INFORMATION AND COMMUNICATION TECHNOLOGIES IN FINANCE

Credit points	4 CP
Duration of the course	5 sem.
Study course annotation	The course is designed offer insights into modern information and communication technology (ICT) and the use of the Internet to promote the financial functions of local and international organisations. The course provides theoretical knowledge that allows students to understand the impact of modern technology on the financial sector, learn terminology and gain practical skills. The course will cover concepts such as artificial intelligence (AI), Big Data Analysis, IoT, locking circuits, cybersecurity.
Aim of the study course	The aim of the academic discipline is to develop the skills of using information and communication technology, which are necessary for modern financial experts.

Study course results	Knowledge	Skills	Competences
	• Definition, development, impact and use of artificial intelligence in finance and accounting; • Analysis of big data and its integration into financial and management accounting, • Defining and using blockchains in finance, • Enterprise Resource Planning Systems (ERP); • Cyber security, AML policies and personal data protection principles.	• • use ICT knowledge for effective financial management; • • use specialised software, tools and instruments in the daily activities of a financial expert; • • be able to prepare reports using the advantages of ICT; • • be able to systematise and analyse financial information; • • be able to assess, forecast, control financial activities and risks using information and communication technology.	• • able to systematise and select financial information using ICT processing methods; • • able to use ICT and applications in the preparation of financial information; • • able to provide information systems security principles; • • able to apply their knowledge in practical activities.

Study course content	Topics	
	1	Introduction to digital technology environment
	2	Business intelligence in the financial sector. Artificial Intelligence. Business Intelligence in the Financial Sector
	3	Big data. Data analysis.
	4	E-Finance Big Data Analysis. Analysis of Big Data in E-Finance
	5	Blockchains and IoT technology in the financial sector
	6	Enterprise Resource Planning (ERP) Process and information flow optimisation in the enterprise. ERP risks and benefits.
	7	Cyber security, personal data protection and anti-money laundering
	8	Group tasks. Practicum
Form of assessment:	Exam	

Obligatory literature:
1. 4. O'Brein J.A and Marakas G.M (2010), Enterprise Information System, New York, MCGraw Hill
2. Blockchain. A Practical Guide to Developing Business, Law, and Technology Solutions / Joseph J. Bambara, Paul R. Allen. - New York: McGraw Hill Education, 2018. - 321 p.
Additional reading:
1. Law of the Republic of Latvia "On Prevention of Money Laundering and Terrorism and Proliferation Financing" Entry into force: 13.08.2008.
2. Law of the Republic of Latvia "On Personal Data Processing" Entry into force: 05.07.2018
3. E-Finance https://www.academia.edu/33333402/ Complete_Lecture_Notes_for_MBFT_615_E-Finance.pdf
4. Robert Slow (1987), ICT and the Future of Financial Service
5. Yishan Zh, Niklow C (2011), ICT Goverrnance in the United Nations System Organisation, United Nations, Geneva 2011
6. Yekini Nureni Asafe (2014), Information Communication Technology https://www.researchgate.net/publication/297403818
Other sources of information:
1. Report of European E-business Market Watch, 4 (2002)
2. Spanos Y.E, Prastacos (2002), The Relationship Between Information and Communication Technology Adoption and Management, International Journal of Information and Management
3. Latvian Information and Communication Technology Association https://likta.lv/ NASSCOM.Org
4. 5. BIA library databases: EBSCO, SCOPUS
Changes and additions to the program and literature list are possible during the study process