

University POLITEHNICA of Bucharest (UPB)  
 Faculty of Industrial Engineering and Robotics (IIR)  
 Study Programme: Industrial Engineering (IE)  
 Level of study: Bachelor

## COURSE SPECIFICATION

Course title	Course code	Semester	Credits (ECTS)
Manufacturing Processes 2 - Project	UPB.06.S.06.O.005	6	2

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

Academic staff	Project
<i>Name, academic degree</i>	DIJMĂRESCU Manuela-Roxana, Lecturer
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Project description
<p><i>Objective</i>            Development of knowledge on product structural and technological characteristics, structure and operational characteristics of manufacturing systems and design of manufacturing technological processes.</p> <p><i>Structure</i></p> <ul style="list-style-type: none"> <li>• Project requirements</li> <li>• Product constructive-functional and technological data</li> <li>• Semi-manufacturing (blanking) processes and machining</li> <li>• Simplified structure of manufacturing processes</li> <li>• Detailed structure of manufacturing technological processes.</li> </ul>

Intended learning outcomes
<ul style="list-style-type: none"> <li>• Knowledge and best practice of specific elements related to manufacturing processes design of mechanical products.</li> <li>• Skills on determining of necessary manufacturing systems and operational characteristics of a mechanical product.</li> <li>• Use of methods, techniques and instruments of investigation and implementation, expression of a positive and responsible attitude to scientific field.</li> </ul>

Assessment method	% of the final grade	Minimal requirements for award of credits
Project activity	15	Min. 50 points
Project contents	65	
Project submission	20	

## References

- Gheorghe M., *Manufacturing Processes 2*, Course Notes, UPB, 2022-23
- Manolache D.S., *Manufacturing Processes 1*, Course Notes, UPB, 2022-23
- Gheorghe M., Dijmărescu M.R., *Manufacturing Processes 2*, Project Work Instructions, UPB, 2022-23
- Dijmărescu M.R., *CAD 2*, Project Notes, UPB, 2021-2022
- Sandvik Coromant ToolGuide - Online Database, <http://toolguide.sandvik.coromant.com>
- Iscar Tool Advisor - Online Database, <http://www.iscar.com/ITA/MainPage.aspx>
- Marochnik - Database of Steel and Alloy, [http://www.splav-kharkov.com/en/e\\_z\\_mat\\_type.php](http://www.splav-kharkov.com/en/e_z_mat_type.php)
- MU-CNC, <https://en.dmgmori.com/>, <http://int.haascnc.com/lang.asp?intLanguageCode=1033>,  
<https://www.okuma.com/cnc-machine-tool-lineup>, <https://www.mazakusa.com/machines/>

<b>Prerequisites</b>	<b>Co-requisites</b> (courses to be taken in parallel as a condition for enrolment)
Materials Technology, Computer Aided Design, Manufacturing Processes 1	Manufacturing Processes 2

Date: 20.09.2022

**Project Coordinator,**

**Lecturer Manuela-Roxana DIJMĂRESCU**