

Social competences:		
K01	Student understands the need of continuous self-education - improvement of professional, personal and social competences;	AU1_K03
K02	Student understands and uses the formalized mathematical tools.	AU1_K01

The evaluation methods

A series of lectures in Mathematics is theoretical basis for engineering subjects. Lectures and classes end with independent credit. Students get studies' program with list of current issues and required design works. Both for lectures and classes are proposed two terms of credit, but the second term is resit credit. To pass the semester there is expected checking student knowledge by tests as well as written and oral exam.

Final grading scale: 2,0; 3,0; 3,5; 4,0; 4,5; 5,0

Positive grade for module depends on achieved by student all learning outcomes specified in the syllabus.

Course contents

Elements of linear algebra.

Functions of one variable.

Elements of differential calculus and integral calculus of one variable function.

Basic bibliography:

I. Foltyńska, Z. Ratajczak, Z. Szafranski, Matematyka dla studentów uczelni technicznych, Wydawnictwo Politechniki Poznańskiej cz. I i II.

Supplementary bibliography:

W. Żakowski, Matematyka, t. I, Wydawnictwa Naukowo-Techniczne, Warszawa, 2003.

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

The student workload

Form of activity	Hours	ECTS
Overall expenditure	63	2
Classes requiring an individual contact with teacher	17	1
Practical classes	-	-

Balance the workload of the average student

Form of activity	Number of hours
participation in lectures	30 h
participation in classes/ laboratory classes (projects)	15 h
preparation for classes/ laboratory classes	5 h
preparation to colloquium/final review	5 h
participation in consultation related to realization of learning process	-
preparation to the exam	6 h
attendance at exam	2 h

Overall expenditure of student:

2 ECTS credits

63 h

As part of this specified student workload:

- activities that require direct participation of teachers:

1 ECTS credit