

Title Processes and Forming Techniques: Forming Technologies	Code 10102514310102202035
Field Management and Production Engineering	Year / Semester 2 / 3
Specialty -	Course core
Hours Lectures: 2 Classes: - Laboratory: 1 Projects / seminars: -	Number of credits 5
	Language polish

Lecturer:

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Status of the course in the study program:

Obligatory course at the Faculty of Mechanical Engineering and Management, in the field of Management and Production Engineering.

Assumptions and objectives of the course:

Acquaint future engineers with technique of production basing on practical forming technologies with the special allowance of machining.

Contents of the course (course description):

Forming technologies in modern technique of production. Characteristic and destination of machining. Types, methods and varieties of machining, kinematics and parameters of machining, cutting time, productivity. Characteristic and description of basic machining methods: turning, drilling, milling, grinding. Modern materials for cutting edges and cutting tools. Stereometric features identification of different cutting tools. Energetic problems: forces, power and cutting torques. Tribology problems. Basic optimization of machining parameters, economical aspects. Machinability of materials. Characteristic of surface layer. Modern tendencies of production technique development with the aid of machining. Selected aspects of eroding and machining with the concentrated stream energy.

Introductory courses and the required pre-knowledge:

Basic knowledge from physics, mechanics, strength of materials, workshop classes.

Courses form and teaching methods:

Lectures and laboratories.

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

Examination from lectures and laboratory credit on the basis of reports and knowledge.

Basic Bibliography:

Additional Bibliography: