UNIVERSITY OF EAST SARAJEVO
Faculty of production and management Trebinje

Program of study: Industrial management

First cycle of study	First year of study

Full name of subject	DESCRIPTIVE GEOMETRY AND TECHNICAL DRAWING
The chair	Chair of Mechanical Structures and Product Engineering – Faculty of Mechanical Engineering of East Sarajevo

Code of subject	Status of subject	Semester	ECTS

Teacer/s	PhD Obrad Spaić
Assistant/s	Aleksandra Koprivica, MSc.

Number of classes/ teaching load (per week)			Individual student workload (per hour of semester)			Student load coefficient S₀
L	AE	ЛЕ	L	AE	ЛЕ	S₀
2	3	0	2*15*1,4 = 42	3*15*1,4 = 63	0*15*1,4 = 0	1,4

total teaching load (per hour, of semester) $2 \cdot 15 + 3 \cdot 15 + 0 \cdot 15 = 75$	total student workload (per hour, of semester) $2 \cdot 15 \cdot 1,4 + 3 \cdot 15 \cdot 1,4 + 0 \cdot 15 \cdot 1,4 = 105$

Total subject load (teaching + student): 75 + 105 = 180 hour for semester

The result of teaching	By mastering this course the student will be able to: 1. designs geometric bodies in axonometric and orthogonal positions, 2. apply technical drawing standards, 3. draws and reads workshop drawings, 4. interprets simpler assembly drawings.
Conditionality	No conditionality.
Methods of teach	Teachs, exercises.
The content of teachs per week	1. The concept and types of projections. Rectangular projection: points, longer, straight, plane images. Collineation and affinity. 2. Transformation of projections (points, longer, straight, bodies). Rotation (longer, straight and body). 3. Interrelations of elements in space: point on line, point and rights on plane, horizontal and frontal plane, penetration through projection planes, plane inclinations. 4. Interrelationships of elements in space: the angle which plane engages with planes H and F, penetration makes through a straight line, the intersection of two straight lines, the intersection of two straight lines, the parallelism of elements, the controllability of elements. 5. Position and metric tasks: distance between two points, distance of point from straight and straight, passing right, figures on plane. 6. Geometry of the body (pyramid, prism, roller and heap). Rotation of geometric bodies about axes perpendicular to projection planes. Prediction of geometric bodies in axonometric position. 7. Axonometry. Frontal Hair Axonometry, Straight Sections Of Geometric Bodies. 8. Standards in technical drawing: paper and drawing formats, scale, headers and components, line shapes and thicknesses, technical letter. Complex lines (contours and shapes in drawings). 9. Tolerances of machine parts. 10. Quotation (basic quotation principles, quotation elements, quotation rules). 11. Orthogonal projection of models: the prospects of models and their arrangement, the projection of complex models. 12. Cross sections of machine parts. Special and partial prospects. Interruptions and abbreviations. Drawing simplifications. 13. Threaded connections. Elastic springs. Longitudinal wedge connections. Welded connections. Gear and chain gear. 14. Quality of the treated surface. Form and position tolerances. 15. Design, development and reading of simpler assembly drawings. Computer graphics, basic concepts.

The required literature

Author/s	Name of the publication, publisher	Year of publish	Pages

The additional literature

Author/s	Name of the publication, publisher	Year of publish	Pages

	The type of student work evaluation	Points	Percentage
Obligations, forms of assessment and grading	Pre-exam obligations		
	The graphic works	20	20 %
	The first colloquium	20	20 %
	The second colloquium	20	20 %
	The final exam		
	The final exam (oral / written)	40	40 %
	IN TOTAL	100	100 %
Web page	http://fpmtrebinje.com/wp/wp-content/uploads/2016/11/6_IM_Nacrtna_geometrija_i_tehnicko_crtanje.pdf		
Date of certification	23.09.2019. - LV Council session of the Faculty of Production and management Trebinje		