

Course Unit Descriptor

Study Programme: Production Engineering			
Course Unit Title: Metal forming			
Course Unit Code: P207			
Name of Lecturer(s): Vilotić Dragiša, Skakun Plavka			
Type and Level of Studies: Bachelor level			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): Winter/Summer			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face			
Number of ECTS Allocated: 5			
Prerequisites: None			
Course Aims: Mastering the basic knowledge related to the theoretical foundations of metal forming and mastering fundamental technological methods.			
Learning Outcomes: Student will be prepared to design basic processes of metal forming: 1. Bulk metal forming (upsetting, extrusion and forging) and 2. Sheet metal forming (cutting, blanking, deep drawing and bending).			
Syllabus: The roll of meal forming in contemporary production; Fundamentals of metal forming processes, stresses, strains, stress-strain relation, strain rate, yield criterion, flow curve, process parameters, load, pressure, work of plastic deformation, friction, lubrication; Sheet metal forming (cutting, punching, bending, deep drawing); Bulk metal forming (upsetting, forging, extrusion); Metal forming machine tools; Contemporary approaches to process design.			
Required Reading: Relevant literature in English TBD			
Weekly Contact Hours:		Lectures:	Practical work:
Teaching Methods: Lectures; Auditory Practice; Computer Practice; Laboratory Practice; Consultations			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Group Assignment		Examination Assignment	
Exercises			
Test			
Test			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			