



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Financial Technologies (FinTech)	

Academic staff	Core academic unit(s)
Coordinating: lect. Lukas Jakubonis Other:	Business School, Saulėtekis av. 22, Vilnius

Study cycle	Type of the course unit
First	Individual

Mode of delivery	Semester or period when it is delivered	Language of instruction
Blended	Spring (2nd, 4th, 6th semester)	English

Requisites	
Prerequisites:	Co-requisites (if relevant):

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	130	50	80

Purpose of the course unit		
<p>Students are introduced to the characteristics of modern financial technologies, their main fields, distinctions, advantages, and disadvantages. The course aims to teach students to identify financial services based on financial technologies, understand the requirements for such services, and recognize their business advantages. As integration and globalization processes expand, the role of financial technologies continues to grow. New forms of electronic money are emerging, transforming the financial sector in a broad sense. New financial service models are being developed, based on cooperation, peer-to-peer financial services, artificial intelligence, blockchain technologies, and other innovative approaches.</p>		
Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
<p>Upon successful completion of this course, students will be able to:</p> <ul style="list-style-type: none"> Demonstrate comprehensive knowledge of financial technologies and apply this knowledge in practical contexts. 	<p>Lectures, presentations of practical and theoretical situations, case analysis, individual and group assignments simulating real-life scenarios, and methods of practical application.</p>	<p>Midterm assessment: creativity, accuracy of data interpretation, correctness, fulfillment of requirements, and situation analysis.</p> <p>Final exam: correct answers to test questions.</p>

<ul style="list-style-type: none"> • Recognize and explain the integral relationship between financial technologies and traditional financial services. • Identify and evaluate opportunities for applying financial technologies in business and everyday operations. • Distinguish between various financial services and analyze their regulatory frameworks. • Critically assess emerging innovations and technologies shaping the contemporary financial landscape. 		
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Content	Contact hours							Individual work: time and assignments	
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
1. Introduction to Financial Technologies Financial technologies (electronic payments, digital accounts, ATMs, e-commerce, global payment networks, online banking, mobile payments). The latest trends in the FinTech sector, future prospects, and potential challenges.	8		6				14	10	Practical Work: Knowledge assessment in the form of questions and answers.
2. Overview of the Legal Regulation of the Financial Sector Supervision of the financial market in Lithuania (regulation and supervision of banking activities, prevention of money laundering and terrorism financing). The Single Euro Payments Area (SEPA) – a framework for standardized euro payments across Europe.	4		2				6	10	Practical Work: Analysis of Lithuanian legal acts.
3. Blockchain and Cryptocurrency Technologies Cryptographic functions (cryptographic hash function), public and private key cryptography, and proof-of-work mechanisms. The history, concept, and	4		2				6	15	Practical Work: Comparison and analysis of blockchain regulation in

implementation of cryptocurrencies. Cryptocurrency mining, smart contracts, and other key features of cryptocurrencies.									Lithuania and worldwide.
Preparation for the Midterm Assessment		1					1		
4. Payment (PayTech) and Credit Market Technologies and Innovations Dominant models and innovations in payment and credit market technologies. Overview of leading companies and their distinctive features.	5		2				7	15	Practical Work: Test.
5. Insurance and Asset Management Technologies and Innovations (InsurTech, WealthTech) Dominant models and innovations in insurance and asset management technologies. Overview of leading companies and their distinctive characteristics.	5		2				7	15	Practical Work: Test.
6. Machine Learning and Artificial Intelligence Exploration of the applications of machine learning and artificial intelligence within the FinTech sector. Analysis of best practices, implementation strategies, and leading technological solutions.	6		2				8	15	Practical Work: Scenarios of applying machine learning and artificial intelligence in business.
Preparation for and Completion of the Final Examination		1					1		
Total	32	2	16				50	80	

Assessment strategy	Weight %	Deadline	Assessment criteria
Practical Group Independent Work – Presentation	60	At the end of the course	Students will be evaluated based on their creativity, accuracy of data interpretation, correctness, fulfillment of requirements, ability to analyze situations, teamwork, contribution to group tasks, and final presentation. Cumulative Assessment: Team-based independent work – 60%, Final examination – 40%.
Examination	40	Upon completion of the entire course	Students will be evaluated on their understanding and assimilation of theoretical and practical material presented during lectures, assessed through a test. Cumulative Assessment: Team-based independent work – 60%, Final examination – 40%.

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
https://finmin.lrv.lt/uploads/finmin/documents/files/2023-2028%20FINTECH%20strategy%20of%20Lithuania.pdf	2023	THE FINTECH STRATEGY OF LITHUANIA		Ministry of Finance of the Republic of Lithuania
The European Parliament and the Council	2023	Regulation (EU) 2023/1114 of 31 May 2023 on Markets in Crypto-Assets (MiCA), amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937.		https://eur-lex.europa.eu/legal-content/LT/TXT/?uri=CELEX:02023R1114-20240109
https://www.coindesk.com/information/what-is-blockchain-technology	2017	What is Blockchain Technology?		Coindesk
Bank of Lithuania	2024	Letter of Expectations to Crypto-Asset Service Providers		Bank of Lithuania https://www.lb.lt/uploads/documents/files/LB%20lukesciu%20rastas%20kriptoturto%20paslaugu%20teikėjams%20ruosiantis%20MiCA-1.pdf
Recommended reading				
USA FINANCIAL INQUIRY COMMISSION	2011	THE FINANCIAL CRISIS INQUIRY REPORT		US Government https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf
Charles Ferguson	2010	The Inside Job		https://www.youtube.com/watch?v=T2IaJwkqgPk

McKinsey and Company	2024	What is fintech?		https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-fintech
Rober T. Kiyosaki, Sharon Lechter	1997	Rich Dad Poor Dad		
Benjamin Graham	1949	The Intelligent Investor		