
- Behavioral Finance (3 credits)
- Case Studies in Financial Innovation (3 credits)
- Sustainable Finance (3 credits)
- Entrepreneurial Finance (3 credits)
- Big Data in Finance (3 credits)
- Algorithmic Trading & Financial Innovation (3 credits)

### Research Project:

- Project (6 Credits)

# Curriculum Structure and Study Plan

## Program Study Plan

The program follows a 2-year curriculum with 39 credit hours in total. The layout of the program balances foundational knowledge, advanced fintech topics, leadership skills, and applied experience.

This structure ensures graduates build foundational finance expertise, advanced technological skills, regulatory insight, and leadership capabilities, culminating in a real-world project that demonstrates mastery of financial technology and innovation.



# Study Plan Layout

## First Year

### Fall Semester

Course Name	Code	Units	GPA	Pre-requisite
Financial Innovation Ecosystem	EFIN 514	3(3+0)	Incl	-----
Corporate Finance & Modeling	EFIN 515	3(3+0)	Incl	-----
Data Management for Finance	EMIS 516	3(6+0)	Incl	-----
<b>Total Credit Hours</b>		<b>9 hours</b>		

### Spring Semester

Course Name	Code	Units	GPA	Pre-requisite
Financial Innovation, Money, & Investment	EFIN 524	3(6+0)	Incl	EFIN 515
Enterprise Systems & IT Infrastructure for Finance	EMIS 525	3(6+0)	Incl	EMIS 516
AI & Machine Learning for Financial Applications	EMIS 526	3(6+0)	Incl	EMIS 516
Financial Risk Management & Compliance	EFIN 527	3(6+0)	Incl	EFIN 515
<b>Total Credit Hours</b>		<b>12 hours</b>		

## Second Year

### Fall Semester

Course Name	Code	Units	GPA	Pre-requisite
Financing, Valuation, & Venture Capital	EFIN 533	3(6+0)	Incl	EFIN 515
Blockchain Innovation & Digital Currencies	EMIS 535	3(6+0)	Incl	EMIS 516
Elective (1)	-----	3(6+0)	Incl	
Elective (2)	-----	3(6+0)	Incl	
<b>Total Credit Hours</b>		<b>12 hours</b>		

### Spring Semester

Course Name	Code	Units	GPA	Pre-requisite
Project	EFIN 598	6(12+0)	Excl	
<b>Total Credit Hours</b>		<b>6 hours</b>		

# Curriculum Structure and Study Plan

## Elective Courses

Students must complete 6 credit hours from the list below. Electives are grouped by theme so participants can tailor the degree to their career goals\*.

### Electives

#### Finance Courses

Course Name	Code	Units	GPA	Pre-requisite
Financial Innovation Leadership & Strategy	EFIN 551	3(3+0)	Incl	
Real Estate & PropTech	EFIN 552	3(6+0)	Incl	EFIN 515
Insurance & InsurTech	EFIN 553	3(6+0)	Incl	EFIN 527
Behavioral Finance	EFIN 554	3(3+0)	Incl	EFIN 524
Case Studies in Financial Innovation	EFIN 555	3(6+0)	Incl	EFIN 515
Sustainable Finance	EFIN 556	3(3+0)	Incl	EFIN 515
Entrepreneurial Finance	EFIN 557	3(3+0)	Incl	EFIN 515

#### MIS Courses

Course Name	Code	Units	GPA	Pre-requisite
Big Data in Finance	EMIS 558	3(6+0)	Incl	EMIS 516
Algorithmic Trading & Financial Innovation	EMIS 559	3(6+0)	Incl	EMIS 516

\*Elective course offerings may vary from term to term and are contingent on instructor and seat availability.

# Course Description

**EFIN  
514**



## The Financial Innovation Ecosystem

This course introduces core financial principles while highlighting the impact of ongoing innovation. Students will examine key participants in the financial-innovation ecosystem—including financial institutions, monetary and financial systems, capital markets, and regulatory authorities. The syllabus also addresses strategic approaches to reshaping banking and financial services through innovation, assesses leading trends and the opportunities they create, and analyzes ways current financial products can be enhanced by these advances.

**EFIN  
515**



## Corporate Finance & Modeling

This course deepens students' grasp of how corporate finance principles and financial modeling are applied in the fintech environment. It begins with an overview of financial statements and introductory modeling techniques, then moves on to critical topics such as capital-market imperfections and the risk-management strategies. The course also examines corporate policy and strategic decision-making. Students will learn how to value debt and equity instruments and evaluate methods companies employ to shape external perceptions of their performance.

**EMIS  
516**



## Data Management for Finance

This course treats data as a strategic asset for finance and fintech, showing how high-quality, well-governed data drives sound decisions and sparks innovation. Students learn the essentials of enterprise-wide data management—metadata, lifecycle planning, risk control—along with hands-on skills in conceptual modeling, table design, and SQL for relational databases. The syllabus also covers data governance and security principles, enabling students to build frameworks that protect integrity, ensure regulatory compliance, and maintain trust across financial operations.

**EFIN  
524**



## Financial Innovation, Money, & Investments

This course surveys the new landscape of money, payments, and investment driven by financial innovation. Students learn how technology is reshaping banking and money creation, then move to capital-market essentials—stock and bond investing, modern portfolio theory, risk-return trade-offs, and passive versus active strategies. Emphasis is placed on the shift from traditional annual-report analysis to data-driven portfolio.

# Course Description

EMIS  
525



Enterprise  
Systems & IT  
Infrastructure  
for Finance

This course explores the foundational enterprise systems and IT infrastructure essential for driving innovation in the financial industry. Designed for future leaders, it covers key topics such as network & system architecture, databases, cybersecurity, and cloud computing. Students will learn to assess their organizations' IT maturity and capabilities, enabling them to make informed investment decisions regarding financial innovations. Through case studies and hands-on projects, students will gain practical skills to align IT infrastructure with innovative financial solutions.

EMIS  
526



AI & Machine  
Learning for  
Financial  
Applications

This course explores the transformative role of artificial intelligence (AI) and machine learning (ML) in the financial industry. The course emphasizes practical applications, including financial forecasting, algorithmic trading, robo-advising systems, regulatory compliance monitoring, and fraud detection mechanisms. Through hands-on projects and case studies, students will acquire practical skills to implement AI and ML solutions that drive financial innovation, enhance decision-making, and create competitive advantages in the evolving landscape of financial technology.

EFIN  
527



Financial Risk  
Management &  
Compliance

This course surveys the full spectrum of risks confronting today's financial industry and shows how to measure and manage them amid rapid product and service innovation. Students examine traditional and emerging threats while learning analytical tools and risk-management frameworks. The syllabus also traces the evolution of money from conventional banking to cryptocurrencies and modern payment rails, and reviews current practices in liquidity, wealth and investment management, robo-advisory services, and supply-chain finance.

EFIN  
533



Financing,  
Valuation, &  
Venture Capital

This course equips students with the tools and methodologies for corporate valuation and capital raising. Participants will explore the financing pathways startups follow to secure various funding sources and apply multiple valuation models in practice. They will learn to assess businesses at every stage—from venture-backed startups to mature enterprises—using both top-down market analysis and bottom-up company fundamentals. The curriculum also covers valuation techniques for mergers and acquisitions.



# Course Description

**EMIS  
535**



**Blockchain  
Innovation &  
Digital  
Currencies**

This course provides a comprehensive understanding of blockchain technology and its transformative potential in today's digital landscape. Students will explore the foundational concepts of blockchain, including the core value propositions. The course covers key platforms such as Bitcoin, addressing their challenges and contemporary solutions. Additionally, students will gain insights into raising capital and valuing assets within the token-based economy, equipping them with the knowledge to navigate and leverage blockchain applications effectively.

**EFIN  
551**



**Financial  
Innovation  
Leadership &  
Strategy**

This course aims in developing students' ability to contribute effectively to the strategic financial management of innovations through objective analysis, critical evaluation, and implementation of change management. This course provides a framework for leaders to analyze, develop, and implement strategies for financial innovations both in growing and established entities. The course will comprise mainly of case studies and discussion. Students will utilize fundamental concepts learned to analyze real-world financial problems and recommend solutions.

**EFIN  
552**



**Real Estate &  
PropTech**

This course delves into cutting-edge developments in real estate, spotlighting PropTech tools and digital platforms. Students will master core concepts and analytical techniques used in valuing and financing both commercial and residential properties, while comparing real-estate assets to traditional securities. Topics include the rise of PropTech solutions—such as asset tokenization for trading on digital marketplaces—alongside best practices in land management, development, REITs, financing, and brokerage.

**EFIN  
553**



**Insurance &  
InsurTech**

This course equips students with the tools and methodologies for corporate valuation and capital raising. Participants will explore the financing pathways startups follow to secure various funding sources and apply multiple valuation models in practice. They will learn to assess businesses at every stage—from venture-backed startups to mature enterprises—using both top-down market analysis and bottom-up company fundamentals. The curriculum also covers valuation techniques for mergers and acquisitions.



# Course Description

EFIN  
554



## Behavioral Finance

This course demystifies puzzling patterns in asset prices and corporate finance by applying behavioral-finance theory. Students examine how psychological forces—cognitive biases, heuristics, prospect theory, and emotional drivers—influence investors and shape market behavior. By blending behavioral insights with emerging financial innovations, the course trains participants to spot new opportunities and anticipate risks in a rapidly evolving marketplace, equipping them to craft inventive strategies that lead to better financial decisions and outcomes.

EFIN  
555



## Case Studies in Financial Innovation

In this course, students analyze real-world case studies showcasing a range of financial innovations across the industry. Each case bridges theory and practice, revealing how core concepts translate into everyday business settings. By working through these examples, participants will put into action the skills they have built throughout the program viewed through an innovation lens. The course also offers a platform to refine the teamwork and communication abilities essential for applying financial expertise within dynamic, innovation-driven organizations

EFIN  
556



## Sustainable Finance

This course introduces the core principles that explain why sustainability has become a critical element in investment decisions. As portfolio managers, corporate leaders, and market participants increasingly focus on (ESG) factors, they must understand how these metrics influence different financial sectors, evaluate expected returns, and assess sustainability-related risks. The course explores ESG reporting frameworks, the fiduciary duties of investors, and practical methods for embedding environmental and social considerations into the investment process.

EFIN  
557



## Entrepreneurial Finance

This course examines the financing landscape that entrepreneurs encounter at every stage—from seed and start-up to growth and management buyout. Students learn how to identify, secure, and evaluate funding sources such as angel investors, venture-capital firms, and alternative capital providers. The curriculum covers key valuation methodologies and highlights the negotiations and challenges that can arise when determining a company's price. Throughout the term, real-world case studies illustrate the practical issues and strategic decisions integral to entrepreneurial finance.

# Course Description

**EMIS  
558**



**Big Data in  
Finance**

This course delves into the dynamic intersection of large datasets, cutting-edge empirical techniques, and behavioral finance insights reshaping contemporary financial decision-making. The course spotlights rapid developments in credit analytics and asset management, guiding students through the creation of empirical models to illustrate critical concepts. By exploring supply, demand, and regulatory facets, learners gain practical insights into leveraging data-driven strategies for more efficient financial outcomes.

**EMIS  
559**



**Algorithmic  
Trading &  
Financial  
Innovation**

This course explores the intersection of algorithmic trading and financial innovation, focusing on how technology transforms trading strategies in today's markets. Students will learn the fundamentals of algorithmic trading. The course emphasizes the role of big data, machine learning, and artificial intelligence in optimizing trading performance. Through practical exercises and case studies, students will gain hands-on experience in building and testing trading algorithms, equipping them with the skills to navigate and innovate within the evolving landscape of financial markets.

**EFIN  
595**



**Project**

Students will complete a project that critically analyzes the financial-services landscape, focusing on both current trends and emerging innovations likely to disrupt the industry. Each student must select a specific trend or future innovation that interests them, then design an innovation roadmap or business model and perform the necessary financial analysis to support it. Students will (1) craft an innovation roadmap or disruptive business model—using tools such as the Business Model Canvas or Lean-Start-Up framework—and (2) produce a rigorous financial analysis.



**For Further Information Contact Us:**

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