

NAME OF THE COURSE		Technical drawing and design I					
Code	PMT051	Year of study	1				
Course teacher	Tomislav Matić	Credits (ECTS)	6				
Associate teachers	Endri Garafulić	Type of instruction (number of hours)	L	S	E	F	
			30		30		
Status of the course	Compulsory	Percentage of application of e-learning					
COURSE DESCRIPTION							
Course objectives	Adopting knowledge and skills needed for engineering graphics development and interpretation, in order to develop the technical, technological and working documentation.						
Course enrolment requirements and entry competences required for the course	None						
Learning outcomes expected at the level of the course (4 to 10 learning outcomes)	1. Explain the organization of technical drawings 2. Draw the geometric contours 3. Draw an object in axonometric projection 4. Draw an object in multiview projections 5. Display an object in section view 6. Apply dimensioning rules on the technical drawing, 7. Apply the rules of weld drawing and dimensioning 8. Distinguish types of technical drawings						
Course content broken down in detail by weekly class schedule (syllabus)	<p>Week 1: General about technical drawing. Standardization in the Republic of Croatia. International standardization. Week 2: Types of drawings. Formats and organization of technical drawings. Title block and parts list. Scales. Lettering standards. Week 3: Displaying objects in the plane. The central projection. Parallel projection. Week 4: Multiview projections. The arrangement of the views. The position of the object. Relationship between the views. Week 5: Multiview projection (continued). Displaying an object in multiview projections. Construct isometric drawing of the dimensioned multiview drawings. Week 6: Section views. Conventional practices for cutting plane lines. Week 7: Colloquium. Week 8: Technical drawings of machine elements in the section views. The exceptions from the general rule in technical drawing (exceptions from the usual arrangement of the views, partial view, revolved projection). Week 9: Simplifications in technical drawing - conventions (conventional breaks, labelling flat surfaces, other simplification). Week 10: Dimensioning. Standard dimensioning rules. Dimensioning of arcs, spherical arcs and curves. Dimensioning chamfers, flat and round tapers. Examples. Week 11: Dimensioning (continued). Use of diameter and square symbols. Dimensioning of holes and diameters. Week 12: Types of dimensioning (chain dimensioning, base line dimensioning, coordinate dimensioning). Examples. Week 13: Analysis of assembly drawings. Produce a detail drawing of a component from an assembly drawing. Week 14: Welding drawing and dimensioning. Week 15: Colloquium.</p>						
Format of instruction	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> seminars and workshops <input checked="" type="checkbox"/> exercises <input type="checkbox"/> <i>on line</i> in entirety <input type="checkbox"/> partial e-learning <input type="checkbox"/> field work		<input checked="" type="checkbox"/> independent assignments <input type="checkbox"/> multimedia <input type="checkbox"/> laboratory <input type="checkbox"/> work with mentor <input type="checkbox"/> (other)				
Student responsibilities	Class attendance, homework (programs), independent study and literature reading, accessing colloquia and/or written and oral examination.						
Screening student work (name the proportion of ECTS credits for each activity so that the total number of ECTS credits is equal to the ECTS	Class attendance	1,5	Research		Practical training		
	Experimental work		Report		Attending the exercises	1,5	
	Essay		Seminar essay		Independent learning	2	
	Tests		Oral exam		Homework (programs)	1	

<i>value of the course)</i>	Written exam	Project	(Other)
Grading and evaluating student work in class and at the final exam	Exercises must be successfully completed. Two colloquiums or written and oral exams in the examination period. Students which achieve more than 50% result of each colloquium or at written/oral exam will have successfully completed the course. Depending of the achieved result percentage at colloquium or at written/oral exam final grades are as follows: 50 - 62% - sufficient (2) 63-75% - good (3) 76-87% - very good (4) 88-100% - excellent (5)		
Required literature (available in the library and via other media)	Title	Number of copies in the library	Availability via other media
	1. Matić T., Grafičko komuniciranje i dizajn 1, recenzirano predavanje, web stranica PMF-a u Splitu, 2015.		
Optional literature (at the time of submission of study programme proposal)	1. Piršić T., Tehničko crtanje, FESB - Split, Udžbenici Sveučilišta u Splitu, Split, 2010. 2. Opalić M., Kljajin M., Sebastijanović S., Tehničko crtanje, Zrinski, Čakovec, 2003. 3. Koludrović Č., Tehničko crtanje u slici s kompjutorskim aplikacijama, Rijeka, 1994. 4. Koludrović Č., Osnovne vježbe iz tehničkog crtanja s kompjutorskim aplikacijama, Rijeka, 1990.		
Quality assurance methods that ensure the acquisition of exit competences	Conducting an anonymous student surveys, talk with students, analyses the success of students on tests and exams, self-assessment.		
Other (as the proposer wishes to add)			