

## COURSE SPECIFICATION

Course title	Course code	Semester	Credits (ECTS)
Manufacturing Processes 2	UPB.06.S.06.O.004	6	4

Course structure	Lecture	Laboratory	Project	Total hours
<i>Number of hours per week</i>	2	2	2	6
<i>Number of hours per semester</i>	28	28	28	84

Academic staff	Lecture	Laboratory	Project
<i>Name, academic degree</i>	GHEORGHE Marian, Professor	DIJMĂRESCU Manuela- Roxana, Assistant	
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### Course description

*Objective* Knowledge and formation of theoretical and practical skills on product structural and technological characteristics, production processes and systems structure, characteristics of manufacturing systems, design methodology of technological processes-simplified structure, detailed structure.

*Structure* • Fundamental Concepts - Technology, Strategy, Product, etc. • Methods of Analysis, Conceive and Decision • Business, Projects, Contracts • Environment and Resources • Sustainable Development • Technology Implementation and Operating • Recovery and Recycling • Reference Technologies.

### Laboratory and project description

*Objective* Formation of practical skills on structural and technological characteristics of products, characteristics of manufacturing systems, simplified and detailed structure of manufacturing technological processes.

*Project Structure* • Theme • General Initial Data • Simplified Structure • Detailed Structure

*Laboratory Structure* • Constructive - Functional Analysis of Manufacturing Systems • Analysis and Execution of Machining Operations • Constructive - Functional Analysis of Manufacturing Fixtures • Analysis of Cold Plastic Deformation Processes and Systems

### Intended learning outcomes

- Knowledge and best practice of specific notions related to course area.
- Explanation and interpretation of ideas, projects, processes, theoretical and practical contents in the course area.
- Use of methods, techniques and instruments of investigation and implementation, expression of a positive and responsible attitude to scientific field.

Assessment method	% of the final grade	Minimal requirements for award of credits
Written exams	35	Total of min. 50 points, including homework of min. 8 points, laboratory promoting, project of min. 15 points
Homework	15	
Laboratory	25	
Project	25	

References	
<ul style="list-style-type: none"> <li>• Gheorghe M., <i>Manufacturing Processes 2</i>, Course Notes, UPB, 2015-16</li> <li>• Gheorghe M., Dijmărescu M.R., <i>Manufacturing Processes 2</i>, Lab Works, UPB, 2015-16</li> <li>• Gheorghe M., <i>Manufacturing Processes 2</i>, Project Guide, UPB, 2015-16</li> <li>• Davim J.P., <i>Modern Manufacturing Engineering</i>, Springer, 2015</li> </ul>	
Prerequisites	Co-requisites (courses to be taken in parallel as a condition for enrolment)
Materials Technology; Manufacturing Processes 1	Engineering Economics

Date: 08.07.2016

**Course Coordinator,**

**Prof.dr.ing. GHEORGHE Marian**