ISM UNIVERSITY OF MANAGEMENT AND ECONOMICS

APPROVED BY
THE STUDY COMMISSION
Minutes No. 02-12-2025-13
as of 26th August 2025

FINTECH ECOSYSTEM AND MANAGEMENT

Course code	*FIN127*
Compulsory in the programmes	---
Level of studies	*Undergraduate*
Number of credits	*6 ECTS (48 in-class hours + 6 consultation hours + 2 exam hours, 106 individual work hours)*
Course coordinator (title and name)	*Assoc. Prof. Silviu Ursu, silurs@faculty.ism.lt*
Prerequisites	*Principles of Finance*
Language of instruction	*English*

THE AIM OF THE COURSE:

This course aims to provide students with an overview of ***FinTech*, the area where finance intersects with information technology**, within the perpetually relevant context of analyzing and understanding financial markets and institutions from both a historical and functional perspective. Finance and technology have had a long history of mutual reinforcement, but only since the Global Financial Crisis of 2008 technological and regulatory developments have started to dramatically change the nature of financial markets and institutions and the way financial services and products are delivered. FinTech is not a new concept, but only now, the unprecedented transformation – the ***revolution in finance*** around the world makes it mainstream.
Therefore, this course is designed to get students familiar to the main notions and concepts specific to the financial institutions and markets in financial instruments in the 21st century, with an emphasis on the innovative technology and mobile applications developed by the entrepreneurial community and increasingly integrated into the existing financial system.
Upon completion, students will have an understanding of the range of financial services and products in the marketplace, new services and products, financial technology, regulation of financial markets with relevance to new FinTech, how new startups are financed, social issues around new FinTech and possible future developments. Understanding FinTech will help students make sense of the new wave of change as it happens.

MAPPING OF COURSE LEVEL LEARNING OUTCOMES (OBJECTIVES) WITH DEGREE LEVEL LEARNING OBJECTIVES (See Annex), ASSESMENT AND TEACHING METHODS

Course level learning outcomes (objectives)	Degree level learning objectives (Number of LO)	Assessment methods	Teaching methods
CLO1. Describe FinTech, current and prospective technology related to financial products and services	BLO1.1, ELO1.1	Final exam, quizzes, group work	Lectures, seminars, self-study
CLO2. Describe FinTech applications to payments, bank lending, derivatives, financial regulation, financing of startups and investment management	BLO1.1, ELO1.1 BLO1.2, ELO1.2	Final exam, quizzes, group work	Lectures, seminars, self-study
CLO3. Analyze and reflect critically on the FinTech ecosystem based on the recent financial news articles, assigned readings, cases and relevant research in finance	BLO1.2, ELO1.2 BLO4.2, ELO4.2 BLO4.3, ELO4.3	Final exam, quizzes, group work	Lectures, seminars, self-study

ACADEMIC HONESTY AND INTEGRITY

The ISM University of Management and Economics Code of Ethics, including cheating and plagiarism are fully applicable and will be strictly enforced in the course. Academic dishonesty, and cheating can and will lead to a report to the ISM Committee of Ethics. With regard to remote learning, ISM remind students that they are expected to adhere and maintain the same academic honesty and integrity that they would in a classroom setting.

COURSE OUTLINE

Topic	In-class hours	Readings
Introduction to FinTech and Course Outline An Overview of Finance, Financial Markets, Financial Institutions, Financial Products, Financial Services, Financial Innovation and Financial Technology (FinTech from 1.0 to 4.0)	4	[1], [3], [5]
FinTech and the Remaking of Money Payments, Cryptocurrencies and Distributed Ledger Technology	4	[4], [5]
FinTech and Financial Institutions Digital Banks and FinTech in Bank Lending	4	[4], [5]
FinTech and Financial Markets Underwriting, Trading and Valuation of Financial Securities	8	[4], [5]
FinTech and Startup Financing Angel Investing, Venture Capital, Accelerators, ICO, Crowdfunding and P2P Lending	4	[4], [5]
FinTech in Investment Management: Big Data, Artificial Intelligence, and Machine Learning Text Analytics, Natural Language Processing, Robo-Advisory Services, Algorithmic Trading	8	[1], [2]
Financial Regulation, FinTech and RegTech	8	[3], [4], [5]
FinTech in a Global Setting	8	[3], [4], [5]
	Total: 48 hours	
CONSULTATIONS	6	
FINAL EXAM	2	

FINAL GRADE COMPOSITION

Type of assignment	**%**
Group Components	***40***
Written Group Project	30
Presentation of Group Project	10
Individual Components	***60***
Quizzes	10
Final Examination	50
Total:	**100**

DESCRIPTION AND GRADING CRITERIA OF EACH ASSIGNMENT

Group work

There will be one formal group work during the course that counts towards 40% of the final grade. Each group (of up to 5 people) turns in a single copy of its work with the names of all contributing members listed and then presents it to the entire class (according to a schedule agreed during the course). The presentation should take 20 minutes and will be followed by questions and discussion.

Assessment requirements, procedures, and other important regulations may be communicated verbally during lectures. Failure to attend a lecture where such information is provided does not exempt the student from the responsibility to comply with these requirements.

Examinations

There will be two quizzes (during the course) and one written examination (at the end of the course) that count towards 60% of the final grade – 10% (quizzes) and 50% (final exam). Quizzes consist of multiple-choice questions only and are closed book (students are allowed to bring calculators). Final examination consists of open questions and/or multiple-choice questions (both theory and quantitative) that cover the contents of the whole course. A part of the exam addresses the issues and themes raised during the peer presentations.

NB: You must obtain at least 5.0 points (out of 10.0) for *each* assignment to be counted for the total score.

RETAKE POLICY

Students are allowed to retake the exam in order to pass. The retake covers all course material and its weight is 60%. Group work cannot be rewritten / retaken but its evaluation (if positive) is not annulled.

ADDITIONAL REMARKS

Positive contributions to class are encouraged and rewarded. Consistent positive contributions will help you if you are on a grade border at the end of the course.

READINGS AND COURSE MATERIALS

All necessary readings, including research papers, articles and lecture notes will be distributed in class or via eLearning.

Recommended readings/textbooks:

[1] CFA® Program Reading 43 on *Fintech in Investment Management* (https://www.cfainstitute.org/-/media/documents/support/programs/cfa/cfa-program-level-iii-fintech-in-investment-management.ashx?la=en&hash=7E8E4B151F5FA24E1B21D3A17A3F1BE9E8F3960E)
[2] Cao, L. (ed.). (2023). *Handbook of Artificial Intelligence and Big Data Applications in Investments*. The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/ai-and-big-data-in-investments.pdf)
[3] Arner, D.W., Barberis, J., and Buckley, R.P. (2017). *FinTech and RegTech in a Nutshell, and the Future in a Sandbox*. The CFA Institute Research Foundation (https://www.cfainstitute.org/-/media/documents/article/rf-brief/rfbr-v3-n4-1.ashx)
[4] Chishti, S., and Barberis, J. (2016). *The FinTech Book. The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries*. Wiley
[5] Hill, J. (2018). *Fintech and the Remaking of Financial Institutions*. Academic Press (https://www.elsevier.com/books/fintech-and-the-remaking-of-financial-institutions/hill/978-0-12-813497-9).

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ANNEX

DEGREE LEVEL LEARNING OBJECTIVES

Learning objectives for the Bachelor of Business Management
Programmes:
International Business and Communication,
Business Management and Marketing, Finance,
Industrial Technology Management

Learning Goals	Learning Objectives
Students will be critical thinkers	BLO1.1. Students will be able to understand core concepts and methods in the business disciplines
	BLO1.2. Students will be able to conduct a contextual analysis to identify a problem associated with their discipline, to generate managerial options and propose viable solutions
Students will be socially responsible in their related discipline	BLO2.1. Students will be knowledgeable about ethics and social responsibility
Students will be technology agile	BLO3.1. Students will demonstrate proficiency in common business software packages
	BLO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	BLO4.1. Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	BLO4.2. Students will be able to convey their ideas effectively through an oral presentation
	BLO4.3. Students will be able to convey their ideas effectively in a written paper

Learning objectives for the Bachelor of Social Science
Programmes:
Economics and Data Analytics,
Economics and Politics

Learning Goals	Learning Objectives
Students will be critical thinkers	ELO1.1. Students will be able to understand core concepts and methods in the key economics disciplines
	ELO1.2. Students will be able to identify underlying assumptions and logical consistency of causal statements
Students will have skills to employ economic thought for the common good	ELO2.1.Students will have a keen sense of ethical criteria for practical problem-solving
Students will be technology agile	ELO3.1. Students will demonstrate proficiency in common business software packages
	ELO3.2. Students will be able to make decisions using appropriate IT tools
Students will be effective communicators	ELO4.1.Students will be able to communicate reasonably in different settings according to target audience tasks and situations
	ELO4.2.Students will be able to convey their ideas effectively through an oral presentation
	ELO4.3. Students will be able to convey their ideas effectively in a written paper