



### MODULE SPECIFICATION

Module code	
Module title in Polish	<b>Podstawy ekonomii</b>
Module title in English	<b>The Fundamentals of Economics</b>
Module running from the academic year	2016/2017

### A. MODULE IN THE CONTEXT OF THE PROGRAMME OF STUDY

Field of study	<b>Environmental Engineering</b>
Level of qualification	first cycle (first cycle, second cycle)
Programme type	academic (academic/practical)
Mode of study	full-time (full-time/part-time)
Specialism	All
Organisational unit responsible for module delivery	<b>The Department of Economic Strategies</b>
Module co-ordinator	<b>Helena Baraniecka, PhD</b>
Approved by:	<b>Halina Jastrzębska-Smolaga, PhD hab., Professor of the University</b>

### B. MODULE OVERVIEW

Module type	core module (core/programme-specific/elective HES*)
Module status	compulsory module (compulsory/optional)
Language of module delivery	<b>Polish/ English</b>
Semester in the programme of study in which the module is taught	semester 1
Semester in the academic year in which the module is taught	winter semester (winter semester/summer semester)
Pre-requisites	None (module code/module title, where appropriate)
Examination required	(Yes/No) No
ECTS credits	1

\* elective HES – elective modules in the Humanities and Economic and Social Sciences



# Politechnika Świętokrzyska

## WYDZIAŁ INŻYNIERII ŚRODOWISKA, GEOMATYKI I ENERGETYKI

Mode of instruction	lectures	classes	laboratories	project	others
Total hours per semester	15				



### C. LEARNING OUTCOMES AND ASSESSMENT METHODS

<b>Module aims</b>	The aims of the module include the following: familiarising students with basic elements of the theory of economics (which concern micro- and macroeconomics); familiarising students with: theoretical fundamentals concerning classical and Keynesian approach to the problems of economics, the rules of market functioning, the basics of the theory of consumer choice, the fundamentals of the enterprise theory, the basics of the division theory, main categories of macroeconomics, state budget, monetary-credit system, the theories of the economic condition cycle, unemployment theories, and inflation theories.
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Module outcome code	Module learning outcomes	Mode of instruction (l/c/lab/p/ others)	Corresponding programme outcome code	Corresponding discipline-specific outcome code
W_01	A student has basic knowledge as regards economics which is useful to formulate and solve simple tasks connected with environmental engineering.	I	IS_W01	T1A_W01 T1A_W02
W_02	A student has knowledge as regards engineering economics, marketing and management.	I	IS_W18	T1A_W02 T1A_W07 T1A_W08
W_03	A student has fundamentals knowledge as regards management (including quality management and running business activity).	I	IS_W19	T1A_W08 T1A_W09 T1A_W11
U_01	A student is able to analyse the costs of enterprise activity and estimate profits.	I	IS_U01	T1A_U08 T1A_U09
U_02	A student is capable of self-education, e.g. in order to raise his/her professional competences.	I	IS_U07	T1A_U05
U_03	A student can initially estimate the costs of the designed engineering solutions.	I	IS_U13	T1A_U07 T1A_U09 T1A_U12
K_01	A student can work independently and co-operate in a team on the assigned task.	I	IS_K01	T1A_K03
K_02	A student is responsible for the reliability of the obtained results of his/her work as well as its interpretation.	I	IS_K02	T1A_K02 T1A_K05
K_03	A student formulated conclusions and describes the results of his/her own work. Moreover, a student is communicative in multimedia presentations.	I	IS_K07	T1A_K07

#### Module content:

1. Topics to be covered in the lectures

No.	Topics	Module outcome code
1.	<b>Basic notions and essence of economics.</b> Modern socio-economic systems. The characteristics of market economy. The evolution of the market economy in the countries of developed capitalism. The characteristics of the centrally-planned economy. Classical economics. Neo-classical economics.	W_01 K_01
2.	<b>Market, supply, and demand</b>  The concept and functions of market, the classification of markets. Demand and its determining factors. The law of demand. Supply and its determining factors. The law of supply. The price of market equilibrium. The buyer's market	W_01 W_02 K_01



	and the seller's market. The mechanism of restoring market equilibrium. The elasticity of supply and demand. Graphical interpretation of elasticity. Measuring elasticity of supply and demand. Price elasticity of demand.	
3.	<p><b>The fundamentals of the consumer choice theory.</b> The choice the current consumption structure. Total utility. Marginal utility. The line of budget constraints. Indifference curve. The condition of optimal choice of the structure consumer current consumption.</p> <p><b>The fundamentals of the production theory.</b> The concept of production. Production factors. Short-term production theory. Total, average, and marginal product. The law of decreasing incomes. Long-term production theory. Isoquant and isocost. The optimisation of utilising production factors. Selecting manufacturing techniques.</p>	W_03 U_01 U_02 K_01
4.	The concept of an enterprise, the purposes of its activity and characteristics. The types of enterprises. Short-term costs. Total, fixed, and variable costs. Average and marginal costs. Total, average, and marginal takings. Economic and normal profit. The condition of enterprise equilibrium on a perfect and imperfect market.	W_02, W_03 K_02 U_02
5.	<b>Main concepts and categories of macroeconomics.</b> GDP and national income. The methods of measuring GDP. The determinants of national income. The role of state in economy. State budget. Monetary and credit system. Taxes. Budget deficit and public debt. The banking system. The functions of banks.	W_03 K_03 U_02
6.	<p><b>Economic condition cycle.</b> The theories of the economic condition cycle. The methods of state interaction on the course of the economic condition cycle.</p> <p><b>Unemployment.</b> The types of unemployment. The reasons of unemployment in terms of classical and Keynesian theory.</p>	W_03 U_02 K_02
7.	Inflation (its notion and the methods of measuring inflation). Socio-economic effects of inflation. Main inflation theories. Inflation with respect to unemployment. The concept of the Phillips curve.	W_02 W_03 U_03 K_02
8	<b>International economics.</b> The theories of international trade. Balance of accounts. Globalisation and its effects.	W_03 U_01 U_02 K_02

2. Topics to be covered in the classes
3. Topics to be covered in the laboratories

### Assessment methods

Module outcome code	Assessment methods <i>(Method of assessment; for module skills – reference to specific project, laboratory and similar tasks)</i>
W_01	A final test
W_02	A final test
W_03	A final test
U_01	A final test
U_02	A final test



# Politechnika Świętokrzyska

## WYDZIAŁ INŻYNIERII ŚRODOWISKA, GEOMATYKI I ENERGETYKI

U_03	A final test
K_01	Observing a student's involvement during the classes
K_02	Observing a student's involvement during the classes
K_03	Observing a student's involvement during the classes



### D. STUDENT LEARNING ACTIVITIES

ECTS summary		
	Type of learning activity	Study time/ credits
1	Contact hours: participation in lectures	15
2	Contact hours: participation in classes	
3	Contact hours: participation in laboratories	
4	Contact hours: attendance at office hours (2-3 appointments per semester)	3
5	Contact hours: participation in project-based classes	
6	Contact hours: meetings with a project module leader	
7	Contact hours: attendance at an examination	
8		
9	<b>Number of contact hours</b>	<b>18</b> <i>(total)</i>
10	<b>Number of ECTS credits for contact hours</b> <i>(1 ECTS credit = 25-30 hours of study time)</i>	<b>0,72</b>
11	Private study hours: background reading for lectures	4
12	Private study hours: preparation for classes	
13	Private study hours: preparation for tests	3
14	Private study hours: preparation for laboratories	
15	Private study hours: writing reports	
16	Private study hours: preparation for a final test in laboratories	
17	Private study hours: preparation of a project/a design specification	
18	Private study hours: preparation for an examination	
19		
20	<b>Number of private study hours</b>	<b>7</b> <i>(total)</i>
21	<b>Number of ECTS credits for private study hours</b> <i>(1 ECTS credit = 25-30 hours of study time)</i>	<b>0,28</b>
22	<b>Total study time</b>	<b>25</b>
23	<b>Total ECTS credits for the module</b> <i>(1 ECTS credit = 25-30 hours of study time)</i>	<b>1</b>
24	<b>Number of practice-based hours</b> <i>Total practice-based hours</i>	
25	<b>Number of ECTS credits for practice-based hours</b> <i>(1 ECTS credit = 25-30 hours of study time)</i>	

### E. READING LIST

References	
Module website	