

National Technical University of Ukraine

«Igor Sikorsky Kyiv Polytechnic Institute»



Department of educational process organization

ACADEMIC OFFER CATALOGUE

for foreign students participating in academic mobility programmes

APPROVED by

Academic Council of Igor Sikorsky Kyiv Polytechnic Institute
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**ACADEMIC OFFERS
for foreign students of
First level (Bachelor's degree)**

035 Philology

035 Philology (UA) / 0231 Language Acquisition, 0232 Literature and Linguistics (ISCED)
First level (Bachelor's degree)

**GERMANIC LANGUAGES AND LITERATURES (INCLUDING TRANSLATION),
 PRIMARY – ENGLISH**

Department of Theory, Practice and Translation of English
 Language of study – English

Educational offers		
Year of study/ semeste r	COURSE TITLE	Number of ECTS credits / semester control
1 / spring semester	Introduction to Romano-Germanic linguistics: Latin	3/Exam
	Introduction to Romano-Germanic Linguistics: History of English	2/Test
	Practical Course in English. Level: Vantage II	10/Exam
	Contrastive Grammar: Morphology	6,5/Exam
	Contrastive Phonetics	4/Test
2 / fall semester	Practical Course in English. Level: Vantage Profound II	8/Exam
	Contrastive Phonetics	4/Test
	Practical Grammar of the English Language	4/Test
	History of Translation	4/Test
	Contrastive Grammar: Syntax	3,5/Exam
2 / spring semester	Practical Course in English. Level: Vantage Profound II	8,5/Exam
	Contrastive Typology: Contrastive Lexicology	3/Exam
	Contrastive Typology: Contrastive Stylistics	2/Test
	Phonostylistics and Practical English Phonetic Studies	4/Test
	Practical Grammar of the English Language	4/Test
3 / fall semester	Practical Course in English. Level: Effective Operational Proficiency II	7/Exam
	Contrastive Typology: Contrastive Stylistics	2/Test
	Copywriting in Advertisement and PR	4/Test
	Terminology Studies	4/Test
	Sociocultural Variations in English Oral Speech	4/Test
3 / spring semester	Practical Course in English. Level: Effective Operational Proficiency II	6,5/Exam
	Phonostylistics and Practical English Phonetic Studies	4/Test
	Contrastive Lexicology of the English and Ukrainian Languages	3/Exam
	Contrastive Typology: Contrastive Stylistics	2/Test
	Speech Etiquette as a Component of Translator's Sociocultural Competence	4/Test
4 / fall semester	Introduction to Romano-Germanic Linguistics: History of English	2/Test
	Practical Course in English. Level: Mastery 1	4/Exam
	Methodology and Didactics of Teaching	4/Test
	Speech Etiquette as a Component of Translator's Sociocultural Competence	4/Test
	Terminology Studies	4/Test
4 / spring semester	Copywriting in Advertisement and PR	4/Test
	Practical Course in English. Level: Mastery II	1,5/Exam
	Copywriting in Advertisement and PR	4/Test
	Sociocultural Variations in English Oral Speech	4/Test
	Academic Writing	4/Test
	Second Foreign Language (French/German, B2)	4/Test
	Methodology and Didactics of Teaching	4/Test

035 Philology (UA) / 0231 Language Acquisition

First level (Bachelor's degree)

GERMANIC LANGUAGES AND LITERATURES (INCLUDING TRANSLATION), PRIMARY – GERMAN

Department – Theory, Practice and Translation of the German Language

Language of study – German

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>German (general) 1</u>	13
	<u>Contrastive Grammar 1</u>	6.5
1 / spring semester	<u>German (general) 2</u>	10
	<u>Contrastive Grammar 2</u>	3.5
2 / fall semester	<u>German (general) 3</u>	8
2 / spring semester	<u>German (general) 4</u>	8.5
	<u>Contrastive Typology. Contrastive Lexicology</u>	3
3 / fall semester	<u>Practice of Oral and Written Speech 1</u>	4
	<u>Practical Translation Course 1</u>	5
	<u>German (general) 5</u>	7
3 / spring semester	<u>Terminology Studies 1</u>	4
	<u>Practical Translation Course 2</u>	6
	<u>German (general) 6</u>	6.5
4 / fall semester	<u>Practice of Oral and Written Speech 2</u>	4
	<u>Practical Translation Course 3</u>	5
	<u>German (general) 7</u>	4
	<u>Consecutive Interpreting</u>	3.5
	<u>Translation and Editing of Specialized Texts</u>	5
4 / spring semester	<u>Translation of Specialized Medical Texts</u>	4
	<u>Interpretation Strategies</u>	4
	<u>Terminology Studies 2</u>	4
	<u>Mediatranslation</u>	4
	<u>Practical Translation Course 4</u>	4.5
	<u>German (general) 8</u>	3

051 Economy

051 Economy (UA) / 0311 Economics (ISCED)

First level (Bachelor's degree)

INTERNATIONAL ECONOMICS

Department of International Economics

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Ukrainian Language for Professional Purposes	2/Test
	History of Ukrainian Culture	2/Test
	History of Economics and Economic Concept	4,5/Exam
	Mathematics for Economists 1	3,5/Test
	Informatics 1	3/Test
	Economic Theory	4,5/Exam
	Regional Economics	3,5/Test
	Money and Credit	4/Exam
1 / spring semester	Basics of a Healthy Lifestyle	3/Test
	Foreign Language	3/Test
	Mathematics for Economists 2	4/Exam
	Informatics 2	3/Test
	Management	3,5/Test
	Socially Responsible Marketing	3,5/Test
	Macroeconomics	4,5/Exam
	Microeconomics	4/Test
	Optimization Methods and Models	4,5/Exam
2 / fall semester	Theory of Probability and Mathematical Statistics	5/Exam
	Finances	5/Exam
	Economics of Enterprise	5/Test
	Integration Processes: Introduction to Specialty	3/Test
	International Insurance	4/Exam
	European Integration	3,5/Test
	European Integration Coursework	1/Test
	Logic	2/Test
2 / spring semester	Foreign Language	3/Test
	Philosophy	2/Test
	Statistics	5/Exam
	Econometrics	4,5/Test
	National Economy	3/Test
	International Economic Activity of Ukraine	4/Exam
	International Economic Law	3/Test
	Investment	4/Exam
	Investment Coursework	1/Test
	Psychology	2/Test

3 / fall semester	<u>Science of Law</u>	2/Test
	<u>Accounting</u>	4,5/Exam
	<u>Economics of Labour and Social Labour Relations</u>	5/Exam
	<u>Economics of Foreign Countries</u>	4.5/Exam
	Economics of Foreign Countries Coursework	1/Test
	<u>Functional-Cost Analysis</u>	3/Test
	<u>International Business</u>	4/Test
	<u>Customs Activity</u>	4/Test
3 / spring semester	<u>Foreign Language for Professional Purposes 1</u>	3/Exam
	<u>International Economics</u>	4,5/Exam
	<u>Economic Analysis of International Business</u>	4/Exam
	<u>European Integration</u>	4,5/Exam
	European Integration Coursework	1/Test
	<u>International Accounts and Currency Operations</u>	3.5/Test
	<u>Systems Technology</u>	4/Test
	<u>Commercial Diplomacy</u>	4/Test
4 / fall semester	<u>Accounting in Foreign Countries</u>	4/Test
	<u>International Financial System</u>	4,5/Exam
	Economics of Foreign Countries	4/Exam
	Economics of Foreign Countries Coursework	1/Test
	<u>Financial Management</u>	3/Test
	<u>Foreign Language for Professional Purposes 2</u>	3/Test
	<u>Financial Activity of Enterprise</u>	4/Test
	<u>State Regulation of Economy</u>	4.5/Exam
4 / spring semester	<u>International Consulting</u>	3.5/Test
	<u>International Economic Relations</u>	3/Test
	<u>Multinational Corporations</u>	4/Exam
	<u>Regional Economics</u>	3,5/Test
	<u>Life Safety and Civil Defence</u>	2/Test
	<u>International Financial System 2</u>	2.5/Test
	International Financial System 2 Coursework	1/Test

051 Economy (UA) / 0311 Economics (ISCED)

First level (Bachelor's degree)

ECONOMIC CYBERNETICS

Department of Economic cybernetics

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Optimization methods and models</u>	4/Exam
1 / spring semester	<u>Econometrics</u>	4/Test
2 / fall semester	<u>Modeling of Economy</u>	5/Exam
	<u>Crisis forecasting in the economy</u>	4/Test
	<u>Theory of economic risk</u>	4/Test
	<u>Money and credit</u>	3/Exam
2 / spring semester	<u>Optimal control and game theory in economics</u>	4/Exam
	<u>Operations research</u>	4/Test
	<u>Intellectual capital economics</u>	4/Test
	<u>Modeling the risks of financial activities of economic entities</u>	4,5/Exam

073 Management

073 Management (UA) / 0413 Management and administration (ISCED)

First level (Bachelor's degree)

MANAGEMENT AND BUSINESS ADMINISTRATION

Department of Enterprise management

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
4 / fall semester	<u>Risk Management</u>	3,5/Exam
	<u>Planning of International Activity</u>	4/Test
	<u>International Logistics</u>	3.5/Test
4 / spring semester	<u>Management of Startup Project</u>	4.5/Exam

101 Environmental studies

101 Environmental studies (UA) / 0521 Environmental sciences (ISCED)

First level (Bachelor's degree)

ENVIRONMENTAL SAFETY

Department of Ecology and Plant Polymers Technology

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
2 / fall semester	<u>Analytical Chemistry - I. Qualitative Analysis</u>	5/Exam
2 / spring semester	<u>Analytical Chemistry - II. Quantitative Analysis</u>	5/Exam
	<u>Meteorology and Climatology</u>	4/Test
3 / spring semester	<u>Environmental Protection Organisation and Management</u>	4/Exam
	<u>Toxicology</u>	5/Exam

121 Software Engineering

121 Software Engineering (UA) / 0613 Software and applications development and analysis (ISCED)

First level (Bachelor's degree)

COMPUTER SYSTEMS SOFTWARE ENGINEERING

Department of Computing Technics

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	History of Science and Technology	2/Test
	Environmental Safety and Civil Protection	2/Test
	Mathematical Analysis I. Differential Calculation	5/Exam
	Linear Algebra and Analytical Geometry	4/Test
	Computer Discrete Mathematics	5/Exam
	Algorithms and Data Structures I. Fundamentals of Algorithmization	3,5/Test
	Programming Fundamentals I. Base construction.	5,5/Exam
1 / spring semester	Foreign Language-1.Practical Course of Foreign Language	3/Test
	Fundamentals of a Healthy Lifestyle	3/Test
	Ukrainian Language for Specific Purposes	2/Test
	Mathematical Analysis II. Integral Calculation	5/Exam
	Algorithms and Data Structures II. Data Structures	4,5/Test
	Programming Fundamentals II. Module Programming	5,5/Exam
	Course work on Programming Fundamentals III.	1/Test
	Computer Systems and Networks Fundamentals	5/Exam
	Software Engineering Components I. Introduction to Software Engineering	4/Test
2 / fall semester	Philosophical Bases of Scientific Cognition	2/Test
	Probability Theory	4/Test
	Databases	4/Test
	Databases. Coursework	1/Test
	Software Engineering Components I. Software Simulation	4/Exam
	Object-Oriented Programming	5/Exam
	Workshop on Linux	5,5/Exam
	Social Psychology	2/Test
	Foreign Language-I1.Practical Course of Foreign Language	3/Test
2 / spring semester	Group Dynamics and Communications	4/Test
	Software Engineering Components II. Software Design	5/Exam
	System Programming	5,5/Exam
	Networks and Network Information Technologies	5/Exam
	Methodologies and Technologies of Software Development	5/Test
	Methodologies and Technologies of Software Development. Coursework	1/Test
	Logic	2/Test

3 / fall semester	Rights and Freedoms	2/Test
	Group Dynamics and Communications	3,5/Test
	Software Engineering Components III. Software Architecture	4/Exam
	Software Engineering Components. Coursework	1/Test
	Workshop on Linux	6/Exam
	ELECTIVE COURSES	
	<i>Graphic and geometric modeling and creation of realistic images</i>	4/Test
	<i>Computer graphics and image processing</i>	4/Test
	<i>Designing User Interfaces</i>	4/Test
	<i>Reactive programming</i>	4/Test
	<i>Game application development</i>	4/ Test
	<i>Development of microservices</i>	4/Test
	<i>Development of mobile applications for Android</i>	4/Test
	<i>Development of mobile applications for iOS</i>	4/Test
	<i>AGILE Software Development Methodology</i>	4/Test
	<i>User Interface Programming Technologies (Front-end)</i>	4/Test
	<i>Server Software Development Technologies (Back-end)</i>	4/Test
	<i>Fundamentals of Frontend and Backend development</i>	4/Test
	<i>Basics of WEB – technologies/ Basics of front-end technologies</i>	4/Test
	<i>Basics of WEB-programming/ WEB – technologies</i>	4/Test
	<i>Client Development Basics</i>	4/Test
	<i>Java programming language</i>	4/Test
	<i>Basics of software development on the Java platform</i>	4/Test
	<i>Basics of software development on the Node.Js platform</i>	4/Test
	<i>System programming C and C++</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the .NET platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Java platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Node.JS platform</i>	4/Test
	<i>Modern server programming technologies using Python (Django)</i>	4/Test

3 / spring semester	Foreign Language for Specific Purposes I. English for Specific Purposes	3/Test
	Agile Programming Techniques	6/Exam
	Risk and Quality Management of Projects	6,5/Exam
ELECTIVE COURSES		
<i>Artificial Intelligence in Image Processing Tasks</i>	4/Test	
<i>Software tools for the design and implementation of neural network systems</i>	4/Test	
<i>Statistical Methods of Machine Learning</i>	4/Test	
<i>Applied Machine Learning Problems</i>	4/Test	
<i>Introduction to Data Science Technology</i>	4/Test	
<i>Introduction to Artificial Intelligence</i>	4/Test	
<i>Gaming Artificial Intelligence</i>	4/Test	
<i>Python programming technologies</i>	4/Test	
<i>Mobile Application Development Technologies</i>	4/Test	
<i>Designing User Interfaces</i>	4/Test	
<i>Reactive programming</i>	4/Test	
<i>Game application development</i>	4/Test	
<i>Development of mobile applications for Android</i>	4/Test	
<i>Development of mobile applications for iOS</i>	4/Test	
<i>User Interface Programming Technologies (Front-end)</i>	4/Test	
<i>Management of IT - infrastructure projects</i>	4/Test	
<i>Working with data in cloud environments</i>	4/Test	
<i>Distributed information systems</i>	4/Test	
<i>Development of microservices</i>	4/Test	
<i>Developing Applications Using the Spring Framework</i>	4/Test	
<i>Program and data security systems</i>	4/Test	
<i>Blockchain technology</i>	4/Test	
<i>Basics of software development on the Microsoft.NET platform</i>	4/Test	
<i>Modern technologies for developing WEB-applications on the .NET platform</i>	4/Test	
<i>Modern technologies for developing WEB-applications on the Java platform</i>	4/Test	
<i>Modern technologies for developing WEB-applications on the Node.JS platform</i>	4/Test	
<i>Server Software Development Technologies (Back-end)</i>	4/Test	
<i>Modern server programming technologies using Python (Django)</i>	4/Test	
<i>Basics of software development on the Node.Js platform</i>	4/Test	

4 / fall semester	Economy of IT-industry	4/Test
	Life safety and civil protection	2/Test
	Group Dynamics and Communications	4/Test
	Foreign Language for Specific Purposes III	1,5/Test
	Software Engineering Components III. Quality and Testing Software	5/Exam
	Software Engineering Components Coursework	1/Test
	ELECTIVE COURSES	
	<i>Server Software Development Technologies (Back-end)</i>	6/Exam
	<i>Mobile computer networks</i>	6/Exam
	<i>Basics of computer modeling</i>	6/Exam
	<i>Computer Vision Technologies</i>	6/Exam
	<i>Distributed information systems</i>	6/Exam
	<i>Program and data security systems</i>	6/Exam
	<i>Mathematical foundations of data protection and information security</i>	6,5/Exam
	<i>Basics of Artificial Intelligence</i>	6,5/Exam
	<i>Statistical Methods of Machine Learning</i>	6,5/Exam
	<i>Graphic and geometric modeling and creation of realistic images</i>	6,5/Exam
	<i>Fundamentals of Data Science</i>	6,5/Exam
4 / spring semester	Pre-diploma Practice	7,5/Test
	<i>Modern software development technologies</i>	4,5/Test
	<i>User Interface Programming Technologies (Front-end)</i>	4,5/Test
	<i>Server Software Development Technologies (Back-end)</i>	6/Exam
	<i>Mobile computer networks</i>	6/Exam
	<i>Basics of computer modeling</i>	6/Exam
	<i>Computer Vision Technologies</i>	6/Exam
	<i>Graphic and geometric modeling and creation of realistic images</i>	6/Exam
	<i>Program and data security systems</i>	6/Exam
	<i>Fundamentals of Data Science</i>	6/Exam
	<i>Distributed information systems</i>	4/Test
	<i>Digital Signal Processing</i>	4/Test

123 Computer Engineering

123 Computer Engineering (UA) /0612 Database and network design and administration (ISCED)

First level (Bachelor's degree)

COMPUTER SYSTEMS AND NETWORKS

Department of Computing Techniques

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	History of Science and Technology	2/Test
	Higher Mathematics I. Differential and Integral Calculation of function of one variable	5/Exam
	Analytic Geometry	3/Exam
	Programming-I. Programming	6/Exam
	Computer Logic I. Computer Logic.	5/Test
	Computer Logic. Coursework	1/Test
	Data Structures and Algorithms	5/Test
1 / spring semester	Culture of Speech and Business Speech	2/Test
	Fundamentals of a Healthy Lifestyle	3/Test
	Practical foreign language course I	3/Test
	Higher Mathematics II. Differential and Integral Calculation of function of many variables	4/Exam
	Programming-II. Object-Oriented Programming	5/Test
	Discrete Mathematics	5/Test
	Physics	6/Exam
2 / fall semester	Computer Logic II. Computer Arithmetic.	5/Exam
	High Mathematics III. CVT Rows . Operating calculus	4,5/Exam
	Theory of electrical circuits and signals	5/Exam
	Probability and Mathematical Statistics	5/Test
	Introduction to Philosophy	2/Test
	Computer Modelling	5/Test
	Software Engineering	5/Exam
2 / spring semester	Social Psychology	2/Test
	Practical foreign language course II	3/Test
	Computer Electronics	5/Exam
	Environmental Strategy	2/Test
	Database Organization	4/Test
	Software Engineering. Coursework	1/Test
	Computer Architecture I. Arithmetic and Control Devices	5,5/Exam
	Algorithms and Methods of Computation	4/Test
	System Programming	5/Exam
	Logic	2/Test

3 / fall semester	Law	2/Test
	Computer Architecture II. Processors	4,5/Exam
	Parallel Programming	5/Test
	System Software. Coursework	1/Test
	ELECTIVE SUBJECTS	
	<i>AGILE Software Development Methodology</i>	4/Test
	<i>Analyze Data using Python</i>	4/Test
	<i>Introduction to Data Science Technology</i>	4/Test
	<i>Introduction to Artificial Intelligence</i>	4/Test
	<i>Graphic and Geometric Modeling and Creation of Realistic Images</i>	4/Test
	<i>Gaming Artificial Intelligence</i>	4/Test
	<i>Computer Graphics and Image Processing</i>	4/Test
	<i>Java Programming language</i>	4/Test
	<i>Fundamentals of Frontend and Backend development</i>	4/Test
	<i>Basics of WEB-technologies/WEB - technologies</i>	4/Test
	<i>Basics of WEB – technologies/ Basics of front-end technologies</i>	4/Test
	<i>Client Development Basics</i>	4/Test
	<i>Basics of Software Development on the Java Platform</i>	4/Test
	<i>Basics of Software Development on the Node.Js Platform</i>	4/Test
	<i>Designing User Interfaces</i>	4/Test
	<i>Professional use of SQL and PL/SQL on the example of Oracle 11g</i>	4/Test
	<i>Reactive Programming</i>	4/Test
	<i>Working with data in cloud environments</i>	4/Test
	<i>Distributed Information Systems</i>	4/Test
	<i>Game Application Development</i>	4/Test
	<i>Development of Microservices</i>	4/Test
	<i>Development of Mobile Applications for Android</i>	4/Test
	<i>Development of Mobile Applications for iOS</i>	4/Test
	<i>Developing Applications Using the Spring Framework</i>	4/Test
	<i>Program and data security systems</i>	4/Test
	<i>System Programming C and C++</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the .NET platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Java platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Node.JS platform</i>	4/Test
	<i>Modern Server Programming Technologies Using Python (Django)</i>	4/Test
	<i>User Interface Programming Technologies (Front-end)</i>	4/Test
	<i>Server Software Development Technologies (Back-end)</i>	4/Test
	<i>Blockchain Technology</i>	4/Test
	<i>Functional Programming</i>	4/Test

3 / spring semester	Practical Foreign Language Course for Professional Purposes I	3/Test
	Computer Architecture III. Microprocessor Devices	5/Exam
	Computer Architecture. Coursework	1/Test
	System Software	5,5/Exam
	Computer Networks	5/Exam
	ELECTIVE SUBJECTS	
	<i>AGILE Software Development Methodology</i>	4/Test
	<i>Analyze data using Python</i>	4/Test
	<i>Introduction to Data Science Technology</i>	4/Test
	<i>Introduction to Artificial Intelligence</i>	4/Test
	<i>Gaming Artificial Intelligence</i>	4/Test
	<i>Computer graphics and image processing</i>	4/Test
	<i>Basics of software development on the Node.Js platform</i>	4/Test
	<i>Designing User Interfaces</i>	4/Test
	<i>Professional use of SQL and PL/SQL on the example of Oracle 11g</i>	4/Test
	<i>Reactive programming</i>	4/Test
	<i>Working with data in cloud environments</i>	4/Test
	<i>Distributed information systems</i>	4/Test
	<i>Game application development</i>	4/Test
	<i>Development of microservices</i>	4/Test
	<i>Development of mobile applications for Android</i>	4/Test
	<i>Development of mobile applications for iOS</i>	4/Test
	<i>Developing Applications Using the Spring Framework</i>	4/Test
	<i>Program and data security systems</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the .NET platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Java platform</i>	4/Test
	<i>Modern technologies for developing WEB-applications on the Node.JS platform</i>	4/Test
	<i>Modern server programming technologies using Python (Django)</i>	4/Test
	<i>User Interface Programming Technologies (Front-end)</i>	4/Test
	<i>Server Software Development Technologies (Back-end)</i>	4/Test
	<i>Blockchain technology</i>	4/Test
	<i>Functional programming</i>	4/Test
	<i>Automation of the software life cycle</i>	4/Test
	<i>Computer graphics and multimedia</i>	4/Test
	<i>Mathematical foundations of data protection and information security</i>	4/Test
	<i>Basics of software development on the Microsoft.NET platform</i>	4/Test
	<i>Applied Machine Learning Problems</i>	4/Test
	<i>Software tools for the design and implementation of neural network systems</i>	4/Test
	<i>Statistical Methods of Machine Learning</i>	4/Test
	<i>Computer Vision Technologies</i>	4/Test
	<i>Python programming technologies</i>	4/Test
	<i>Mobile Application Development Technologies</i>	4/Test
	<i>Management of IT - infrastructure projects</i>	4/Test
	<i>Artificial Intelligence in Image Processing Tasks</i>	4/Test

133 Industrial Machinery Engineering

133 Industrial Machinery Engineering (UA) / 0715 Mechanics and Metal Trades
First level (Bachelor's degree)

ENGINEERING OF EQUIPMENT FOR THE PRODUCTION OF POLYMERIC AND BUILDING MATERIALS AND PRODUCTS

Department of Chemical, Polymer and Silicate Mechanical Engineering
Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Informatics</u>	4/Test
	<u>Heat Transfer</u>	4/Test
	<u>Theoretical Foundations of Heat Technics</u>	4/Test
1 / spring semester	<u>Applied Numerical Methods</u>	4/Test
	<u>3D-graphics and printing</u>	4/Test

COMPUTER-AIDED DESIGN OF CHEMICAL EQUIPMENT

Department - Machines and Apparatus of Chemical and Oil Refining Industries
Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Design of Heat Exchange Equipment</u>	4/Test
	<u>Processes and Technologies of Primary Oil and Gas Refining</u>	4/Test
	<u>Numerical Methods of Analysis</u>	4/Test
1 / spring semester	<u>Special Methods of Thermal Treatment</u>	4/Test
	<u>Chemical Engineering Thermodynamics</u>	4/Test
	<u>Refrigeration Equipment</u>	4/Test
	<u>3D-engineering Methods</u>	4/Test

134 Aerospace and rocket-space technology

134 Aerospace and rocket-space technology (UA) / 0716 Motor vehicles, ships and aircraft (ISCED)

First level (Bachelor's degree)

AEROSPACE AND ROCKET SYSTEMS ENGINEERING

Department of Space Engineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	History of Science and Technology	2/Test
	Higher Mathematics	6/Exam
	Physics	5/Exam
	Chemistry	3/Test
	Descriptive Geometry	4/Exam
	Engineering basics of aviation and astronautics	3/Test
1 / spring semester	Ukrainian Language for Specific Purposes	2/Test
	Basics of a healthy lifestyle	3/Test
	Foreign Language	3/Test
	Higher Mathematics	6/Exam
	Physics	5/Exam
	Theoretical Mechanics	5/Exam
	Engineering and Computer Graphics	3/Test
2 / fall semester	General Theory of Development	2/Test
	Higher Mathematics	6/Exam
	Theoretical Mechanics	6/Exam
	Electrical Engineering and Electronics	3/Test
	Theory of Mechanisms and Machines	5/Test
	Hydrogas dynamics and thermodynamics	7,5/Exam
2 / spring semester	Foreign Language	3/Test
	Environmental Safety of Engineering Activities	2/Test
	Materials and Constructions Mechanics	3,5/Test
	Machines Details and Basics of Aircraft Designing	5/Exam
	Theory of Automatic Control	5/Exam
	Course Work in the Theory of Automatic Control	1/Test
	Aerospace Materials Science	4/Test
	Design of Rocket and Spacecraft Power Plants	6,5/Exam

134 Aerospace and rocket-space technology (UA) / 0716 Motor vehicles, ships and aircraft (ISCED)

First level (Bachelor's degree)

AIRPLANES AND HELICOPTERS

Department of Aircraft and Rocket Engineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
3 / fall semester	Business law	2/Test
	Machines Details and Basics of Designing	3,5/Exam
	Structural Mechanics of Aircrafts and Helicopters	3,5/Exam
	Aerohydromechanics	3/Test
	The aircraft structure	2,5/Test
	Aerodynamics of Aircraft	3,5/Exam
3 / spring semester	Foreign Language for Professional Purposes	3/Test
	Structural Mechanics of Aircrafts and Helicopters	2,5/Exam
	The aircraft structure	2,5/Exam
	Course projects the aircraft structure	1,5/Test
	Aircraft designing	3,5/Exam
	Aerodynamics of Aircraft	2,5/Test

151 Automation and Computer Integrated Technologies

151 Automation and Computer Integrated Technologies (UA) / 0714 Electronics and automation (ISCED)

First level (Bachelor's degree)

AUTOMATION HARDWARE AND SOFTWARE

Department of Automation Hardware and Software

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / spring semester	<u>Programming</u>	5/Exam
3 / fall semester	<u>Industrial Networks</u>	4/Test
3 / spring semester	<u>Basics of Robotics and Machine Vision</u>	4/Test
	<u>Fundamentals of design of computer-integrated technological complexes</u>	3/Test
4 / spring semester	<u>Application of computer-integrated technological complexes</u>	4/Test

153 Micro- and Nanosystem Engineering

153 Micro- and Nanosystem Engineering (UA) / 0714 Electronics and Automation, 0788 Inter-Disciplinary Programmes and Qualifications Involving Engineering, Manufacturing and Construction (ISCED)

First level (Bachelor's degree)

MICRO- AND NANOELECTRONICS

Department of Microelectronics

Language of study – English

COURSE TITLE	Number of ECTS credits / semester control
Chemistry of Electronics Materials	5.5
Basics of Micro- and Nanosystem Technology	4
Basics of Sensor Electronics	4
Sensory Materials and Technologies	4
Physical Basics of Sensory	4.5
Statistical Methods of Data Processing	4
Basics of Quantum Theory	5
Semiconductor Physics	4
Functional Electronics	5
Physical and Technological Bases of Nanoelectronics-2.	4.5
Technological Bases of Nanoelectronics	
Dielectric Physics	4
Optoelectronics	5
Informatics-2. Programming and Algorithmic Languages	5
Microprocessors and Microcontrollers	3
Microwave Microelectronics	5
Computational Mathematics	5

161 Chemical engineering and processes

161 Chemical engineering and processes (UA) / 0711 Chemical engineering and processes (ISCED)

First level (Bachelor's degree)

INDUSTRIAL ECOLOGY AND RESOURCE EFFICIENT CLEANER TECHNOLOGIES

Department of Ecology and Plant Polymers Technology

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
2 / fall semester	<u>Analytical Chemistry - I. Qualitative Analysis</u>	5,0/exam
	<u>Chemistry of plant polymers</u>	4,0/Test
2 / spring semester	<u>Analytical Chemistry - II. Quantitative Analysis</u>	5,0/exam
3 / spring semester	<u>Environmental Protection Organisation and Management</u>	4,0/exam
	<u>Toxicology</u>	5,0/exam

163 Biomedical Engineering

163 Biomedical Engineering (UA) / 0588 Inter-disciplinary programmes and qualifications involving natural sciences, mathematics and statistics (ISCED)
First level (Bachelor's degree)

MEDICAL ENGINEERING

Department of Biomedical Engineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
2 / fall semester	Higher Mathematics III: Series, Basics of Theory of Functions of Complex Variable.	6,5/Exam
	Physics II. Optics. Quantum physics	5/Exam
	Introduction to Philosophy	2/Test
	Quantitative Physiology	4,5/Test
	Material science and Structural materials	4,5/Test
	Foundations of Discrete Mathematics	4/Test
	Psychology	2/Test
2 / spring semester	Foreign Language II. Practical Course of Foreign Language	3/Test
	Ecological Management	2/Test
	Electrical Engineering and Electronics	6/Exam
	Biomaterials and Biocompatibility	5/Exam
	Biophysic	4,5/Test
	Mechanics	4,5/Test
	Object-Oriented Programming	4,5/Test
	Logic	2/Test
	Power sports	2/Test
3 / fall semester	Business Law	2/Test
	Radiation Safety and Dozimitriya	5/Exam
	Analog and Digital Circuits Design-1. Analog Circuit Design	4,5/Exam
	Biomedical Mechanics	4 /Test
	Registration and Processing of Biosignals and Medical Images	4 /Test
	Telemedicine and Computer Networks.	4/Test
	Design of Automatic Monitoring and Control Systems	2/Test
3 / spring semester	Foreign Language for Specific Purposes-I. Practical foreign language course for professional communication I	3/Test
	Coursework in Analog and Digital Circuitry	1/Test
	Analog and Digital Circuitry II. Digital Circuitry	7/Exam
	Biomedical Devices, Sets and Systems	4,5/Exam
	Biothermodynamics and Mass-transfer Theory	4/Test
	Thermodynamics of biological processes and systems	4/Test

171 Electronics

171 Electronics (UA) / 0714 Electronics and Automation (ISCED)

First level (Bachelor's degree)

ELECTRONIC COMPONENTS AND SYSTEMS

Department of Electronic Devices and Systems

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Ukrainian for Specific Purposes	2/Test
	Mathematical Analysis I	5,5/Exam
	Analytic Geometry	4,5/Exam
	Physics I	5,5/Exam
	Engineering and Computer Graphics I. Engineering Graphics	2/Test
	Informatics I. Personal Computers and Fundamentals of Programming	4/Test
	<u>Measuring Technique</u>	3,5/Test
1 / spring semester	History of Science and Technology	2/Test
	Basics of a Healthy Lifestyle	3/Test
	Foreign Language I. Practical course on Foreign Language I	3/Test
	Mathematical Analysis II	6,5/Exam
	Physics II	6,5/Exam
	Engineering and Computer Graphics II. Computer Graphics	4/Exam
	Informatics II. Programming and Algorithmic Languages	4/Test
2 / fall semester	Fundamentals of Analytical Mechanics and Theory of Oscillations	4/Test
	Environmental Safety of Engineering Activity	2/Test
	Mathematical Analysis III	5,5/Exam
	<u>Materials Science in Electronics</u>	4/Exam
	<u>Physical Fundamentals of Electronics</u>	4/Exam
	<u>Calculus</u>	4/Test
	<u>Programming of Embedded Systems</u>	3/Test
2 / spring semester	Logic	2/Test
	<u>Theory of Electrical Circuits</u>	4/Test
	Foreign Language II. Practical Foreign Language Course II	3/Test
	Introduction to Philosophy	2/Test
	<u>Nonlinear Electric Circuits and Transient Processes</u>	6/Exam
	<u>Term Paper in Nonlinear Electric Circuits and Transient Processes</u>	1/Test
	Fundamentals of Probabilistic Data Processing	5/Exam

[171 Electronics \(UA\) / 0714 Electronics and Automation \(ISCED\)](#)

First level (Bachelor's degree)

ACOUSTIC ELECTRONIC SYSTEMS AND ACOUSTIC INFORMATION PROCESSING TECHNOLOGY

Department – Acoustic and Multimedia Electronic Systems

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
2 / fall semester	<u>Computational Mathematics</u>	4/Test
	<u>Physical Fundamentals of Electronics</u>	4/Exam
2 / spring semester	<u>The Probabilistic Basics of Data Processing</u>	5/Test
3 / fall semester	<u>Circuitry</u>	4.5/Exam
3 / spring semester	<u>Fundamentals of Non-Destructive Testing</u>	4/Test
	<u>Fundamentals of Defectology</u>	4/Test
	<u>Special Programming Languages for Embedded Systems</u>	4/Test
4 / fall semester	<u>Base of Microprocessor Technology</u>	4/Exam
	<u>Power Supply and Electromagnetic Compatibility of Multimedia Equipment</u>	4/Test
4 / spring semester	<u>Information Support of Telecommunication Systems</u>	4.5/Test

172 Telecommunications and Radio Engineering

172 Telecommunications and Radio Engineering (UA) / 0714 Electronics and automation
(ISCED)

First level (Bachelor's degree)

INFORMATION-COMPUTING MEANS OF RADIO ELECTRONIC SYSTEMS

Department of Design of Electronic Digital Equipment

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Informatics - 1</u>	4 / Test
1 / spring semester	<u>Informatics - 2</u>	7 / Exam
2 / fall semester	<u>Environmental Safety of Engineering Activity</u>	2 / Test
2 / spring semester	<u>Functional and Logical Design</u>	5 / Exam
2 / fall semester	<u>Fundamentals of Circuits Theory</u>	8 / Exam

**ACADEMIC OFFERS
for foreign students of
Second level (Master's degree)**

035 Philology

035 Philology (UA) / 0231 Language Acquisition (ISCED)

Second level (Master's degree)

**GERMANIC LANGUAGES AND LITERATURES (INCLUDING TRANSLATION),
PRIMARY – ENGLISH**

Department – Linguistics Department, Chair of Theory, Practice and Translation of English

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Theory of Translation	2/Exam
	<u>Pedagogy of Higher Education and Methodic Principles of Teaching Foreign Languages and Translation</u>	4/Test
	<u>CAT Tools for Specialized Translation</u>	4/Test
	<u>Corpus Linguistics</u>	4/Test
	<u>Ancient Themes in European Literature</u>	4/Test
	<u>Role of Phonetic Devices in Translating Texts of Different Genres</u>	4/Test
1 / spring semester	<u>Suggestion in Oral Communication</u>	4/Test
	<u>Sociolinguistics</u>	4/Test
	<u>Public Speaking</u>	4/Test
	<u>ICT in Teaching English for Specific Purposes</u>	4/Test
	<u>Stereotypes of Speech Behaviour in Typical Communicative Situations</u>	4/Test

**GERMANIC LANGUAGES AND LITERATURES (INCLUDING TRANSLATION),
PRIMARY – GERMAN**

Department – Theory, Practice and Translation of the German Language

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Practice in linguistic communication and translation (German)</u>	9
	<u>Theory of Translation</u>	2
1 / spring semester	<u>Practice in Interpreting</u>	3
	<u>Audiovisual Translation</u>	4
	<u>Introduction to Corpus and Computational Linguistics</u>	4
	<u>Medical Translation</u>	4
	<u>The Theory and Practice of Copywriting</u>	4
	<u>Legal Translation</u>	4

051 Economy

051 Economy (UA) / 0311 Economics (ISCED)

Second level (Master's degree)

INTERNATIONAL ECONOMICS

Department of International Economics

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Economic Measurement of Sustainable Development</u>	2/Test
	<u>Startup-Projects Development</u>	3/Test
	<u>Methods of Decision-Making in the Context of Globalization</u>	2,5/Test
	<u>Social Responsibility</u>	2,5/Test
	<u>International Project Management</u>	2,5/Test
	<u>Intellectual Capital Management</u>	3/Test
	<u>Risk Forecasting in International Economic Activity</u>	3,5/Exam
	<u>Global Economy</u>	4/Exam
	<u>Integrated Corporate Structures in International Business</u>	3,5/Exam
	<u>Scientific Work on Theme of Master Thesis</u>	2/Test
1 / spring semester	<u>International Trade</u>	4,5/Exam
	International Trade Coursework	1/Test
	<u>Workshop on Professional Communication in Foreign Language</u>	3/Test
	<u>International Scientific and Technical Cooperation</u>	4/Test
	<u>Management of International Competitiveness</u>	4/Test
	<u>International Investment Activity</u>	4/Test
	<u>International Economic Development Strategies</u>	4,5/Exam
	<u>Strategic Enterprise Management</u>	4/Test
	<u>Management of International Business Projects Industry 4.0</u>	4,5/Exam
	<u>Scientific Work on Theme of Master Thesis</u>	2/Test

054 Sociology (UA) / 0314 Sociology and cultural studies (ISCED)
 Second level (Master's degree)

CONFLICT RESOLUTION AND MEDIATION

Department of Sociology

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Methodology and methods of sociological research on conflicts - 1	2,5/test
	Sociology of conflicts and wars in the context of transformations and modernizations	5/Exam
	Regional/ethnic conflicts and peace-building - 1	3/test
	Sociological studies of migrations and forced relocations	3/Exam
1 / spring semester	Methodology and methods of sociological research on conflicts - 2	3,5/Exam
	Regional/ethnic conflicts and peace-building - 2	3/Exam
	Contemporary Sociological Theories	4/test
	Sociology of war: ideological discourses, mobilization practices	4/test

073 Management

073 Management (UA) / 0413 Management and Administration (ISCED)

Second level (Master's degree)

MANAGEMENT AND BUSINESS ADMINISTRATION

Department of Enterprise Management

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Practical Course of Foreign Language Business Communication	3/Test
	<u>Financial Management</u>	4,5/Exam
	<u>Design of Integration Structures</u>	4/Test
	<u>Enterprise Development Management</u>	5/Exam
	<u>Strategic Management</u>	4/Exam
	<u>Human Resource Management Technologies</u>	4/Test
	<u>Digital Business Transformation</u>	4/Test
1 / spring semester	<u>Management of Foreign Exchange Transactions</u>	5,5/Exam
	<u>Corporate Governance</u>	5,5/Exam
	<u>Design Thinking</u>	4.5/Test
	<u>Technology Transfer</u>	4.5/Test
	<u>Environmental Management</u>	4.5/Test
	<u>Business Management</u>	5/Exam

073 Management (UA) / 0413 Management and administration (ISCED)
 Second level (Master's degree)

MANAGEMENT OF INTERNATIONAL BUSINESS

Department of Enterprise Management

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Financial Management</u>	4,5/Exam
	<u>Design of Integration Structures</u>	4/Test
	<u>Strategic Management in International Business</u>	5/Exam
	<u>Digital Transformation and New Business Models</u>	4/Test
1 / spring semester	<u>International Management</u>	5/Exam

141 Electric power engineering, electrotechnics and electromechanics

141 Electric Power Engineering, Electrotechnics and Electromechanics (UA) /

0713 Electricity and Energy (ISCED)

Second level (Master's degree)

ELECTRIC POWER DISTRIBUTION SYSTEMS ENGINEERING

Power Supply Department

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
2 / fall semester	Mathematical Methods of Optimization in Power Engineering	4/Exam
	Mathematical Modeling of Processes and Systems in Power Engineering	4/Exam
	Theory of Nonlinear Electric and Magnetic Circuits	4/Exam
	Practical Course of Foreign Language for Scientific Communication	1,5/Test
	Higher School Pedagogy	2/Test
	Scientific and Research Work on Topic of Master's Thesis	3,5/Test
	Integrated resource planning in power engineering	4/Test
	Intelligent Technologies for Electricity Distribution	4/Test
	Innovations in Energy Sector	3/Test

144 Thermal Power Engineering

144 Thermal Power Engineering (UA) / 0713 Electricity and Energy (ISCED)

Second level (Master's degree)

ENERGY MANAGEMENT AND ENGINEERING OF THERMAL POWER SYSTEMS

Department – Heat Engineering and Energy Saving

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Intellectual Property and Patenting	3 / Test
	Fundamentals of Engineering and Technology for Sustainable Development	2 / Test
	Energy and Resource Saving in the Energy Sector	4 / Exam
	Management of Startup Projects	3 / Test
	Methods of Buildings Energy Efficiency Analysis	4.5 / Exam
	Combined Systems with Renewable Energy Sources	4 / Test
	Applied Tasks of Energy Saving	5 / Exam
	Course Work on Applied Tasks of Energy Saving	1 / Test
	Scientific Work on the Topic of Master's Thesis	2 / Test
	Workshop on Foreign Language Scientific Communication	1,5 / Test
1 / spring semester	Analysis and Expertise of Energy Supply Projects	3 / Test
	Course Work on Methods of Buildings Energy Efficiency Analysis	1 / Test
	Scientific Work on the Topic of Master's Thesis	2 / Test
	Methods of energy monitoring and energy audit	5.5 / Exam
	Market research in the energy sector	3 / Test
	Methods for control of energy consumption efficiency	4 / Test
	Methods of energy analysis in heat technologies	5 / Exam
	Heat and mass transfer processes and technologies	5 / Exam
	Workshop on Foreign Language Scientific Communication	1,5 / Test

153 Micro- and Nanosystem Engineering

153 Micro- and Nanosystem Engineering (UA) / 0714 Electronics and Automation, 0788 Inter-Disciplinary Programmes and Qualifications Involving Engineering, Manufacturing and Construction (ISCED)

Second level (Master's degree)

MICRO- AND NANOELECTRONICS

Department of Microelectronics

Language of study – English

COURSE TITLE	Number of ECTS credits / semester control
Physicochemistry of the Surface of Semiconductors	5
Modeling of Semiconductor Devices and Integrated Circuits	5
Mathematical Modeling of Systems and Processes	4
Wireless Sensor Networks	5
Electronic Sensors	5
Design of Semiconductor Devices and Integrated Circuits	5
Microelectronic Information Sensor Systems	5
Design of Semiconductor Devices and Integrated Circuits	7
Scientific Research	2
Magnetoelectronics in Information Systems	5
Devices Based on Nanosized and Quantum Effects	5
Special Course of Micro- and Nanosystem Technology	4

171 Electronics

171 Electronics (UA) / 0714 Electronics and Automation (ISCED)

Second level (Master's degree)

ELECTRONIC COMPONENTS AND SYSTEMS

Department of Electronic Devices and Systems

Language of study – English

Educational offers		
Year of study/ semeste r	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Electronic Systems for Operation and Control</u>	5 / Exam
	<u>Course Project in Electronic Systems for Operation and Control</u>	1,5 / Test
	<u>Fundamentals of Automatic Control Theory</u>	6 / Exam
	<u>Power Electronic Systems</u>	5 / Exam
	<u>Power Supply Systems of Electronic Equipment</u>	5 / Test
	<u>Scientific Research I. Fundamentals of Scientific Research</u>	2 / Test
1 / spring semester	<u>Scientific Research II. Research Work on Master Thesis Subject</u>	2 / Test
	<u>Specialized and Industrial Microprocessor Systems / Microprocessor Systems Based on ARM Processors</u>	5 / Exam
	<u>Display and Data Recording Devices / Information Visualization and Detection Systems</u>	4 / Test
	<u>Components of Electronic Control Systems / Specialized Power Electronic Devices and Systems</u>	5 / Exam
	<u>Design and Technology of Electronic Devices and Systems / Design of Robotic Electronic Systems</u>	5 / Exam
	<u>Internet of Things Technology in Electronics / Internet Technology in Industry</u>	4 / Test
2 / fall semester	<u>Pedagogical Excellence</u>	2 / Tests
	<u>Mathematical Optimization Methods</u>	4 / Exam
	<u>Mathematical Modeling of Systems and Processes</u>	4 / Exam
	<u>Supplementary Topics of Information Electronics</u>	6 / Exam
	<u>Course Project in Supplementary Topics of Information Electronics</u>	1,5 / Test
	<u>Scientific Research II. Research Work on Master Thesis Subject</u>	3,5 / Test
	<u>Fundamentals of Machine Learning</u>	3,5 / Test
	<u>Modern trends in Computer and Microprocessor Technology</u>	4 / Test

171 Electronics (UA) / 0714 Electronics and Automation (ISCED)

Second level (Master's degree)

ACOUSTIC ELECTRONIC SYSTEMS AND ACOUSTIC INFORMATION PROCESSING TECHNOLOGY

Department – Acoustic and Multimedia Electronic Systems

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / spring semester	<u>Software for Wireless Security Systems</u>	4/Test
	<u>Technologies for Creating Educational Computer Games and Augmented Reality Design</u>	4.5/Test
	<u>Acoustic Equipment of Studios and Rooms</u>	5/Exam
	<u>Hardware for Wireless Security Systems</u>	5/Test
2 / fall semester	<u>Mathematical Modeling of Systems and Processes</u>	4/Exam

184 Mining

184 Mining (UA) / 0724 Mining and Extraction (ISCED)

Second level (Master's degree)

GEOENGINEERING

Department of Geoengineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Intellectual Property and Patenting</u>	3 / Test
	Basics of Engineering and Sustainable Development Technologies	2 / Test
	<u>Geotechnical Structures Construction</u>	4 / Exam
	<u>Underground Enterprises Reconstruction</u>	4 / Exam
	<u>Specialized Course On Underground Construction</u>	4 / Test
	<u>Computer-Aided Design System</u>	4 / Test
	<u>Municipal Underground Structures Engineering</u>	3.5 / Exam
	<u>Course project in Municipal Underground Structures Engineering</u>	1.5 / Test
	<u>Scientific Work on the Topic of Master's Thesis</u>	2 / Test
1 / spring semester	<u>Practical course of Foreign Language on Business Communication</u>	
	<u>Management of startup projects</u>	3 / Test
	<u>Special Methods of Building</u>	4 / Exam
	<u>Scientific Work on the Topic of Master's Thesis</u>	2 / Test
	ELECTIVE COURSES	
	<u>Designing of Underground Transport Systems</u>	4 / Exam
	<u>Management of Technological Processes of Open-cast Mining</u>	4 / Exam
	<u>Environmental Safety of Subsoil Use</u>	4 / Exam
	<u>Designing of Connection Between Ground and Underground Facilities</u>	4 / Exam
	<u>Logistics of Mining Transport Systems</u>	4 / Exam
	<u>Utilization and Processing of Mining Wastes</u>	4 / Exam
	<u>Modernization of Underground Networks</u>	4 / Test
	<u>Resource-Saving Technologies for Mining and Processing of Rocks</u>	4 / Test
	<u>Environmental Protection Technologies for Open-cast Mining</u>	4 / Test
	<u>Designing Underground Structures of Special Purpose</u>	4 / Test
	<u>Mathematical Methods of Process Optimization by Geoengineering Systems</u>	4 / Test
	<u>Optimization of Quarrying Processes in the Quarry</u>	4 / Test
	<u>Resource Management of a Geotechnical Enterprise</u>	4 / Test
	<u>Geo-information Systems of Superuse</u>	4 / Test
	<u>Information Technologies in Nature Protection</u>	4 / Test
	<u>Geoinformation Systems of Construction Objects</u>	4 / Test
	<u>Designing of Open-cast Mining Enterprises</u>	4 / Test
	<u>Thermodynamics of Stability of Quarry Sides and Dumps</u>	4 / Test

ACADEMIC OFFERS
for foreign students of
Third level (PhD)

035 Philology

035 Philology (UA) / 0231 Language Acquisition (ISCED)

Third level (PhD)

PHILOLOGY

Department – Linguistics Department, Chair of Theory, Practice and Translation of English

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Linguistic Studies: History and Modernity	5/Exam
	Methodology and Organization of Philological Research: Methodology of Philological Studies	2/Test
	<u>Non-verbal means of communication: nominative and pragmatic aspects</u>	4/Test
	<u>Text Theory: Vectors Of Development, Research Schools And Personalities</u>	4/Test
	<u>Synergetic approach as a methodological basis of linguistic research</u>	4/Test
	<u>Academic Writing and Scientific Communication in English</u>	3/Exam
1 / spring semester	Methodology and Organization of Philological Research: Organization of Research Activities in Philology	2/Test
	<u>Phonosemantic aspect of linguistic research</u>	4/Test
	<u>Sociocultural aspect of linguistic research</u>	4/Exam
	<u>Academic Writing and Scientific Communication in English</u>	3/Exam
	<u>Current trends in higher education</u>	4/Test
	<u>Stylistics and Text Interpretation: Tradition and New Vistas</u>	4/Test
2 / fall semester	Modern Translatology	5/Exam
	<u>Academic Writing and Scientific Communication in English</u>	3/Exam
	<u>Cognitive Poetics: Scope of Research</u>	4/Test
	<u>Non-verbal means of communication: nominative and pragmatic aspects</u>	4/Test
	<u>Psychoenergetic and communicative-pragmatic aspects of language functioning</u>	4/Test
2 / spring semester	<u>Energetic approach to the study of communication processes</u>	4/Test
	<u>Multimodality of Modern Mass Media Space</u>	4/Test
	<u>Psycholinguistics</u>	4/Test
	<u>Synergetic approach as a methodological basis of linguistic research</u>	4/Test
	<u>Stylistics and Text Interpretation: Tradition and New Vistas</u>	4/Test

051 Economy

051 Economy (UA) / 0311 Economics (ISCED)

Third level (PhD)

ECONOMICS

Department of International Economics

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	<u>Philosophical Principles of Scientific Activity 1</u>	6/Test
	<u>Foreign Language for Scientific Activity 1</u>	6/Test
	<u>Global Economy</u>	3/Exam
	<u>Neoclassical Models of Economic Processes</u>	3/Exam
1 / spring semester	<u>Philosophical Principles of Scientific Activity 2</u>	6/Exam
	<u>Foreign Language for Scientific Activity 2</u>	6/Exam
	<u>Organization of Scientific and Innovative Activities</u>	4/Test
2 / fall semester	<u>Change Management and Business Transformation</u>	3/Exam
	<u>Pedagogic Practice</u>	2/Test
	<u>Economic Theories of Nobel Laureates</u>	5/Test
2 / spring semester	<u>Theory of Analysis of Economic Systems</u>	3/Exam
	<u>Mechanisms of Integration into the International Research Space</u>	5/Test

141 Electric power engineering, electrotechnics and electromechanics

141 Electric Power Engineering, Electrotechnics and Electromechanics (UA) /

0713 Electricity and Energy (ISCED)

Third level (PhD)

ELECTRIC POWER ENGINEERING, ELECTROTECHNICS and ELECTROMECHANICS

Department – Department of theoretical electrical engineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Philosophical principles of scientific activity-1. Scientific worldview and ethical culture of the scientist	2.0 / Test
	Foreign language for scientific activity-1. Foreign language for scientific research	3.0 / Test
1 / spring semester	Philosophical principles of scientific activity-2. Philosophical epistemology and epistemology	4.0 / Exam
	Foreign language for scientific activity-2. Foreign language of scientific communication	3.0 / Exam
	Advanced technologies in electric drive and electromechanical systems-1	2.0 / Test
2 / fall semester	Fundamentals of theory of electromagnetic field and processes	3.0 / Test
	Monitoring, control and protection of electric power systems and electrotechnical complexes	3.0 / Exam
	Advanced technologies in electric drive and electromechanical systems-2	2.0 / Exam
	Pedagogical Internship	2.0 / Test
	Special issues of protection against electromagnetic effect of lightning	3.0 / Test
2 / spring semester	Methods of research, formation and control of intelligent energy systems and complexes	3.0 / Exam
	Non-conventional and renewable energy sources in electric power systems and electrotechnical complexes	3.0 / Test
	Analysis and research of development of lightning discharge channel as dynamic system	3.0 / Test
	Mathematical modeling of systems of protection of electrotechnical complexes against electromagnetic effects of lightnings	4.0 / Exam

153 Micro- and Nanosystem Engineering

153 Micro- and Nanosystem Engineering (UA) / 0714 Electronics and Automation, 0788 Inter-Disciplinary Programmes and Qualifications Involving Engineering, Manufacturing and Construction (ISCED)

Third level (PhD)

MICRO- AND NANOELECTRONICS

Department of Microelectronics

Language of study – English

COURSE TITLE	Number of ECTS credits / semester control
Electronic Materials: Principles and Applied Science	5
Micro- and Nanocomponents and Systems	3
Photonic and Optoelectronic Devices	5

184 Mining

184 Mining (UA) / 0724 Mining and Extraction (ISCED)

Third level (PhD)

GEOENGINEERING

Department – Geoengineering

Language of study – English

Educational offers		
Year of study/ semester	COURSE TITLE	Number of ECTS credits / semester control
1 / fall semester	Philosophical principles of scientific activity	3 / Test
	Foreign language for scientific activity	3 / Test
1 / spring semester	Philosophical principles of scientific activity	3 / Exam
	Foreign language for scientific activity	3 / Exam
	Organization of scientific and innovative activities	4 / Test
2 / fall semester	Geomechanical Processes in Rock Ranges	6 / Exam
	Mathematical Modelling of Geomechanical Processes	3 / Test
	Pedagogical practice	2 / Test
2 / spring semester	Mathematical Modelling of Geomechanical Processes	3 / Test
	Educational component 1 F	5 / Test
	Educational component 2 F	5 / Test