
	UNIVERSITY OF EAST SARAJEVO Faculty of Technology Zvornik					
	Study programme: Chemical Engineering and Technology					
	Cycle I		Year I			
Course title		Engineering Drawing				
Department						
Course code		Course status		Semester		ECTS
04-1-005-1		Compulsory		I		4
Teacher		Bojan Međo, PhD, Assoc. Prof.				
Teaching assistant		Bojan Međo, PhD, Assoc. Prof.				
Number of hours/ teaching workload (per week)			Individual student workload (in hours per semester)			Student workload coefficient S₀
Lectures	Auditory exercises	Laboratory exercises	Lectures	Auditory exercises	Laboratory exercises	S₀
2	1	0	50	25	0	1.67
Total teaching workload (in hours, per semester) 2*15 + 1*15 + 0*15 = 45 hours			Total student workload (in hours, per semester) (2*15*1.67 + 1*15*1.67 + 0*15*1.67) = 75 hours			
Total course workload 45 + 75 = 120 hours per semester						
Learning outcomes		<ol style="list-style-type: none"> 1. Technical education with an aim to get familiar with the current state of engineering disciplines and corresponding literature. 2. Enabling the student, based on the actual mechanical element geometry, to understand its spatial representation and to form technical drawings. 3. Communication with engineers and technicians, regardless of their technical field and geographical location, by using the technical drawings. 4. Understanding and learning different technical regulatory documents and standards related to industrial production. 5. Foundation for problem solving in the field of design and construction in process and chemical industry, as well as forming and reading/understanding of the project documentation. 				
Prerequisites		-				
Teaching methods		Lectures, auditory exercises.				
Syllabus outline per week		<ol style="list-style-type: none"> 1. Orthogonal projections. Projecting onto one, two and three planes. 2. Position assignments. Point and line. Two lines. Point in a plane. Line and plane. Two planes. 3. Methods of transformation and rotation. 4. Metric assignments. True sizes of line segments and plane figures. 5. Projections, sections and mesh of a prism. 6. Projections, sections and mesh of a pyramid. Special sections. 7. Projections, sections and mesh of a cylinder. 8. Projections, sections and mesh of a cone. 9. Axonometric projections (onto two, three and more planes). 10. Technical curves in the plain and their construction. Technical geometry. Technical lettering. 11. Standards for technical drawings in industry. Projections of specific elements of process equipment. Flow (process) diagrams in chemical and process industry. 12. Views and sections. Rules for projections of models. Dimensioning, marking tolerances and surface texture on drawings. 13. Technical (workshop) drawing. Assembly drawing. Drawing of welded and threaded joints. Drawing of specific power transmissions. 14. Drawing of simple and more complex pipe installations and pipe elements in chemical and process industry. 15. Tolerances. Types of fits. Position and shape tolerances. Basics of application of computers in design and construction. Engineering and computer graphics. Programming languages in technics. 				

Obligatory reading				
Author	Title, publisher	Year	Pages	
Pejović, B.	Zbirka zadataka iz inženjerskog crtanja	2004	1-283	
Additional reading				
Author	Title, publisher	Year	Pages	
Žepinić, C.	Tehničko crtanje sa nacrtom geometrijom Tehnološki fakultet, Zvornik	2000	1-298	
Ljubojević, R., Stevanović, M.	Inženjersko crtanje, Tehnološko metalurški fakultet Beograd	1999	1-162	
Obligations, assessment methods and grading system	Type of student evaluation		Grade points	Percentage
	Pre-exam obligations			
		Attendance	6	6%
		Obligatory (program) assignments	29	29 %
		Mid-term test/Colloquium I	15	15 %
		Mid-term test/Colloquium II	15	15 %
		Mid-term test/Colloquium	5	5 %
	Final examination			
	Final examination (oral/written)	30	30 %	
	Total	100	100 %	
Webpage	www.tfzv.ues.rs.ba			
Date	2023			