COURSE SYLLABUS

University	UNIVERSITY OF ORADEA
Faculty	FACULTY OF ENERGY ENGINEERING AND INDUSTRIAL MANAGEMENT
Study program*	KNITTING AND CLOTHING TECHNOLOGY

I.CourseName: BASICS OF COMPUTER AIDED TECHNOLOGICAL DESIGN

II. Course Details

No of hours/week						
Code	Semester	Credits	Lecture	Seminar	Laboratory	Project
IEMI 0766	3		2		2	

III.Coursecoordinator (title, name, surname, e-mail): Assoc.Prof. ȘUTEU Marius DariusPhD, msuteu@uoradea.ro, suteu_marius@yahoo.com.

IV. Courseobjectives

Thiscourseaimstoformstudents' basic knowledge of computer-aided design, usingtheAutoCAD program withthe ultimate goal of generatingtwo-dimensional models. The laboratoryapplications are intendedtodeepenthetheoreticalknowledgetaughtduringthecourseandtotraintheskills of usingtheAutoCAD program, as well as familiarizationwiththe hardware and software aspects, in the context of usingcomputers in the textile industry.

V. Course content	No. of hours
V.1. Lecture (chapters/subchapters and paragraphs)	
1. Introductorynotions Presentation of theAutoCAD program.	1
2. Basic techniques for drawing in AutoCAD Howtousethedrawingmenus. Drawingcommands. Drawinglines, circles, ellipses, polylines, circular arcs, ellipses, regular polygons, linesegments, curves, brokenlines. Usingtheworkingmodes: grid, ortho, osnap, polar.	8
3. Basic techniques for editing in AutoCAD Entityselection. Usingeditcommands: copy, move, expand, rotate, cut, delete, creatingimages in themirror, scaling, exit, stretch, undocommands. Usingblocks.	10
4. Entitymodificationcommands Properties of AutoCADentities. Entitymodificationcommands. Workingwithlayers. Creatinghatchingpatterns. Quotation of drawings. Creatingandmodifying rating styles.	5
5. 3D objectscreation 3D coordinate systems. 3D visualizationcommands. Creating 3D surfaces. 3D modeling of solids. Making 3D assemblies. Generatingprojections in thepaperspace. Create anduse predefineddrawingformats. Rendering in three-dimensional space.	4
V.2. Laboratory/Seminar/Project:	
1.Introduction toAutoCAD program.	2
2. Gettingtoknowandapplyinggeneral standards in technicaldrawing. Formats, indicator, lines, scales, etc. andsettingthem in AutoCAD.	4
3. Commandsfor drawingwithpracticalapplications.	4
4.Commandsfor editingwithpracticalapplications.	4
5.Helpfulcommandsandfacilitieswithpracticalapplications.	2
6.Insertingtexts in thedrawing, hatching.	2
7.Drawingstructure, work on layersandworkingwithblocks.	2
8.UsingAutoCAD-specific commands in creatingclothingpatterns.	3
9.UsingAutoCAD-specific commandstorepresentknittedstructures.	3
10. 3D modeling of solidsandsurfaces. Projectionsgeneration.	2

VI. Bibliography

1. Șuteu, M.D. –Bazele proiectării asistate de calculator - Note de curs 2019.
2. Dragomir, D., - Proiectare asistată de calculator, Editura Teora, Bucureşti, 1998
3. Simion I. – AutoCAD 2002 pentru ingineri, Ed. Teora, Bucureşti, 2003
4. Simion Ionel, AutoCAD 2009 pentru ingineri, Editura Teora Bucureşti, 2009, 576 pag., ISBN:978-973-

20-1203-1.
5. Simion Ionel, AutoCAD 2008 pentru ingineri, Editura Teora Bucureşti, 2007, 503 pag., ISBN:978-973-20-1135-5.
6. Dolga,L., - Bazele proiectării asistate de calculator, Editura Universitatii Politehnica Timisoara 1997, C 18778
7. Manolea, Daniel Practica in AUTOCAD 2D, Cluj-Napoca: Microinformatica, 1994
8. Bradut, Mircea AutoCAD-ul in trei timpi: ghidul proiectarii profesionale, Iasi: POLIROM, 2006

VII. Grading criteria

Activities	Assesment	% of final grade
Exam	Writtenexamfromthenotionlearned at thelecture. 10: excellent (outstanding performance withonly minor errors), 8-9: verygood (abovetheaverage standard but withsomeerrors), 6-7: satisfactory (fair, but withsignificantshortcomings), 5: sufficient (performance meets minimum criteria), 1.0-4: fail (significantworkhastobedone).	40%
Seminar/Laboratory/Project	Continuousevaluation. Correctness of theassignments.	60%

Course coordinator,
Assoc.Prof. ȘUTEU Marius Darius