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	**CAD I**
Level	**Bachelor**
Course Status	**Obligatory**
Year of studies	**II, Semester III**
Number of hours per week	**3**
Value of Credits - ECTS	**5**
Time / location	**Class 203**
Course lecturer	
Contact details	
Course Description	*This course will introduce students about 2D drawings with AutoCAD software.*
Objectives of the course	*The aim of the course is to prepare students with the basic and advanced principles of drawing using AutoCAD application software.*
Expected learning outcomes	*After the completion of this module, student will be able to:* • *understand how to use AutoCAD software,* • *apply commands to AutoCAD software for drawing various figures in 2D,* • *develop skills for layer management, line types, commands in DRAW and MODIFY bar, object OSNAP criteria, dimensioning commands, and printing,* • *create different drawings, texts, etc.,* • *develop successfully engineering projects using AutoCAD software.*
Prerequisites	*There are no prerequisites to get started with the CAD I. However, it is recommended that students to have a basic understanding of Engineering Graphics and Mathematics.*

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	*Lectures through presentations, as well as using software directly, exercises tasks and examples, seminars, discussions.*
Assessment methods	*The student can choose to be assessed one of the two forms of assessment, given below:* *1. Form 1: Evaluation with test and the Graphic tasks* *2. Form 2: Evaluation of the final exam.* ***Form 1:*** *In the first form of assessment "Assessment with two test and graphic task" the student is assessed in four activities that are carried out during the lectures:* 1. *Test (70%), individual assessment* 2. *Class activity (10%), individual assessment* 3. *Graphic task (20%), individual assessment.* ***Additional clarification:*** *If the student in each activity above reaches the maximum points, then he will be evaluated with 100 points.* *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.* ***Form 2:*** *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.* *Through the final exam, the student can achieve a maximum of 70% of the points from the total of 100 points.* 1. *Final exam (70%), individual assessment* 2. *Class activity (10%), individual assessment* 3. *Graphic task (20%), individual assessment.*

	In the Test and the final exam, the evaluation of the students will be done through an evaluation form, which must be completed individually by the student. The evaluation form will contain the task of drawing the models in 2D during the test/exam time. *Activity in the class means the student's engagement in dealing with the issues discussed in the class, during the lectures.* *Graphic Task (20%): it is an activity in which students apply the acquired knowledge in a concrete project. It is carried out by one student who is obliged to carry out the activity, document it, and present it to the subject professor.* ***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.*
The ratio of theory and practice	60% theory with exercises and 40% laboratory work.
Literature	
Basic Literature	*[1] Avdiu S. Vizatimi me kompjuter (AutoCAD 2008)* *[2] Lutolli Z. Konjufca E, Autocad 2002* *[3] Avdiu S. Vizatimi me kompjuter (praktikum) 2005*
Additional Literature	*[4] Finkelstein E. AutoCAD 2013 and AutoCAD LT 2013 BIBLE.2012* *[5] TechASCEND PROJECTS VALENTINO J 2002.*
Designed learning plan	
Week:	**Lectures and exercises to be held**
Week one	*Introduction to AutoCAD. Absolute, relative and polar coordinates [2] page 26, 27 and 33.*
Week two	*Exercises [3] pages 5-14*
Week three	*Commands for defining the drawing area. Measuring system* *[1] page 23* *Exercises [3] pages 5-14*
Week four	*Draw Commands (Commands: Point, Line, Polyline, XLine, Spline) [1] page 27-65*
Week five	*Draw Commands (Commands: Circle, Arc, Ellipse, Polygon) [1] page 27-65*
Week six	*Operational task with maus (Zoom, Extend, Pan, Move, Select).* *Exercises [3] pages 5-14*
Week seven	*Modify Commands (Commands: Erase, Copy, Array, Mirror) [1] page 67-94*
Week eight	*Modify commands (Commands: Offset, Rotate, Trim, Extend)*

	[1] page 67-94
Week nine	*Modify commands (Commands: Break, Chamfer, Fillet, Devide) [1] page 67-94*
Week ten	*Precise Drawing Point Determination (Object snap modes) (Criteria: Endpoint, Midpoint, Center, Quadrant, Intersection, Extension, Tangent) [1] page 149-162*
Week eleven	*Exercises [3] pages 27-35*
Week twelve	*Quoting commands (dimensioning of the object) (commands: Dimlinear, Dimaligned, Dimradius, Dimdiameter, Dimangular) [1] page 109-143*
Week thirteen	*Command for creating and editing texts. Tables.* *Commands for Hatching (Hatch) [1]*
Week fourteen	*Block creating and exploding, dimension editing.* *Plotting*
Week fifteen	*Repetition and completion of the course.* *Test*
Academic policies and rules of conduct	
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.	