



COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Smart economy and new value creation	

Academic staff	Core academic unit(s)
Coordinating: Assistant. Prof. Dr Singh Devesh	Vilnius University, Faculty of Economics and Business Administration
Other:	

Study cycle	Type of the course unit
First cycle	Elective

Mode of delivery	Semester or period when it is delivered	Language of instruction
Remote	Spring semester	English

Requisites	
Prerequisites:	Co-requisites (if relevant):

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
5	130	48	82

Purpose of the course unit			
The subject objective is to develop students' ability to analyse and evaluate the processes of new economic transitions. After completing the course, students acquire the following competencies:			
<ul style="list-style-type: none"> -Gain essential skills for the modern job market, digital literacy and understand how technology drives innovation and economic growth. -Build an analytic toolkit for the analysis of complex processes which involve the application of digital solutions. -Able to present an informed scientific opinion in the public debate concerning the role of digitalisation in society. 			

Learning outcomes of the course unit	Teaching and learning methods	Assessment methods
Chapter 1: Students will understand emerging digital trends and the importance of the Industrial Revolution in the past, present, and future.	Lecture, active learning methods, situation analysis, critical reading, discussion, arguments for and against.	Discussion and Presentation
Chapter 2: Students will be able to understand new technology trends and communicate effectively using technical vocabulary.	Lecture, active learning methods, situation analysis, critical reading, discussion, arguments for and against.	Discussion and Presentation
Chapter 3: Students will be able to understand complex relationships between various participants in smart economies.	Lecture, active learning methods, situation analysis, critical reading, discussion, arguments for and against.	Discussion and Presentation

Chapter 4-5: Students will be able to understand the gaps in existing digital economy indicators and how to capture the digital economy.	Lecture, active learning methods, situation analysis, critical reading, arguments for and against.	Report, 2500 words
Chapter 6: Students will be able to identify the moderators of the smart economy. Develop critical thinking skills, understand how economic events affect them, and become informed citizens prepared for the future job market.	Lecture, active learning methods, situation analysis, critical reading, discussion, arguments for and against.	Report, 2500 words

Content	Contact hours						Individual work: time and assignments		
	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
Chapter 1 Smart Economy Introduction. In this chapter, we will learn about the: ◦ Evolution of the smart economy ◦ Main component of smart economy	4						4	8	Understanding the Digital Revolution and its Influences, Chapter 2
Chapter 2 Value creation in the new industrial revolution In this chapter, we will learn about the: ◦ Digital Technologies as Catalysts for Value Creation ◦ Additive Manufacturing. ◦ Cyber-Physical Systems (SCPS). ◦ Big Data. ◦ Extended, Virtual, and Mixed Reality. ◦ Digital Twins. ◦ 6G technology and beyond. ◦ IoT (Internet of Things). ◦ Blockchain. ◦ Cloud Computing ◦ Artificial Intelligence ◦ Collaborative Robots (Cobots) ◦ Edge computing	6		4				10	16	Digital Economy Value Creation and Capture, Chapter 1
Chapter 3 Drivers of Smart Economy In this chapter, we will learn about the: ◦ Importance of digital platform in the smart economy ◦ The central role of data and digital intelligence in the digital economy ◦ The economic value of data ◦ Role of citizens in a smart economy ◦ Smart cities	5		2				7	13	Digital Economy Value Creation and Capture, Chapter 2
Chapter 4 Measuring value in the smart economy In this chapter, we will learn about the challenges that occurred in the smart economy.	5		2				7	13	Toolkit for Measuring Digital Economy, Chapter 3

◦Role of businesses ◦Role of new Society 5.0 in smart economy									
Chapter 5 Smart economy value creation In this chapter, we will learn about the: ◦Digital platforms and their global reach ◦Market concentration dynamics ◦Digital data and the global value chain ◦Digital platform and taxes ◦Digital platforms' impact on employment	6	4				10	16	Digital Economy Value Creation and Capture, Chapter 4	
Chapter 6 Policies aimed at smart economy value creation In this chapter, we will learn about the: ◦National policies for creating and capturing value in the digital economy ◦Data policies for capturing values	6	4				10	14	Digital Economy Value Creation and Capture, Chapter 6	
Total	32		16			48	82		

Assessment strategy	Weight %	Deadline	Assessment criteria
Presentation	30 %	March	<p>Presentation consists of group assignments in two parts: (1) Presentation – 15%, and (2) Active participation 15%. The presentation assessment criteria are the following: clear presentation of the ideas, the quality of argumentation and conclusions, and the quality of visually presented materials. Active participation refers to raising questions, joining the discussion. The quality of raised questions and arguments in a discussion.</p> <p>Individual/group assignments (practical assignments and tasks). Assessment criteria:</p> <p>10 points. Questions answered comprehensively, summarised knowledge demonstrated, insights from theoretical literature used, ability to evaluate critically demonstrated, and tasks completed correctly.</p> <p>9 points. The essence of the questions was revealed, summarised knowledge was demonstrated, reasons were explained, and tasks were completed correctly.</p> <p>8 points. Demonstrated coherent knowledge and understanding: essential parts are linked and integrated into a whole, tasks are completed with minor errors.</p> <p>7 points. Multi-structured knowledge demonstrated: focus on several important aspects, but not all of them are properly linked, and tasks are completed with errors.</p> <p>6 points. Demonstrated multi-structured knowledge: focused on several important aspects, but they are not linked together, and tasks are completed with errors.</p> <p>5 points. Demonstrated single-structured knowledge: answers focused on one aspect, answers based on listing facts, and tasks are completed with errors.</p> <p>4–0 points. Minimum requirements not met, inappropriate or incorrect facts used, incorrect answers or no answers to questions, tasks not completed.</p>
Discussion	30%	April	An online discussion will be organised between the two groups: 1) 1st group speaks in support of the topic, and 2) 2nd group against the topic. Evaluation will be based on the quality of argumentation and conclusions, raising questions, and joining the discussion. Assessment criteria:

			<p>10 points. Questions answered comprehensively, summarised knowledge demonstrated, insights from theoretical literature used, ability to evaluate critically demonstrated, and tasks completed correctly.</p> <p>9 points. The essence of the questions was revealed, summarised knowledge was demonstrated, reasons were explained, and tasks were completed correctly.</p> <p>8 points. Demonstrated coherent knowledge and understanding: essential parts are linked and integrated into a whole, tasks are completed with minor errors.</p> <p>7 points. Multi-structured knowledge demonstrated: focus on several important aspects, but not all of them are properly linked, and tasks are completed with errors.</p> <p>6 points. Demonstrated multi-structured knowledge: focused on several important aspects, but they are not linked together, and tasks are completed with errors.</p> <p>5 points. Demonstrated single-structured knowledge: answers focused on one aspect, answers based on listing facts, and tasks are completed with errors.</p> <p>4-0 points. Minimum requirements not met, inappropriate or incorrect facts used, incorrect answers or no answers to questions, tasks not completed.</p> <p>The number of points scored by the student is multiplied by 30%.</p>
Report	40%	May	<p>Group assignments (practical assignments and tasks). Assessment criteria:</p> <p>10 points. Questions answered comprehensively, summarised knowledge demonstrated, insights from theoretical literature used, ability to evaluate critically demonstrated, and tasks completed correctly.</p> <p>9 points. The essence of the questions was revealed, summarised knowledge was demonstrated, reasons were explained, and tasks were completed correctly.</p> <p>8 points. Demonstrated coherent knowledge and understanding: essential parts are linked and integrated into a whole, tasks are completed with minor errors.</p> <p>7 points. Multi-structured knowledge demonstrated: focus on several important aspects, but not all of them are properly linked, and tasks are completed with errors.</p> <p>6 points. Demonstrated multi-structured knowledge: focused on several important aspects, but they are not linked together, and tasks are completed with errors.</p> <p>5 points. Demonstrated single-structured knowledge: answers focused on one aspect, answers based on listing facts, and tasks are completed with errors.</p> <p>4-0 points. Minimum requirements not met, inappropriate or incorrect facts used, incorrect answers or no answers to questions, tasks not completed.</p> <p>The number of points scored by the student is multiplied by 40%.</p>
<p>A student's knowledge and skills are assessed during the exam session only when he/she have fulfilled the requirements for the assessments and completed all tasks during the semester. Failure to complete the tasks within the specified time will result in a 2-point reduction in their grade. The student's knowledge and skills are assessed with grades from 1 to 10. The course has been passed if:- The results of all tasks and exams are at least 5.</p> <p>- The examination grade is at least 5. The results of the midterm exam are published in the MOODLE (https://emokymai.vu.lt/). The final grade for the subject is published no later than 10 days after the examination (MOODLE, https://emokymai.vu.lt/). The use of AI generative models is prohibited in the learning process when performing tasks. AI generative models cannot be used for the completion of a task. For the external examination, the following formula is applied: Presentation – 40%. Report – 60%, submit on the agreed date.</p>			

Author (-s)	Publishing year	Title	Issue of a periodical or volume of a publication	Publishing house or web link
Required reading				
United Nations Conference on Trade and Development	2019	Digital Economy Value Creation and Capture	2019	UNCTAD https://unctad.org/publication/digital-economy-report-2019
Yuxin Yu; Yanqing Jiang	2024	Understanding the Digital Revolution and its Influences	1st	Springer Nature Singapore
G20	2018	Toolkit for Measuring Digital Economy		Digital Economy Task Force https://www.itu.int/en/ITU-D/Statistics/Documents/g20-deft-toolkit_FINAL.pdf