



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Product manufacturing

Course

Field of study

Product Lifecycle Engineering

Area of study (specialization)

Level of study

Second-cycle studies

Form of study

full-time

Year/Semester

1/1

Profile of study

general academic

Course offered in

English

Requirements

compulsory

Number of hours

Lecture

15

Tutorials

Laboratory classes

15

Projects/seminars

Other (e.g. online)

Number of credit points

2

Lecturers

Responsible for the course/lecturer:

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Faculty of Mechanical Engineering

Piotrowo Street No 3, 60-965 Poznań

Responsible for the course/lecturer:

Prerequisites

Knowledge of the product life cycle and the importance of shaping, machining and assembly processes in it.



Course objective

To acquaint students with techniques for shaping and machining of machine parts and their assembly.

Course-related learning outcomes

Knowledge

The student has a general knowledge of techniques for shaping and machining machine parts and their assembly.

Skills

Student is able to determine whether the use of a particular manufacturing technique is technically and economically justified.

Social competences

Student is aware of the diversity and complementary of manufacturing techniques. Is able to use the complementary of manufacturing techniques when planning the production phase of products, taking into account environmental and social aspects.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Test of checking the knowledge provided in lectures

Laboratory: Demonstrating the ability to make parts using a technique of their choice

Visits to enterprises: Presentation of analysis about the use of various manufacturing technologies of selected products

Programme content

Lecture: General characteristics of techniques for shaping or machining parts of products and their assembly. Discussion of the most important techniques of shaping or machining parts of products and their assembly: casting, plastic forming, machining, processing of plastics, joining materials. Indication of areas of application of individual techniques.

Laboratory: Independent workmanship, with the support of instructor, the indicated parts of the product.

Enterprise visits: Tracing and describing the production process of the selected product.

Teaching methods

Lecture: classical lecture, multimedia presentation illustrated with video.

Laboratorium: teamwork, discussion.

Wizyty w przedsiębiorstwach:



Bibliography

Basic

K. C. JAIN, A. K. CHITALE, TEXTBOOK OF PRODUCTION ENGINEERING; PHI Learning, 2010

Additional

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Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	30	1,0
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests/exam, project preparation) ¹	20	1,0

¹ delete or add other activities as appropriate

