

Title <b>Selected topics of mathematics</b>	Code <b>1010332411010340677</b>
Field <b>Computer Science</b>	Year / Semester <b>1 / 1</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>1</b> Classes: <b>1</b> Laboratory: -    Projects / seminars: -	Number of credits <b>3</b>
	Language <b>polish</b>

**Lecturer:**

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**Status of the course in the study program:**

Obligatory.

**Assumptions and objectives of the course:**

The knowledge of the theory concerning the mentioned above topics in order to applying it to solving of technics problems. In particular: computing characteristic values (characteristic vectors) of linear transformations, solving differential equations.

**Contents of the course (course description):**

Differential equations of the first and second order ? methods of solving of selected types. Partial differential equations.

Linear spaces. Basis and dimension of finite dimensional linear space. Linear transformations, characteristic value (characteristic vector) of linear transformation.

**Introductory courses and the required pre-knowledge:**

Basic knowledge from mathematics from the secondary school, background of linear algebra, differential and integral calculus from studies of I degree.

**Courses form and teaching methods:**

Lectures, exercises (traditional presentation-blackboard and chalk).

**Form and terms of complete the course - requirements and assessment methods:**

Written classes, written tests.

**Basic Bibliography:**

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**Additional Bibliography:**

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