



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Fundamentals of economy [N1MiBP1>PE]

### Course

Field of study

Mechanical and Automotive Engineering

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

polish

Form of study

part-time

Requirements

elective

### Number of hours

Lecture

18

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

### Number of credit points

2,00

### Coordinators

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### Lecturers

dr hab. inż. Marek Waligórski prof. PP  
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### Prerequisites

Student has a basic knowledge of economic relations that occur in the environment. Student is able to associate and integrate the information, analyze the phenomena occurring in the environment, draw conclusions, formulate and justify opinions.

### Course objective

Understanding the basics of micro-and macroeconomics with particular emphasis on corporate behavior and interrelationships in the national economy.

### Course-related learning outcomes

Knowledge:

Has knowledge in the field of mathematics, including algebra, analysis, theory of differential equations, probability, analytical geometry necessary to: describe the operation of discrete mechanical systems, understand computer graphics methods, describe the operation of electrical and mechatronic systems. Has elementary knowledge of the life cycle of machinery, recycling of machine elements and construction and consumables. Has elementary knowledge of the economics and economics of industrial enterprises, banking system,

commercial law, and entrepreneurial accounting.

#### Skills:

Can obtain information from literature, the Internet, databases and other sources. Can integrate the obtained information, interpret and draw conclusions from it, and create and justify opinions.  
Can use computer office packages for editing technical texts, including formulas and tables, technical and economic calculations using a spreadsheet and running a simple relational database.  
Can interact with other people as part of teamwork (also of an interdisciplinary nature).

#### Social competences:

Is ready to fulfill social obligations and co-organize activities for the benefit of the social environment.  
Is willing to think and act in an entrepreneurial manner.  
Is ready to fulfill professional roles responsibly, including:  
- observing the rules of professional ethics and requiring this from others,  
- caring for the achievements and traditions of the profession.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Learning outcomes presented above are verified as follows:

Discussion and active participations in lectures.

Written test in the form of a multiple-choice test with possible additional open questions.

### Programme content

1. Basic concepts. Subject and scope of economy. Types of economic operators. Needs and resources. Rational choice theory and economic rationality.
2. Market mechanism. Market definition and types of markets. Elements and characteristics of the market. Market functions. Law of supply and demand. Factors affecting supply and demand. Market equilibrium.
3. Theory of buyer behavior. Categories of demand. Type of demand curves. Price, mixed and income elasticity of demand. Types of goods. The indifference curve and the budget constraint line. Optimum choice of consumption level.
4. Theory of production optimization. Features and types of business entities. Capital concentration and cooperation between enterprises. Price elasticity of supply. Equal product curve and iso costs. The optimal combination of inputs. Optimization of production volumes, cost curves and revenue curves.
5. Economic systems Part 1. Liberalism in the economy. Characteristics and mechanism of the free-market economy. Market models: perfect competition, monopolistic competition, oligopoly and monopoly.
6. Economic systems part 2. Centrally planned economy. Etatism in the economy. Characteristics and mechanism of the centrally planned economy. Advantages and disadvantages. Transformation of the centrally planned economy to a market economy on the example of Poland.
7. Economic indicators. Analysis of economic performance: production, income, consumption, employment and price level indicators.
8. Economic growth. Quantitative and qualitative sources of economic growth. Barriers to growth. Growth and economic development. Factors affecting economic growth in Poland.
9. Economic cycle. Fluctuations in the course of economic growth. Phases of the business cycle. Types of cycles. Tools of predicting the economic performance.
10. Role of the state in the economic development. part 1. Fiscal policy. Budget structure. Sources of budget income and expenditure. Role and principles of fiscal policy. Budget deficit and public debt rules. The risks related to debt.
11. Role of the state in the economic development. part 2. Monetary policy. Role and tasks of the Central Bank. Direct and indirect instruments of monetary policy. Objectives and principles of monetary policy.
12. Counter-cyclical policy. The instruments of fiscal and monetary policy in the context of fluctuations in the business cycle. Restrictive and expansionary economic policies.
13. International trade - theories of exchange, the tendency to exchange countries with a supply imbalance and the tendency of countries with a demand imbalance.
14. Globalization. Factors and dimensions of globalization. Advantages and disadvantages in the context of socio-economic development.

## Teaching methods

Lecture with multimedia presentation

## Bibliography

Basic

Begg D., Vernasca G., Fischer S., Dornbusch R., Economics, McGraw-Hill Education, 2014

Additional

Samuelson P., Nordhaus W., Economics, McGraw-Hill Education, 2010

## Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	18	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	32	1,00