1- EDUCATIONAL PROGRAM

Digital economy (Bachelor's degree). Director of the educational programme - V.Lazorenko, PhD in Economics, Senior Lecturer, Deputy Dean of FIT for Educational Work

1- GENERAL INFORMATION	
Full name of HEI and structural subdivision	State University of Trade and Economics, Faculty of Information Technology, Department of Digital Economics and Systems Analysis
Higher education level and qualification name in the original language	The first (bachelor's) level of higher education Qualification - Bachelor of Economics
Field of study	C Social Sciences, Journalism and Information
Subject Area	C1 Economics
Name of educational program	Digital Economics
Restrictions on Modes of Study	There are no restrictions
Compliance with the higher education standard of the Ministry of Education and Science of Ukraine	Meets the standards of higher education of the Ministry of Education and Science of Ukraine (order No. 1244 of 11/13/2018)
Diploma Type and Educational Program Volume	Bachelor's degree, single. The volume of the educational and professional program is 240 ECTS credits. The normative term of preparation is 3 years and 10 months
Accreditation availability	Certificate of accreditation of the specialty UD 11015993, valid until 01.07.2026, issued by the Accreditation Commission of the Ministry of Education and Science of Ukraine.
Cycle, higher education level	NQF of Ukraine – level 6, FQ-EHEA – first cycle, EQF-LLL – level 6
Prerequisites for admission to the educational program	Availability of complete general secondary education
Language(s) of teaching	Ukrainian
Term of validity of the educational program	Until the approval of the new edition of the educational and professional program
Internet address of permanent placement of the educational program description	https://knute.edu.ua/
2- PURPOSE OF EDUCATIONAL PROGRAM	
Training bachelors in digital economics who are capable, based on mastering basic economic concepts, digital technologies, principles of modeling and creating information systems, of carrying out professional activities aimed at building models of economic objects and processes, their research and analysis in order to make	

effective business decisions

3- CHARACTERISTICS OF EDUCATIONAL PROGRAM

Subject area

Object of study and/or activity: the regularities of the functioning and development of socio-economic systems, socio-economic processes, their modeling, forecasting and regulation, motivation and behavior of economic entities.

Learning goals: training specialists who possess modern economic thinking, theoretical knowledge and practical skills necessary for solving the tasks of the subject area.

Theoretical content of the subject area: concepts, categories, concepts, principles of economic sciences**.**

Methods, techniques and technologies: general scientific methods of cognition and research activity, mathematical and statistical methods of economic analysis, economic and mathematical modeling, information and communication technologies of research, dissemination and presentation of research results.

Tools and equipment: modern information and communication equipment, information systems and software products used in professional activities.

Orientation of educational program

Educational and professional. Emphasis on the study of real economic processes in the digital space in compliance with the principles of building mathematical models and the use of information systems and their practical implementation.

Main focus of educational program

Special education in economics with the use of economic and mathematical modeling and digital technologies in economics.

Keywords: economic systems, economic processes, digital systems, digital technologies, mathematical modeling, mathematical methods, information systems, information technologies, decision making, forecasting, management, digital infrastructure, digital space.

Program features

Professional and practical training involves studying educational components that will allow you to master theoretical knowledge and practical skills in modeling and information support for managing economic systems in the digital space.

4- GRADUATES' EMPLOYABILITY AND FURTHER LEARNING

Employability

The sphere of professional activity of graduates is the study of objects and processes of the digital economy by building and analyzing economic models and their information support.

According to the classifier of professions DK 003:2010 with amendments approved by order of the Ministry of Economic Development and Trade of Ukraine dated February 15, 2019 No. 259:1226.2 Керівник структурного підрозділу (сфера захисту інформації)

2131.1 Researcher-consultant (computer systems)
2131.2 Computer communications analyst
2131.2 Computer systems analyst
2139.2 Computer applications engineer
2139.2 Information technology management expert
2419.2 Specialist in economic modeling of ecological systems
2433.1 Researcher-consultant (information analytics)
2441.2 Economist of a computing (information-computing) center
3121 Information technology specialist

Further learining

The possibility of studying at the second (master's) level of higher education. Obtaining additional qualifications in the postgraduate education system.

5- TEACHING AND ASSESSMENT
Teaching and learning
Problem-based learning, self-study, learning through practical training.
Assessment
Assessment of students' learning outcomes is carried out in accordance with the "Regulations on the Assessment of Learning Outcomes of Students and Postgraduate Students at SUTE" and provides for the following control measures: current and final control, certification. Current control is carried out during practical/laboratory classes and based on the results of completing independent work tasks. It involves assessing the theoretical preparation of students during work in seminar classes and acquired practical skills during the completion of laboratory/practical work tasks. Final control - control measures that provide for establishing compliance (measurement, evaluation) of the learning outcomes obtained by a person with the requirements of the educational program in terms of the relevant educational component, which is carried out at the university in the form of a test and exam. Student learning outcomes at SUTE are assessed on a 100-point scale, where: 60-100 points - learning outcomes that give the student the right to obtain ECTS credits; 0-59 points – unsatisfactory learning results that do not give the student the right to obtain ECTS credits.

6- PROGRAM COMPETENCIES	
Integral competence	
The ability to solve complex specialized tasks and practical problems in the economic sphere, which are characterized by the complexity and uncertainty of conditions, which involves the application of theories and methods of economic science, *digital and information technologies.*	
General competencies (GC)	
GC1	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC2	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC3	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC4	The ability to preserve moral, cultural, scientific values and multiply the

	achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC5	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC6	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC7	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC8	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC9	The ability to preserve moral, cultural, scientific values and multiply the achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and engineering, to use various types and forms of physical activity for active recreation and leading a healthy lifestyle.
GC10	The ability to be critical and self-critical.
GC11	The ability to make informed decisions.
GC12	Interpersonal skills.
GC13	The ability to act socially responsible and conscious.
GC14	The ability to make decisions and act in accordance with the principle of inadmissibility of corruption and any other manifestations of dishonesty.
Special (professional, subject) competencies (SC)	
SC1	The ability to demonstrate knowledge and understanding of the problems of the subject area, the basics of the functioning of the modern economy at the micro-, meso-, macro- and international levels.
SC2	The ability to carry out professional activities in accordance with current

	regulatory and legal acts.
SC3	Understanding the features of leading scientific schools and areas of economic science.
SC4	The ability to explain economic and social processes and phenomena based on theoretical models, analyze and meaningfully interpret the results obtained.
SC5	Understanding the features of the modern world and national economy, their institutional structure, substantiation of the directions of the state's social, economic and foreign economic policy.
SC6	The ability to apply economic and mathematical methods and models to solve economic problems.
SC7	The ability to apply computer technologies and data processing software to solve economic problems, analyze information and prepare analytical reports.
SC8	The ability to analyze and solve problems in the field of economic and social and labor relations.
SC9	The ability to predict socio-economic processes based on standard theoretical and econometric models.
SC10	The ability to use modern sources of economic, social, managerial, accounting information to prepare official documents and analytical reports.
SC11	The ability to justify economic decisions based on an understanding of the laws of economic systems and processes and using modern methodological tools.
SC12	The ability to independently identify problems of an economic nature when analyzing specific situations, to propose ways to solve them.
SC13	The ability to conduct an economic analysis of the functioning and development of business entities, and to assess their competitiveness.
SC14	The ability to analyze problems and phenomena in one or more professional areas in depth, taking into account economic risks and possible socio-economic consequences.
SC15	*The ability to operate an information system and application software in the economic sphere.*
SC16	*The ability to design a technological process for collecting, processing and storing economic information.*
SC17	*The ability to model economic and business processes, systems, and phenomena using mathematical and computer modeling tools.*
7- PROGRAM LEARNING OUTCOMES	
1	1. To associate yourself as a member of civil society, the scientific community, recognize the rule of law, in particular in professional activities, understand and be able to exercise their rights and freedoms, show respect for the rights and freedoms of others, including members of the team.
2	2. To reproduce moral, cultural, scientific values, to increase the achievements of society in the socio-economic sphere, to promote a healthy lifestyle.
3	3. To know and use economic terminology, explain the basic concepts of micro-and macroeconomics,

4	4. To understand the principles of economic science, features of economic systems.
5	5. To apply analytical and methodological tools to substantiate proposals and make management decisions by various economic agents (individuals, households, enterprises and public authorities).
6	6. To use professional arguments to convey information, ideas, problems and ways to solve them to specialists and non-specialists in the field of economic activity.
7	7. To explain the models of socio-economic phenomena in terms of fundamental principles and knowledge based on understanding the main directions of economic science.
8	8. To apply appropriate economic and mathematical methods and models to solve economic problems.
9	9. To understand the main features of the modern world and national economy, institutional structure, areas of social, economic and foreign economic policy of the state.
10	10. To analyze the functioning and development of economic entities, to determine the functional areas, to calculate the relevant indicators that characterize the effectiveness of their activities.
11	11. To be able to analyze the processes of state and market regulation of socio-economic and labor relations.
12	12. To apply the acquired theoretical knowledge to solve practical problems and meaningfully interpret the results.
13	13. To identify sources and understand the methodology for determining and methods of obtaining socio-economic data, collect and analyze the necessary information, calculate economic and social indicators.
14	14. To identify and plan opportunities for personal professional development.
15	15. To demonstrate basic skills of creative and critical thinking in research and professional communication.
16	16. To be able to use data, provide arguments, evaluate logic critically and draw conclusions from scientific and analytical texts on economics.
17	17. To perform interdisciplinary analysis of socio-economic phenomena and problems in one or more professional areas, taking into account the risks and possible socio-economic consequences.
18	18. To use normative and legal acts regulating professional activity.
19	19. To use information and communication technologies to solve socio-economic problems, prepare and present analytical reports.
20	20. To master the skills of oral and written professional communication in state and foreign languages.
21	21. To be able to think abstractly, apply analysis and synthesis to identify key characteristics of economic systems at different levels, as well as the behavior of their subjects.
22	22. To demonstrate flexibility and adaptability in new situations, in working with new objects, and in uncertain conditions.
23	23. To demonstrate skills of independent work, demonstrate critical,

	creative, self-critical thinking.
24	24. To demonstrate the ability to act socially responsibly and consciously on the basis of ethical principles, to value and respect cultural diversity, individual differences.
25	*25. To demonstrate a solid understanding of the peculiarities of the functioning of economic systems in the digital space.*
26	*26. To carry out programming using tools in different software environments.*
27	*27. To model decision-making processes in conditions of uncertainty.*
28	*28. To develop models of business processes (organizational, functional, information and management models).*
29	*29. To develop and research economic and mathematical models of economic objects and systems in order to analyze them and improve the management system.*

8- RESOURCE PROVISION FOR PROGRAM IMPLEMENTATION

Staff support

Professionals who train bachelors in the Digital Economics educational program must have professional knowledge and professional skills in the field of mathematical modeling and (or) modern information technology.
The participation of foreign specialists and practitioners is possible in the teaching of disciplines of the training cycle.

Material and technical support

Fully complies with the Licensing requirements for conducting educational activities. For the convenience of higher education applicants, a corporate distance learning system and an automated educational process management system “MIA: Education” operate. The basis of material and technical support is made up of computer laboratories with modern hardware and software resources, which ensure high-quality training of bachelors in the educational program “Digital Economy”. The Educational and Scientific Center for Business Simulation operates and a Smart Library is operating. All conditions have been created for the training of persons with disabilities. The social and household infrastructure of SUTE is available.

Information and educational and methodological support

For each educational program at the university, an ECTS Information Package is being developed.

Each student, through his personal account of the ACS "MIA: Education", can review and form his own individual plan, view the curriculum, points earned by disciplines, class schedule, and communicate with participants in the educational process.

Programs, work programs, discipline syllabi, and assessment criteria for educational components are posted on the corporate distance learning platform.

The university's electronic repository provides full-text access to SUTE scientific and educational literature, manuscripts of qualification works and dissertations for obtaining scientific degrees.

For the convenience of higher education applicants, the university has developed a Catalog of Academic Disciplines, according to which students have the right to choose elective educational components.
9- ACADEMIC MOBILITY
National credit mobility
National credit mobility is carried out in accordance with the concluded agreements on academic mobility.
International credit mobility
International credit mobility is realized through the conclusion of agreements on international academic mobility (Erasmus +), double graduation, long-term international projects involving student education, double degree, etc.
Learning of foreign students
It is carried out in accordance with the requirements of current legislation. Conditions and features of the educational program in the context of training foreign citizens: knowledge of the Ukrainian language at a level not lower than B1.

2. LIST OF EDUCATIONAL PROGRAM COMPONENTS AND THEIR LOGICAL SEQUENCE

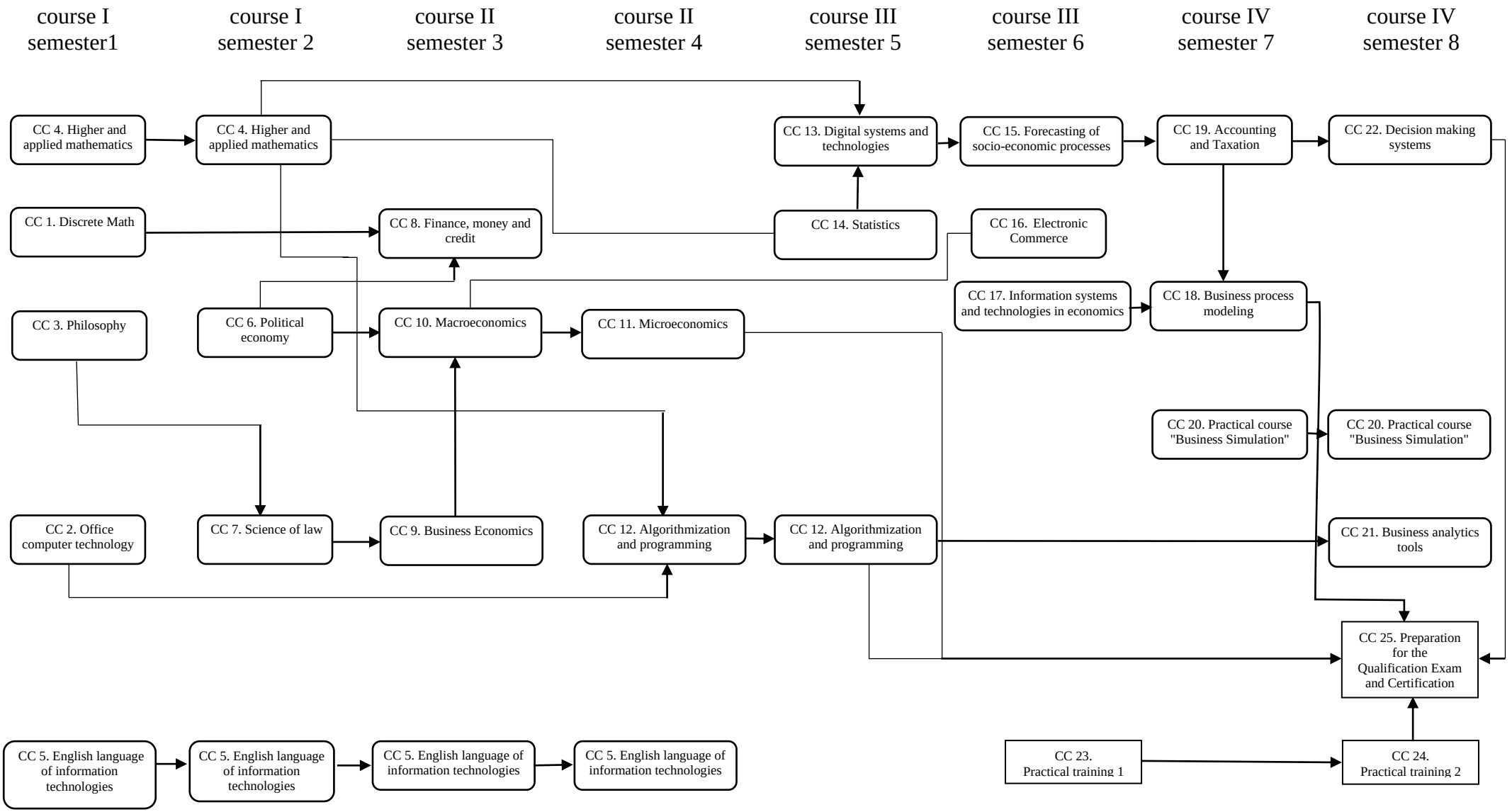
2.1 List of EP components

Code	Educational program components	ECTS credits	Control form
Compulsory components			
CC 1.	Discrete Math	6	Exam
CC 2.	Office computer technology	6	Exam
CC 3.	Philosophy	6	Exam
CC 4.	Higher and applied mathematics	12	Exam
CC 5.	English language of information technologies	24	Exam
CC 6.	Political economy	6	Exam
CC 7.	Science of law	6	Exam
CC 8.	Finance, money and credit	6	Test
CC 9.	Business Economics	6	Defense
CC 10	Microeconomics	6	Exam
CC 11	Macroeconomics	6	Exam
CC 12	Algorithmization and Programming	12	Exam
CC 13	Digital Systems and Technologies	6	Exam
CC 14	Statistics	6	Exam
CC 15	Forecasting Socio-Economic Processes	9	Exam
CC 16	Electronic Commerce	6	Exam
CC 17	Information Systems and Technologies in Economics	6	Exam
CC 18	Business Process Modeling	6	Exam
CC 19	Accounting and Taxation	6	Exam
CC 20	Practical Course "Business Simulation"	9	Exam
CC 21	Business Analytics Tools	6	Exam
CC 22	Decision-Making Systems	6	Exam
CC 23	Practical Training 1	3	Test
CC 24	Practical Training 2	6	Test
CC 25	Preparation for the Qualification Exam and Certification	3	Certification
Total amount of compulsory components:		**180**	
Elective components			
EC 1.	Educational component 1	6	Exam
EC 2.	Educational component 2	6	Exam
EC 3.	Educational component 3	6	Exam
EC 4.	Educational component 4	6	Exam
EC 5	Educational component 5	6	Exam
EC 6	Educational component 6	6	Exam
EC 7	Educational component 7	6	Exam
EC 8	Educational component 8	6	Exam
EC 9	Educational component 9	6	Exam
EC10	Educational component 10	6	Exam
Total amount of elective components:		**60**	

TOTAL VOLUME OF EDUCATIONAL PROGRAM	**240,0**	

Students choose elective academic disciplines through their personal account on the portal "MIA: Education". Descriptions of academic disciplines and their prerequisites are presented in the Catalog of Academic Disciplines of SUTE

2. 2 Structural and logical scheme of EP



3. THE FORM OF CERTIFICATION OF THE STUDENTS

Certification is carried out in the form of a qualifying exam. The qualification examination in the specialty must check the achievement of learning outcomes defined by the Standard of Higher Education and this educational program.

4. MATRIX OF COMPLIANCE WITH PROGRAM COMPETENCIES WITH COMPULSORY COMPONENTS OF THE EDUCATIONAL PROGRAM

Components / Competences	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 12	CC 22	CC 23	CC 24	CC 25
GC1.			+				+																		
GC2.			+																						
GC3.	+		+	+		+				+	+	+	+	+				+	+		+	+			
GC4.	+	+		+			+	+	+			+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC5.						+	+			+	+														+
GC6.					+																				
GC7.	+	+										+	+		+	+	+	+	+	+	+	+	+	+	+
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GC9.			+				+													+					
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GC11.							+												+	+		+			
GC12.			+		+		+															+			
GC13.			+				+																		
GC14	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
SC1.		+				+		+	+	+	+				+	+		+	+					+
SC2.							+		+																
SC3.						+				+	+														
SC4.						+			+	+	+				+	+		+	+	+					+
SC5.						+		+	+	+	+														
SC6.		+		+											+			+	+	+	+	+	+	+	+
SC7.		+										+	+		+	+	+	+		+	+	+	+	+	+
SC8.						+			+	+	+					+							+	+	+
SC9.		+													+					+			+	+	+
SC10.		+							+														+	+	+
SC11.						+		+	+	+	+				+	+	+			+		+	+	+	+
SC12.						+		+	+	+	+														+
SC13.		+						+	+						+	+				+			+	+	+
SC14.									+										+						
SC15		+										+					+	+		+	+	+	+	+	+
SC16		+														+	+			+	+		+	+	+
SC17															+			+	+	+		+	+	+	+

5. MATRIX OF PROVISION OF PROGRAM LEARNING OUTCOMES WITH COMPULSORY COMPONENTS OF THE EDUCATIONAL PROGRAM

Components Program Learning outcomes	CC 1	CC 2	CC 3	CC 4	CC 5	CC 6	CC 7	CC 8	CC 9	CC 10	CC 11	CC 12	CC 13	CC 14	CC 15	CC 16	CC 17	CC 18	CC 19	CC 20	CC 21	CC 22	CC 23	CC 24	CC 25
1			+				+																		
2			+				+																		
3						+			+	+	+														+
4						+			+	+	+				+	+	+		+						+
5						+		+	+	+	+					+	+		+	+		+	+	+	+
6			+			+			+	+	+														
7						+		+	+	+	+							+					+	+	+
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9						+	+	+		+	+					+									+
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11						+	+			+	+				+										+
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28									+								+	+					+	+	+
29															+				+			+	+	+	+

Розроблено робочою групою у складі

1. Роскладка Андрій Анатолійович – завідувач кафедри цифрової економіки та системного аналізу, доктор економічних наук, професор – керівник робочої групи

2. Герасименко Анжеліка Григорівна – проректор з науково-педагогічної роботи та міжнародних зв'язків, професор кафедри економічної теорії та конкурентної політики, доктор економічних наук, професор

3. Пурський Олег Іванович – завідувач кафедри комп'ютерних наук та інформаційних систем, доктор фізико-математичних наук, професор

4. Лазоренко Віталій Валерійович – канд. екон. наук, доцент каф. цифрової економіки та системного аналізу, гарант освітньої програми

5. Івасенко Катерина Ігорівна – студентка 4 курсу ОС бакалавр зі спеціальності 051 «Економіка» (спеціалізація «Цифрова економіка»)

Рецензії-відгуки зовнішніх стейкголдерів:

1. Далєвська Тетяна – заступник генерального директора-керівник експертної групи з питань цифрової трансформації освіти і науки директорату цифрової трансформації Міністерства освіти і науки України

2. Максим Шарафутдінов – директор з розвитку компанії «Center Research &amp Development»

Appendix

LIST OF RECOMMENDED ELECTIVE COMPONENTS

Code	Educational components	ECTS credits
EC 1	Databases and information systems	**6**
EC 2	Economics and organization of the information services market	**6**
EC 3	Economic analysis	**6**
EC 4	Simulation modeling	**6**
EC 5	History of Ukraine	**6**
EC 6	Cross-platform programming	**6**
EC 7	Machine learning	**6**
EC 8	Management	**6**
EC 9	International economics	**6**
EC10	Payment systems	**6**
EC 11	Tax system	**6**
EC 12	Risk science	**6**
EC 13	Business analytics systems in international business	**6**
EC 14	Web application development technologies	**6**
EC 15	Digital marketing technologies	**6**

Аркуш реєстрації змін

№ пор.	Дата	Пункти, до яких вносяться зміни	Ініціатор зміни	Прізвище, ім’я особи, що відповідає за внесення змін	Підпис

ЛИСТ ПОГОДЖЕННЯ

освітньо-професійної програми і навчальних планів
«Цифрова економіка»
першого (бакалаврського) рівня вищої освіти ДТЕУ

Погоджено
Перший проректор
з науково-педагогічної роботи
_____Наталія ПРИТУЛЬСЬКА

«_____»_____ 2025 р.

Погоджено
Проректор з науково-педагогічної роботи та міжнародних зв'язків
___Анжеліка ГЕРАСИМЕНКО

«_____»_____ 2025 р.

Погоджено
Начальник навчального відділу ДТЕУ

_____Сергій КАМІНСЬКИЙ
«_____»_____2025р.

Погоджено
Начальник навчально-методичного відділу ДТЕУ

_____ Тетяна БОЖКО
«_____»_____ 2025р.

Погоджено
Декан факультету інформаційних технологій ДТЕУ

_____ Олександр ХАРЧЕНКО
«_____»_____ 2025р.

Погоджено
Завідувач кафедри цифрової економіки та системного аналізу

_____Андрій РОСКЛАДКА
«_____»_____ 2025р.

Погоджено
Керівник групи забезпечення спеціальності ДТЕУ
_____Анжеліка ГЕРАСИМЕНКО
«_____»_____ 2025 р.

Погоджено
Гарант освітньої програми ДТЕУ

_____Віталій ЛАЗОРЕНКО
«_____»_____ 2025 р.

Погоджено
заступник генерального директора-керівник експертної групи з питань цифрової трансформації освіти і науки директорату цифрової трансформації Міністерства освіти і науки України
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Погоджено
Директор з розвитку компанії «Center Research & Development», бізнес-аналітик

_____Максим ШАРАФУТДІНОВ
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Погоджено
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