

University POLITEHNICA of Bucharest

Faculty of Industrial Engineering & Robotics

Study programme: Industrial Engineering

Form of study: Bachelor

### COURSE SPECIFICATION

<b>Course title</b>	<b>Materials Technology</b>	<b>Semester</b>	<b>4</b>
<b>Course code</b>	UPB.06.D.04.O.002	<b>ECTS</b>	<b>5</b>

<b>Course structure</b>	<b>Lecture</b>	<b>Seminar</b>	<b>Laboratory</b>	<b>Project</b>	<b>Total hours</b>
<b>No. of hours/ week</b>	<b>2</b>	-	<b>2</b>	-	<b>4</b>
<b>No. of hours/ semester</b>	<b>28</b>	-	<b>28</b>	-	<b>56</b>

<b>Lecturer</b>	<b>Lecture</b>	<b>Seminar</b>	<b>Laboratory</b>	<b>Project</b>
<b>Name, academic degree</b>	Rindasu Viorel, Assoc prof	-	Rindasu Viorel, Assoc prof	-
<b>Contact (E-mail, location)</b>	viorel.rindasu@gmail.com CE206			

**Course description (max: 200 words)** The course offers the general training in primary manufacturing processes (for obtaining metals, ceramics, plastics, composites), giving competencies in modern technologies practice

**Seminar description (max: 200 words) -**

**Laboratory description (max. 200 words)** The lab presents some principal manufacturing properties of engineering materials, as well as the main manufacturing processes (casting, forging, welding, machining, testing) based on it

**Project description (max. 200 words) -**

<b>Assessment methods</b>	<b>Percentage of the final grade</b>	<b>Minimal requirements for award of credits</b>
<b>Written exam</b>	<b>20 + 20</b>	
<b>Report/ Project</b>		
<b>Homework</b>	<b>10</b>	
<b>Laboratory</b>	<b>50</b>	

### References

1. Groover, M., P., Fundamentals of Modern Manufacturing. Materials, Processes and Systems, 4th Edition, John Wiley & Sons, Inc., 2010

2. Boothroyd, G., Dewhurst, P., Knight, W., A., Product Design for Manufacturing and Assembly, 3rd Edition, CRC Press, 2011

<b>Prerequisites</b>	<b>Co-requisites (courses to be taken in parallel as a condition for enrolment)</b>
Maths, Physics, Materials science	Strength of Materials

**Additional relevant information:**

**Date: 16.05.2022**