Title	Code
Advanced manufacturing processes	**10102212610102202293**
Field: **Mechanical Engineering**	Year / Semester: **3 / 6**
Specialty: **Mechanical Engineering**	Course: **core**
Hours: Lectures: **1** Classes: **-** Laboratory: **1** Projects / seminars: **-**	Number of credits: **3**
	Language: **polish**

Lecturer:

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Status of the course in the study program:

The subject belongs to group of obligatory subjects on diploma profile.

Assumptions and objectives of the course:

Acquaintance of future mechanic engineers with the newest cutting techniques (machine tools, cutting tools, process and its practical effects).

Contents of the course (course description):

Tendencies in range of advanced decremental and incremental technologies of machines and devices elements forming. Machining (turning, milling, drilling, boring, mill-turning, rotary broaching) of machine elements (made of hardened steel, ceramics and composite in hard state). Machining with high speeds (HSM, HSC). Complete and hybrid machining (assisted with concentrated energy sources). Wet and minimal quantity lubrication machining. Selected problems of micro-machining in products forming.

Introductory courses and the required pre-knowledge:

Basic knowledge about machining and cutting tools.

Courses form and teaching methods:

Illustrated lectures with demonstration, example laboratory tests of manufacturing processes.

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

Passing lectures and laboratories.

Basic Bibliography:

Additional Bibliography: