

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

CHERNIHIV NATIONAL UNIVERSITY OF TECHNOLOGY

EDUCATIONAL-SCIENTIFIC INSTITUTE OF ECONOMICS



EDUCATIONAL AND PROFESSIONAL PROGRAM

ECONOMICS

Of the first level of higher education

in the specialty 051 'Economics'

Field of Study 05 'Social and Behavioral Sciences'

Qualification: Bachelor in Business Economics

APPROVED BY

THE ACADEMIC BOARD

The Head of the Academic Board

_____ / S. Shkarlet /
(Protocol No. ___ of « __ » _____ 2016)

The study program is put into operation
from September 01, 2016

Rector _____ /S. Shkarlet/
(Order No. ___ of « __ » _____ 2016)

Chernihiv 2016

PREFACE

The study program 'Economics' for training students of the first level of higher education in the specialty 051 Economics contains the requirements for those who can take up the training, the list of academic disciplines and their logical sequence, the amount of ECTS credits necessary to complete the program, intended learning outcomes (competences) acquired by a higher education student.

Developed by the working group of the specialty 051 'Economics' including:

1. Zh. Derii, Doctor of Economic Sciences, Professor, the Head of the Department of Theoretical and Applied Economics;
2. O. Minina, PhD in Economics, Associate Professor of the Department of Theoretical and Applied Economics;
3. M. Polenkova, PhD in Economics, Associate Professor of the Department of Theoretical and Applied Economics
4. N. Shadura-Nykyporets, PhD in Economics, Associate Professor of the Department of Theoretical and Applied Economics

1. Profile of the study program ‘Economics’

1.1 - General information	
Full name of a higher education institution and structural unit	Chernihiv National University of Technology Educational-Scientific Institute of Economics Department of Theoretical and Applied Economics
Higher education degree and title in the original language	Level of higher education – 1 Degree – Bachelor Field of Study – 51 ‘Social and Behavioral Sciences’ Specialty – 051 ‘Economics’ Educational and scientific program ‘Economics’
Official title of the study program	The study program ‘Economics’ for training bachelors in the specialty ‘Economics’
Type of diploma and volume of the study program	Bachelor’s Diploma, individual, 240 ECTS credits Term of study 3 years and 10 months
Accreditation availability	
Cycle/level	National Qualification Framework – the 7 th level
Prerequisites	Certificate of complete general secondary education
Language(s) of teaching	Ukrainian, English
Duration of the study program	Until a new one is introduced
An Internet address for a permanent description of the study -program	http://www.stu.cn.ua/index.html
1.2 - The purpose of the study program	
To provide a comprehensive system of educational components to ensure the training of students of the first level of higher education in the economic field.	
1.3 - Characteristics of the study program	
Subject field (field of study, specialty, specialization)	The study program is focused on providing students with competences in the field of study 05 ‘Social and Behavioral Sciences’, specialty 051 ‘Economics’. The amount of compulsory training modules is 73%, of which: general training disciplines are 44%, professional training disciplines are 24%, and practical training is 5%. Optional disciplines are 27%.
Description of the subject field	The object of study is patterns of operation and development of social-economic systems, social-economic processes, their modeling, forecasting, regulation, motivation and behavior of economic entities. The objectives include providing students with modern economic thinking, theoretical knowledge and skills necessary to solve tasks in the subject field. Theoretical content of the subject field includes concepts, categories and principles of economic sciences.
	Methods and techniques: general scientific methods, mathematical and statistical methods of economic analysis, economic-mathematical modeling. Equipment: modern information and communication technologies, information systems and software products used in the professional

	activity.
Focus of the study program	The study program has a professional focus, is based on well-known economic research results, taking into account the general laws and tendencies of economic systems development, motivation and behavior of market entities, social-economic processes, within which further professional career is possible.
Aim of the study program and specialization	Providing students with modern economic thinking, theoretical knowledge and skills necessary to solve tasks in the subject field. Key words: enterprise, price, profit, expenses, costs, income, fixed assets, current assets, inventories, break-even point.
Volume of the study program in ECTS	- 240 ECTS credits based on complete general secondary education; - 120 ECTS credits based on Junior Bachelor degree (educational and qualification level of Junior Specialist).
Features of the study program	Arrangement of students' independent work using Moodle distant learning system.
1.4 - Suitability of graduates for employment and further education	
Suitability of graduates for employment	<p>Graduates can find jobs at enterprises, investment and pension funds, banking and insurance companies, and fiscal institutions.</p> <p>A specialist is capable of performing such the following work:</p> <ul style="list-style-type: none"> • Investment analyst; • Assistant of economist demographer; • Assistant of economist-statistician; • Teacher of a vocational school; • Teacher of a professional-educational institution; • Chief economist; • Econometrician; • Economist in accounting and business analysis; • Economist in contractual and claim work; • Economist in material and technical maintenance; • Economist in international trade; • Economist in planning; • Taxes and fees economist; • Labor economist; • Economist specializing in gas supply, gas metering and control; • Financial economist; • Sales economist; • Pricing economist; • Economist of a computing (information-computing) center; • Economist-demographer; • Economist-statistician; • Economist-statistician (applied statistics); • Economic advisor; • Expert on regulation of social-labor relations; • Expert on working conditions; • Economic consultant; • Business efficiency consultant; • Marketing consultant; • Taxes and fees consultant; • Consultant on enhancing productivity; • Consultant on foreign economic issues;

	<ul style="list-style-type: none"> • Office worker (accounting); • Office worker (records management); • Office worker (investments); • Office worker (cash desk); • Office worker (appraisal); • Office worker (production planning); • Office worker (supply); • Office worker (registration and accounting); • Office worker (cost calculation); • Office worker (warehousing); • Laboratory assistant (education); • Logistics manager; • Marketing manager; • Personnel manager; • Supply manager; • Forwarding agent; • Sales manager; • Manager in foreign economic activity; • Researcher (economics); • Specialist in labor market analysis; • Specialist in enterprise efficiency; • Specialist in hiring labor; • Marketing specialist; • Specialist in enhancing productivity; • Specialist in the allocation of productive forces and the regional economy; • Specialist in managing projects and programs in the field of material and non-material production; • Specialist in commodity market research.
Further education	The completion of the program allows graduates to proceed to the second (master) level of higher education and acquire additional qualifications in other specialties and in the system of postgraduate education.

1.5 - Teaching and assessment	
Teaching and learning	Teaching is carried out in the form of lectures and practical classes using case methods, business games, interdisciplinary trainings that develop interpersonal and leadership and teamwork skills.
Assessment	Assessment is carried out in the form of oral and written exams, pass-fail tests, presentations and continuous assessment. Certification involves taking written qualification complex exam in the specialty.
1.6 - The study program competences	
Integral competence	The ability to solve difficult professional tasks and practical problems in the economic field that are characterized by complex and uncertain conditions and involve the use of theories and methods of the economic science.
General competences (GC)	GC1. The ability to exercise their rights and responsibilities as a member of society, to be aware of the values of civil (democratic) society and the need for its sustainable development, the rule of law, rights and freedoms of human and citizen of Ukraine. GC2. The ability to preserve and enrich moral, cultural, scientific values and achievements of the society on the basis of understanding of 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 and technology; to use different types and forms of motor activity for outdoor activity and healthy lifestyle.

GC3. The ability of abstract thinking, analysis and synthesis.

GC4. The ability to use knowledge in practical situations.

GC5. The ability to use the official language in oral and written form.

GC6. The ability to speak the foreign language.

GC7. Skills in using information and communication technologies.

GC 8. The ability to search, process and analyze information from different sources.

GC9. The ability to adapt and act in a new situation.

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 consciously.

GC14. Knowledge of current issues and major tasks of life safety and skills in determining the scope of one's responsibilities for professional tasks, taking into account the risks of emergencies that can lead to accidents and adverse effects on business entities.

GC15. The ability to provide assistance and advice to workers and the public on practical issues of life safety and emergency protection.

**Professional
competences (PC)**

- PC1. The ability to show knowledge and understanding of the subject field, the basics of operation of modern economy at micro-, meso-, macro and international levels.
- PC2. The ability to perform professional duties complying with current regulatory and legal acts.
- PC3. Understanding the features of leading science schools and areas of economic science.
- PC4. The ability to explain economic and social processes based on theoretical models, to analyze and interpret the results obtained.
- PC5. Understanding the features of modern global and national economy, their institutional structure, substantiation of directions of social, economic and foreign economic policy of the state.
- PC6. The ability to apply economic and mathematical methods and models to solve economic problems.
- PC7. The ability to use computer technology and data processing software to solve economic problems, analyze information, and prepare analytical reports.
- PC8. The ability to analyze and solve problems in the field of economic and social-labor relations.
- PC9. The ability to forecast social-economic processes based on standard theoretical and econometric models.
- PC10. The ability to use modern sources of economic, social, managerial, accounting information to prepare official documents and analytical reports.
- PC11. The ability to justify economic decisions understanding the regularities of economic systems and processes and using modern methodological tools.
- PC12. The ability to identify economic problems when analyzing specific situations and suggest the ways to solve them.
- PC13. The ability to analyze the functioning and development of business entities, assess their competitiveness.
- PC14. The ability to analyze problems and phenomena in one or more professional fields, taking into account economic risks and possible socio-economic consequences.
- PC15. The ability to develop measures for formation and utilization of production potential of the enterprise, all kinds of resources in different spheres of activity of the enterprise.
- PC16. The ability to evaluate the impact and take into account external and internal factors when planning activities and developing enterprise development strategies.
- PC17. To know the methods, techniques and tools for evaluating the results of the functioning and development of economic systems at the micro, meso, and macro levels.
- PC18. The ability to analyze the international economy as a systemic complex of relations between subjects and processes of regionalization of world economic relations using modern information technologies.
- PC19. The ability to make informed managerial decisions to identify priority areas for the development and organization of international economic activity at the macro, meso and micro levels.
- PC20. To be able to manage and control the process of formation and use of all types of resources as well as production process at the enterprise in different areas.
- PC21. To predict and evaluate the impact of external and internal factors and managerial decisions on the performance of the enterprise in planning its

	<p>activities and development strategies.</p> <p>PC22. To implement measures and design solutions to improve the performance of the enterprise in case of uncertain conditions and risks.</p> <p>PC23. The ability to use knowledge and skills in the field of labor economics and social-labor relations to improve the efficiency of personnel management of the enterprise.</p> <p>PC24. The ability to assess operation of a company and its departments in terms of performance of production tasks and contractual obligations.</p> <p>PC25. The ability to analyze and plan work indicators, identify international trends labor organization; to apply methods of regulation, formation and use of labor potential.</p> <p>PC26. The ability to provide a general assessment of the status and results of social-economic activity of regions by type of economic actions.</p> <p>PC27. The ability to prepare information, choose the model type, calculate its parameters and evaluate the adequacy.</p> <p>PC28. The ability to labor intensity of a production program; to complete a balance of working time; to plan the amount of staff members, labor performance and the work of production team; to perform economic calculations.</p> <p>PC29. The ability to determine and justify the priorities of organizing one's own business.</p> <p>PC30. The ability to calculate the cost-effectiveness of projects, evaluate alternatives taking into account risk possibilities.</p> <p>PC31. The ability to formulate managerial decisions, evaluate and choose their alternatives, think creatively.</p> <p>PC32. The ability to prepare and conduct quantitative and qualitative marketing research, prepare reports on the status and dynamics of the market development of goods and services.</p> <p>PC33. The ability to calculate and forecast the company's pricing policy: prices, discounts, surcharges, justification of pricing strategies.</p> <p>PC34. To know the main methods and systems ensuring industrial safety, to choose devices, systems and methods for human and environmental protection from dangers.</p>
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1.7 - Intended learning outcomes (ILO)

Knowledge and understanding:	<p>ILO1. To know and use economic terminology, explain basic concepts of micro- and macroeconomics.</p> <p>ILO2. To understand the principles of economic science, especially the operation of economic systems.</p> <p>ILO3. To be aware of the basic features of the modern world and national economy, institutional structure, directions of social, economic and foreign economic policy of the state.</p>
Skills	<p>ILO4. To be able to analyze the processes of state and market regulation of social-economic and labor relations.</p> <p>ILO5. To apply analytical and methodological tools to substantiate offers and make managerial decisions by various economic agents (individuals, households, enterprises and public authorities).</p> <p>ILO6. To use professional argumentation to convey information, ideas, problems, and solutions to professionals and non-professionals in the field of economic activity.</p> <p>ILO7. To apply appropriate economic and mathematical methods and models to solve economic problems.</p> <p>ILO8. To explain models of social-economic phenomena from the point of view of fundamental principles and knowledge based on understanding the</p>

	<p>basic directions of development of economic science.</p> <p>ILO9. To analyze the functioning and development of economic entities, determine the functional areas; calculate appropriate indicators that characterize the effectiveness of their activities.</p>
	<p>ILO10. To apply theoretical knowledge to solve practical problems and interpret the results properly.</p> <p>ILO11. To identify sources and understand the methods to determine and obtain social-economic data, collect and analyze relevant information, calculate economic and social indicators.</p> <p>ILO12. To be able to use data, provide reasoning, critically evaluate logic and draw conclusions from scientific and analytical texts in economics.</p> <p>ILO13. To perform an interdisciplinary analysis of social-economic phenomena and problems in one or more professional fields, taking into account the risks and potential social-economic consequences.</p> <p>ILO14. To use regulatory and legal acts regulating professional activity.</p> <p>ILO15. To use information and communication technologies to solve social-economic problems, prepare and submit analytical reports.</p> <p>ILO16. To be able to think abstractly, apply analysis and synthesis to identify key characteristics of economic systems of various levels, as well as the behavior of their entities.</p> <p>ILO17. To be able to be flexible and adapt to new situations when working with new objects under uncertain conditions.</p> <p>ILO18. To analyze business, economic, financial and business activity of an enterprise, institution or organization.</p> <p>ILO19. To be able to independently identify problems of economic nature when analyzing specific situations and offer ways to solve them.</p> <p>ILO20. To form and evaluate the performance indicators of enterprises and institutions, taking into account the factors of the external and internal environment.</p> <p>ILO21. To be able to develop optimal plans for the enterprise as a whole and its individual divisions.</p> <p>ILO22. To establish economic links between elements of the enterprise management system, apply technologies of an integrated management of material, information and financial flows of the enterprise.</p> <p>ILO23. To assess the potential risks, social-economic consequences of managerial decisions.</p> <p>ILO24. To have knowledge of ensuring safe working conditions and the environment when conducting research in production activity.</p> <p>ILO25. To choose and use the necessary scientific, methodological and analytical tools to manage economic activity.</p> <p>ILO26. To be able to assess the level of economic security of the business, to examine the dynamics of the market situation and to generalize the development of situations in order to ensure the competitiveness of the enterprise</p> <p>ILO27. The ability to apply knowledge and understanding to solve problems that are specific to the economy.</p> <p>ILO28. The ability to provide assistance and advice to workers and the public on practical issues of life safety and emergency protection.</p>
Communication	<p>ILO29. To be a part of public society, scientific community, to accept the rule of law especially in the professional activity, to understand and be able to exercise one's own rights and freedoms, show respect to rights and freedoms of other people.</p> <p>ILO30. To reproduce moral, cultural, scientific values, multiply the</p>

	<p>achievements of society in the social-economic sphere, promote a healthy lifestyle.</p> <p>ILO31. To master the skills of oral and written communication in the state and foreign language.</p> <p>ILO32. To demonstrate basic creative and critical thinking skills in research and professional communication.</p> <p>ILO33. The ability to organize and hold conferences, round-table discussions, seminars in the native and foreign languages.</p> <p>ILO34. To be able to use communication technologies to maintain harmonious business and personal contacts as a prerequisite for business success.</p> <p>ILO35. To discuss, explain, reproduce one's research results, decisions.</p> <p>ILO36. The ability to present and discuss results and transfer knowledge.</p>
Autonomy / responsibility	<p>ILO37. To identify and plan opportunities for personal professional development.</p> <p>ILO38. To demonstrate independent work skills, critical, creative, self-critical thinking.</p> <p>ILO39. To demonstrate the ability to act socially responsible and consciously relying on ethical principles, to appreciate and respect cultural and individual diversity of people.</p> <p>ILO40. To demonstrate high social responsibility and comply with the principles of academic integrity.</p> <p>ILO41. The ability to be responsible for the work performed and to achieve the stated goal in accordance with the requirements of professional ethics.</p> <p>ILO42. The ability to adapt to new conditions, make independent decisions and initiate original research and innovative projects.</p>

1.8 – Resources for the program implementation	
Human resources	Doctor of Sciences and Doctors of Philosophy
Material and technical resources	Sixteen educational buildings, the cultural and educational center 'Peremoha', workshops, dormitories, garages and canteens. The total area of all buildings is 83156,6 m ² , the area of educational rooms is 45975,1 m ² . The average area per a student is 16 m ² . The area of sports facilities is 14256,4 m ² , the sports and recreational facility seats 135 people, is equipped with a sports hall, swimming pool (360 m ²), and two saunas. All premises and buildings are in a good sanitary condition. There are also modern computer technologies with access to the Internet (including Wi-Fi).
Information and academic resources	The educational process is fully provided with information sources. The University has its own library network, which provides students with sufficient amount of educational and methodical literature. In addition, all educational buildings and student dormitories are connected to the Internet, which students can access through computers from study rooms and libraries, and from their own electronic devices via Wi-Fi.

2. List of Components of the Study Program and Their Logical Sequence

2.1- List of Components

No.	The study program components (academic disciplines, course projects (papers), practices, qualification work	ECTS-credits	Form of examination
1	2	3	4
Compulsory components (CC)			
General training cycle			
CC 1.	Foreign Language for Specific Purposes	12	pass-fail test
CC 2.	History of Ukraine	4	exam
CC 3.	History of Ukrainian Culture	3	pass-fail test
CC 4.	Philosophy	4	exam
CC 5.	Business Ukrainian Language and Basics of Business Communication	3	pass-fail test
CC 6.	Higher Mathematics	13	exam pass-fail test
CC 7.	Probability Theory And Mathematical Statistics	7	exam
CC 8.	Computer Science	6	exam
CC 9.	Political Economy	6	exam
CC 10.	History of Economics and Economic Thought	5	exam
CC 11.	Microeconomics	8	exam
	<i>Course paper</i>		defense
CC 12.	Macroeconomics	7	exam
CC 13.	Econometrics	5	exam
CC 14.	International Economic Relations	4	pass-fail test
CC 15.	Statistics	4	exam
CC 16.	Regional Economics	4	exam
CC 17.	State Regulation of Economy	4	exam
CC 18.	Economic and mathematical methods and models	6	exam
Professional training cycle			
CC 19.	Fundamentals of Systems Theory	5	exam
CC 20.	Business Economics	10	exam pass-fail test
	<i>Course paper</i>		defense
CC 21.	Accounting	4	exam
CC 22.	Business Finance	4	pass-fail test
CC 23.	Internal Economic Mechanism of the Enterprise	6	pass-fail test
CC 24.	Marketing	5	exam
CC 25.	Economic Evaluation of Enterprise Activity	6	pass-fail test
CC 26.	Enterprise Potential and Development	6	exam
CC 27.	Enterprise Strategy	6	exam
CC 28.	Development of Business Model of an Enterprise	6	pass-fail test
	<i>Course paper</i>		defense
Total of compulsory components:		163	
Optional Components (OC)			
<i>Optional disciplines unit (General training cycle)</i>			
OC 1.1.	Legal Regulation of Economy	4	exam
OC 1.2.	Fundamentals of Law		

OC 1.3.	Finance, Money and Credit	4	exam
OC 1.4.	Financial Activity		
OC 1.5.	Economics and Organization of Labor	3	pass-fail test
OC 1.6.	Labor Economics and Social-Labor Relations		
<i>Optional disciplines unit (Professional training cycle)</i>			
OC 2.1.	Cost Management	6	exam
OC 2.2.	Income Management		
OC 2.3.	Investment Activity of an Enterprise	4	pass-fail test
OC 2.4.	Investment		
OC 2.5.	Ecological Economics	4	exam
OC 2.6.	Ecology		
OC 2.7.	Financial Analysis of Enterprise Activity	3	pass-fail test
OC 2.8.	Enterprise Taxation		
OC 2.9.	Organization of Production	7	exam
OC 2.10.	Economics and Organization of Innovative Activity		
	<i>Course paper</i>		defense
OC 2.11.	Pricing	4	exam
OC 2.12.	Controlling		
OC 2.13.	Planning and Control at the Enterprise	5	exam
OC 2.14.	Economic Cybernetics		
OC 2.15.	Foreign Economic Activity of the Enterprise	3	pass-fail test
OC 2.16.	Competitiveness Management		
OC 2.17.	Logistics	5	exam
OC 2.18.	Mathematical Modeling of Business Activity		
OC 2.19.	Start-up training course	3	pass-fail test
OC 2.20.	Entrepreneurship and Business Culture		
OC 2.21.	Substantiation of Business Decisions and Risk Assessment	6	exam
OC 2.22.	Economic Substantiation of Projects		
OC 2.23.	Economic Security of the Enterprise	4	pass-fail test
OC 2.24.	Risk Studies		
Total of optional components:		65	
Practical training		12	
OVERALL TOTAL		240	

2.2 Structural and Logical Scheme

Logical sequence of training a full-time student:

Semester	Type of educational activity
1 – 30 credits	Compulsory disciplines (general training cycle) CC1 (3 credits), CC2 (4 credits), CC6 (6 credits), CC 8 (6 credits), CC9 (6 credits) Compulsory disciplines (professional training cycle) CC19 (5 credits)
2 – 30 credits	Compulsory disciplines (general training cycle) CC1 (3 credits), CC3 (3 credits), CC6 (7 credits), CC10 (5 credits), CC11 (8 credits) Optional disciplines OC1.1/1.2 (4 credits)
3 – 30 credits	Compulsory disciplines (general training cycle) CC1 (3 credits), CC4 (4 credits), CC7 (7 credits), CC12 (7 credits), Compulsory disciplines (professional training cycle) CC20 (5 credits) Optional disciplines OC1.3/1.4 (4 credits)
4 – 30 credits	Compulsory disciplines (general training cycle) CC1 (3 credits), CC5 (3 credits), CC15 (4 credits), CC16 (4 credits) Compulsory disciplines (professional training cycle) CC20 (5 credits), CC21 (4 credits), CC22 (4 credits) Educational practice (3 credits)
5 – 30 credits	Compulsory disciplines (general training cycle) CC13 (5 credits), CC17 (4 credits), CC18 (6 credits) Compulsory disciplines (professional training cycle) CC23 (6 credits) Optional disciplines OC1.5/1.6 (3 credits), OC2.1/2.2 (6 credits)
6 – 30 credits	Compulsory disciplines (general training cycle) CC14 (4 credits) Compulsory disciplines (professional training cycle) CC24 (5 credits) Optional disciplines OC2.3/2.4 (4 credits), OC2.5/2.6 (4 credits), OC2.7/2.8 (3 credits), OC2.9/2.10 (7 credits) Educational practice (3 credits)
7 – 30 credits	Compulsory disciplines (professional training cycle) CC25 (6 credits), CC26 (6 credits), CC27 (6 credits) Optional disciplines OC2.11/2.12 (4 credits), OC2.13/2.14 (5 credits), OC2.15/2.16 (3 credits)
8 – 30 credits	Compulsory disciplines (professional training cycle) CC28 (6 credits) Optional disciplines OC2.17/2.18 (5 credits), OC2.19/2.20 (3 credits), OC2.21/2.22 (6 credits), OC2.23/2.24 (4 credits) Production practice (6 credits)

4. Consistency Matrix of Program Competences with Compulsory Components of the Study Program

	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-21	CC-22	CC-23	CC-24	CC-25	CC-26	CC-27	CC-28
GC-1														+		+	+											
GC-2		+	+	+						+				+														
GC-3				+				+		+	+	+	+	+	+	+	+	+			+			+	+	+	+	+
GC-4						+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-6	+							+				+			+													
GC-7						+	+	+			+	+	+		+			+	+	+	+		+	+	+	+	+	+
GC-8						+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-9												+	+	+	+		+	+	+	+			+	+	+	+	+	+
GC-10				+	+					+															+			
GC-11									+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-12												+		+											+			
GC-13					+					+		+		+			+				+	+	+	+	+	+	+	+
GC-14				+																								
GC-15				+												+												
PC-1					+				+		+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+	+
PC-2														+			+				+	+		+	+		+	+
PC-3									+	+	+	+					+											
PC-4									+		+	+	+		+	+	+	+	+	+		+				+		
PC-5									+					+		+	+				+							
PC-6						+	+				+	+	+		+			+		+		+				+		
PC-7						+	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC-8																												
PC-9						+	+					+	+	+	+		+	+								+		
PC-10						+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC-11									+	+	+	+	+		+	+	+	+	+	+		+			+			

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-21	CC-22	CC-23	CC-24	CC-25	CC-26	CC-27	CC-28
PC-12									+		+	+	+	+	+			+		+			+	+	+	+	+	+
PC-13											+	+								+		+	+	+	+	+	+	+
PC-14													+		+			+						+	+	+	+	+
PC-15																				+				+		+		
PC-16									+														+			+	+	
PC-17											+	+	+		+		+	+		+		+	+		+	+		+
PC-18								+						+			+											
PC-19														+			+											
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PC-27						+	+						+		+		+	+						+	+			+
PC-28																				+			+					
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PC-30																											+	+
PC-31																		+								+	+	+
PC-32																								+			+	+
PC-33																											+	
PC-34							+																					

4.1 Consistency Matrix of Program Competences with Optional Components of the Study Program

Competences																														
	OC 1.1	OC 1.2	OC 1.3	OC 1.4	OC 1.5	OC 1.6	OC 2.1	OC 2.2	OC 2.3	OC 2.4	OC 2.5	OC 2.6	OC 2.7	OC 2.8	OC 2.9	OC 2.10	OC 2.11	OC 2.12	OC 2.13	OC 2.14	OC 2.15	OC 2.16	OC 2.17	OC 2.18	OC 2.19	OC 2.20	OC 2.21	OC 2.22	OC 2.23	OC 2.24
GC-1	+	+			+	+																								
GC-2											+	+																		
GC-3													+	+		+							+	+	+	+	+	+	+	
GC-4	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-5	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-6																+			+	+	+			+	+	+				
GC-7	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-8	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-9					+	+	+	+	+	+						+		+	+	+		+	+	+	+	+	+	+	+	
GC-10	+	+			+	+										+														
GC-11			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC-12					+	+																				+	+			
GC-13	+	+			+	+	+	+	+	+	+	+						+												
GC-14											+	+			+															
GC-15											+	+			+															
PC-1	+		+	+	+	+	+	+	+	+			+	+			+	+			+	+	+	+	+	+	+	+	+	+
PC-2	+	+	+	+	+				+	+			+	+			+													
PC-3																						+								
PC-4			+																			+								
PC-5	+	+																												
PC-6						+			+	+																		+	+	
PC-7			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC-8			+	+																						+				
PC-9									+	+															+					
PC-10			+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
PC-11							+	+	+	+			+	+	+	+	+	+	+		+	+	+		+	+	+	+	+	+

Competences

	OC 1.1	OC 1.2	OC 1.3	OC 1.4	OC 1.5	OC 1.6	OC 2.1	OC 2.2	OC 2.3	OC 2.4	OC 2.5	OC 2.6	OC 2.7	OC 2.8	OC 2.9	OC 2.10	OC 2.11	OC 2.12	OC 2.13	OC 2.14	OC 2.15	OC 2.16	OC 2.17	OC 2.18	OC 2.19	OC 2.20	OC 2.21	OC 2.22	OC 2.23	OC 2.24	
PC-12							+	+	+	+					+	+		+			+	+		+	+	+			+	+	
PC-13													+	+							+	+									
PC-14				+					+	+	+	+	+	+									+	+	+	+	+	+	+	+	
PC-15							+	+							+			+													
PC-16																			+		+							+	+		
PC-17							+	+										+	+					+							
PC-18																															
PC-19																					+										
PC-20							+	+							+			+					+		+	+					
PC-21							+	+									+	+	+			+		+	+						
PC-22							+	+								+		+							+	+	+	+	+	+	
PC-23					+	+																									
PC-24																			+												
PC-25					+	+																									
PC-26																															
PC-27			+	+					+	+			+	+							+	+	+	+	+	+	+	+	+	+	
PC-28					+	+																									
PC-29																										+	+	+	+		
PC-30																														+	+
PC-31																+					+	+			+	+	+	+			
PC-32																									+	+	+	+			
PC-33																	+														
PC-34											+	+			+																

5. Matrix of Providing Intended Learning Outcomes (ILO) with Compulsory Components of the Study Program

Intended 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	CC-26	CC-27	CC-28	
ILO 1									+	+	+	+				+				+		+							
ILO 2									+	+	+	+		+		+	+		+			+		+	+	+		+	
ILO 3				+					+	+				+		+	+			+		+				+			
ILO 4												+					+												
ILO 5						+	+		+		+		+		+		+	+			+					+	+	+	+
ILO 6													+		+		+	+		+	+	+					+		+
ILO 7						+	+				+	+	+		+	+		+											
ILO 8						+			+	+	+	+		+					+							+			+
ILO 9							+		+				+		+	+		+		+				+	+	+	+	+	+
ILO 10		+				+	+				+	+					+		+		+	+			+	+	+	+	+
ILO 11													+	+	+	+		+		+	+			+	+		+		+
ILO 12										+	+	+					+				+	+	+		+		+		
ILO 13											+	+					+						+						
ILO 14																+	+			+	+	+					+		
ILO 15						+			+				+	+	+			+				+	+	+	+	+	+	+	+
ILO 16						+	+	+	+	+	+	+	+		+		+		+			+				+		+	+
ILO 17																				+								+	+
ILO 18																							+	+		+		+	
ILO 19											+	+						+						+	+	+		+	+
ILO 20														+	+								+	+		+		+	+
ILO 21																						+			+	+		+	+
ILO 22																						+			+		+		+
ILO 23																		+						+			+	+	+
ILO 24																													
ILO 25																	+				+						+	+	

Intended 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	CC-26	CC-27	CC-28	
ILO 26																				+						+		+	
ILO 27						+	+				+	+					+			+		+							
ILO 28																													
ILO 29		+																											
ILO 30		+			+																			+					
ILO 31	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 32	+	+		+	+			+																+	+	+	+	+	+
ILO 33	+			+	+			+																+		+	+	+	+
ILO 34	+	+		+				+																+	+	+	+	+	+
ILO 35			+		+				+	+	+	+		+		+	+		+				+	+			+		
ILO 36	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 37			+					+																			+		
ILO 38			+		+				+	+	+	+		+		+			+	+				+			+		
ILO 39			+		+				+								+											+	
ILO 40			+		+									+								+		+			+		+
ILO 41									+										+	+			+				+		
ILO 42					+						+	+		+		+	+						+	+	+	+	+	+	+

5.1 Matrix of Providing Intended Learning Outcomes (ILO) with Optional Components of the Study Program

Intended Learning Outcomes																															
	OC 1.1	OC 1.2	OC 1.3	OC 1.4	OC 1.5	OC 1.6	OC 2.1	OC 2.2	OC 2.3	OC 2.4	OC 2.5	OC 2.6	OC 2.7	OC 2.8	OC 2.9	OC 2.10	OC 2.11	OC 2.12	OC 2.13	OC 2.14	OC 2.15	OC 2.16	OC 2.17	OC 2.18	OC 2.19	OC 2.20	OC 2.21	OC 2.22	OC 2.23	OC 2.24	
ILO 1			+	+		+	+	+	+	+			+	+					+	+			+	+	+	+					
ILO 2			+	+	+	+			+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+			+			
ILO 3	+	+			+	+															+	+									
ILO 4			+	+			+	+							+	+															
ILO 5							+	+	+	+	+	+							+	+	+	+						+	+	+	+
ILO 6									+	+	+	+					+	+	+	+	+	+									
ILO 7									+	+			+	+					+									+	+		
ILO 8																															
ILO 9					+	+	+						+	+	+	+	+	+	+	+						+	+	+			
ILO 10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 12	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 13											+	+														+	+				
ILO 14	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 15	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
ILO 16			+	+	+	+			+	+	+	+	+	+										+	+	+	+	+			
ILO 17											+	+					+	+	+	+					+	+	+	+	+	+	+
ILO 18							+	+	+	+			+	+			+	+	+	+											
ILO 19							+	+			+	+			+	+	+	+	+	+						+	+	+	+		
ILO 20			+	+			+	+			+	+						+				+	+								
ILO 21							+	+							+	+								+	+	+	+			+	+
ILO 22									+	+			+	+					+	+				+	+						
ILO 23											+	+					+	+	+					+	+	+	+	+	+	+	+
ILO 24					+	+					+	+	+	+	+	+														+	+
ILO 25		+					+	+			+	+							+	+											
ILO 26																										+	+	+	+	+	+
ILO 27					+	+									+	+	+	+	+									+	+		
ILO 28											+	+			+	+												+	+	+	+

