

Title <b>Mathematics (Matematyka I)</b>	Code <b>1010401221010340173</b>
Field <b>Fizyka Techniczna</b>	Year / Semester <b>1 / 2</b>
Specialty -	Course <b>core</b>
Hours Lectures: <b>2</b> Classes: <b>2</b> Laboratory: -    Projects / seminars: -	Number of credits <b>6</b>
	Language <b>polish</b>

**Lecturer:**

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

Core course of the study for Technical Physics, Faculty of Technical Physics.

**Assumptions and objectives of the course:**

Knowledge improvement in basic math concepts and making use of some math results in solving problems.

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

Double integral. Double integral in polar coordinates. Applications of double integral. Triple integral. Applications of triple integral. Curvilinear integrals. Applications of curvilinear integrals. Infinite series. Taylor and Maclaurin Series. Differential equations. Exact differential equations. Homogeneous differential equations. First order differential equations. Bernoulli difference equations.

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

Basic math knowledge on high school level and a the first semester

**Courses form and teaching methods:**

Lectures, exercises.

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

Tests, oral examination.

**Basic Bibliography:**

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**Additional Bibliography:**

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