

SYLLABUS

Basic data of the subject			
University	University of Applied Sciences in Ferizaj		
Academic unit	Faculty of Engineering and Informatics		
Program	Industrial Engineering with Informatics		
Title of the subject	Engineering Graphics		
Level	Bachelor		
Course Status	Core		
Year of studies	I, Semester I		
Number of hours per week	3		
Value of Credits - ECTS	5		
Time / location			
Course lecturer			
Contact details	_____		
Course Description			
Course Description	<i>This course will inform students about how to draw various details using technical drawing standards.</i>		
Objectives of the course			
Objectives of the course	<i>The aim of this course is to provide students with basic knowledge of engineering graphics.</i>		
Expected learning outcomes			
Expected learning outcomes	<p><i>After the completion of this module, student will be able to:</i></p> <ul style="list-style-type: none"> • <i>know the technical letters, sorts of lines, types of paper, formats, tables,</i> • <i>understand the drawing and sketching of various geometric constructions,</i> • <i>apply dimensional rules, layout of points, lines, and objects in space,</i> • <i>create technical and engineering drawings,</i> • <i>successfully develop engineering projects using technical drawing knowledge.</i> 		
Prerequisites			
Prerequisites	<i>There are no prerequisites to get started with Engineering Graphics. However, it is recommended that students have a basic understanding of Mathematics,</i>		
Contribution to the student load (which must correspond with learning outcomes)			
Activity	Hour	Day/Week	In total
Lectures with numerical exercises	3	15	45
Internship			
Contacts with teacher / consultations	1	4	4
Field exercises			
Midterm, seminars and projects.	2	9	18
Homework			
Self-learning time student (at the library or at home)	3	10	30
Final preparation for the exam	3	8	24

Time spent on evaluation (tests, quiz and final exam)	2		2
Projects and presentations.		1	1
Total			124
Teaching methodology	<i>Lectures and exercises and class discussions, as well as active collaboration in student teams</i>		
Assessment methods	<p><i>The student can choose to be assessed one of the two forms of assessment, given below:</i></p> <ol style="list-style-type: none"> <i>1. Form 1: Evaluation with two tests and the Project</i> <i>2. Form 2: Evaluation of the final exam.</i> <p>Form 1: <i>In the first form of assessment "Assessment with two tests and project" the student is assessed in four activities that are carried out during the lectures:</i></p> <ol style="list-style-type: none"> <i>1. Test 1 (30%), individual assessment</i> <i>2. Test 2 (30%), individual assessment</i> <i>3. Class activity (10%), individual assessment</i> <i>4. Project (30%), group assessment.</i> <p>Additional clarification: <i>If the student in each activity above reaches the maximum points, then he will be evaluated with 100 points.</i></p> <p><i>Students who pass the exam according to Form 1 of the assessment, are released from the obligation to take the final exam. Only if the student is not satisfied with the grade achieved according to form 1, then he can undergo the final exam to obtain a higher grade.</i></p> <p>Form 2: <i>In the second form of evaluation, "Evaluation with the final exam", the student will undergo the exam which will be held after the end of the course lectures and is organized in the exam deadlines, determined by the University Senate.</i></p> <p><i>Through the final exam, the student can achieve a maximum of 70% of the points from the total of 100 points.</i></p> <p><i>The rest of the 30% points must be completed through work on the Project and activity carried out during the lectures.</i></p> <p><i>In Test 1, Test 2 and the final exam, the evaluation of the students will be done through:</i></p>		

	<ul style="list-style-type: none"> • <i>Model drawing tasks (the student must solve the tasks individually)</i> • <i>Theoretical tasks (questions from the material of the subject)</i> <p><i>Activity in the class means the student's engagement in dealing with the issues discussed in the class, during the lectures.</i></p> <p><i>Project (30%), individual assessment: it is an activity in which students apply the acquired knowledge in a concrete project. It is carried out individually by students who are obliged to carry out the activity, document it, and present it to the subject professor.</i></p> <p>Rating: 91-100 points – graded 10 (ten) 81-90 points – graded 9 (nine) 71-80 points – grade 8 (eight) 61-70 points – grade 7 (seven) 51-60 points – grade 6 (six) 0-50 points – The student repeats the exam.</p>
The ratio of theory and practice	60% theory with exercises and 40% practical work.
Literature	
Basic Literature	<p>[1] Bajraktari M. dhe Doçi I. <i>Grafika Inxhinierike, Prishtinë, 2012.</i></p> <p>[2] K.C. John, <i>Engineering Graphics for Diploma, PHI Learning Private Limited, 2009.</i></p> <p>[3] Bajraktari M. dhe Doçi I. <i>Vizatimi Teknik, Prishtinë, 2010</i></p>
Additional Literature	<p>[1] Hoischen H. <i>Technisches Zeichnen, Grundlagen, Normen, Beispiele Darstellende Geometrie, Comelsen, 2002.</i></p> <p>[2] Bajraktari M. dhe Doçi I. <i>Prezetime nga Grafika Inxhinierike, Prishtinë, 2011.</i></p>
Designed learning plan	
Week:	Lectures and exercises to be held
Week one	<i>Introduction to Engineering Graphics. Information of the course. Seminar tasks.</i>
Week two	<i>Types of drawings. Standards. Standard numbers.</i>
Week three	<i>Types of lines. Drawing formats. The proportion on technical drawing.</i>
Week four	<i>Drawing of geometric constructions. Constructing lines and angles. Construction of arcs and tangents. Curve construction: ellipse, parabola, hyperbola, cycloid, spiral, helix.</i>
Week five	<i>Technical letters. Types of writing. Symbols.</i>
Week six	<i>Dimensioning. Dimensioning and quotation rules.</i>
Week seven	<i>Materials in technical drawing. Quality of surfaces and signs of quality.</i>

Week eight	<i>Test 1</i>
Week nine	<i>Projections. Types of projections. Isometric Projection and Perspectives.</i>
Week ten	<i>Cutting. Object cutting in different planes.</i>
Week eleven	<i>Drawing presentation. Sketching. Presentation of drawing. Presentation of details in three orthogonal projections.</i>
Week twelve	<i>Presentation of objects in technical drawing with all elements. Different examples.</i>
Week thirteen	<i>Point projections. Line projections. Design of curves.</i>
Week fourteen	<i>Projections of objections. Cutting of objections.</i>
Week fifteen	<i>Test 2</i>
Academic policies and rules of conduct	
<i>Regular attendance of lectures and exercises is necessary, as well as active participation with discussion and solution of tasks. Not impeding the progress required for learning using mobile phones turned off or in silent mode.</i>	