POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)
pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name

Mathematics

Course

Field of study	Year/Semester
Logistics	1/2
Area of study (specialization)	Profile of study
	general academic
Level of study	Course offered in
First-cycle studies	Polish
Form of study	Requirements
full-time	compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
15		
Tutorials	Projects/seminars	
30		

Number of credit points

4

Lecturers

Responsible for the course/lecturer:

Ph.D., Grzegorz Grzegorczyk

Mail to: grzegorz.grzegorczyk@put.poznan.pl

Phone: 61 665 26 87

Faculty of Control, Robotics and Electrical Engineering

ul. Piotrowo 3A, 61-138 Poznań

Responsible for the course/lecturer:

Prerequisites

The basic knowledge obtained in the first semester.

The ability to think logically.

The ability to describe simple mathematical problems.

Course objective

The acquisition and consolidation of examples of basic mathematical concepts and acquire the ability to use the mathematical apparatus

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Course-related learning outcomes

Knowledge

Knows the basic issues of mathematics and statistics in the study of the structure of economic and logistic phenomena [P6S_WG_04]

Skills

Is able to apply appropriate experimental and measurement techniques, including computer simulation within logistics and its specific issues and supply chain management, to solve the problem within the studied subject [P6S_UW_03]

Can select the right tools and methods to solve a problem within logistics and supply chain management, and can use them effectively [P6S_UO_02]

Social competences

Is aware of initiating activities related to the formulation and transfer of information and cooperation in the society in the area of logistics [P6S_KO_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Knowledge acquired as part of the lecture is verified on the basis of a 90-minute "zero exam" on the 15th lecture. Students can also proceed to the exam during the exam session. Exam includes material from both semesters.

Tutorials: Skills acquired on tutorials are verified on the basis of two 75-minutes tests, which are realized on 7th and 14th meetings

Programme content

Integral calculus of functions of one variable:

- indefinite integral,

- definite integral,

- applications of definite integral,

- improper integral and numerical series.

Ordinary differential equations - introduction.

Teaching methods

Lecture: oral presentation with examples and formulas, which are presented using a visualizer.

Tutorials: presentation of exemplary tasks on the blackboard and individual solving of similar examples by students - practical exercises.

Bibliography

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Basic

Foltyńska, Szafrański, Ratajczak, Matematyka cz I, cz II, Wydawnictwo Politechniki Poznańskiej, Poznań 2004

Additional

W. Krysicki, L. Włodarski, Analiza matematyczna w zadaniach 1, Wydawnictwo Naukowe PWN, Warszawa, 2013.

F. Leja, Rachunek różniczkowy i całkowy. Państwowe Wydawnictwo Naukowe, Warszawa 1978.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,0
Classes requiring direct contact with the teacher	45	2,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) [1]	55	2,0

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[1] delete or add other activities as appropriate