C O U R S E G U I D E – s h o r t f o r m

Academic year 2024 - 2025

Course name[1]	Tolerances and Dimensional Control					Course code	2.ISI.20.DD-1		
Course type[2]	DID	Category[3]	DI	Year of study	II	Semester	3	Number of credit points	3

Faculty	Material Science and Engineering	Number of teaching and learning hours[4]					
Field	Industrial Engineering	Total	L	T	LB	P	IS
Specialization	Security Engineering in Industry	75	28	-	14	-	33

Pre-requisites from the curriculum[5]	Compulsory	-
	Recommended	Technical drawing

General objective [6]	The knowledge of the main theoretical and practical aspects, needed to resolve the technical projects, refering to how to establish the dimensional and geometrical tolerances of the machines parts; the knowledge of the methods and equipments used to dimensional and geometrical parameters control, how to know to apply a specified control method and how to decide correctly about the machine part measured..
Specific objectives[7]	• knowledge about dimensions, limit deviations, tolerances, fits and categories of fits, form deviations, orientation deviations, relative position of the machines parts surfaces; • knowledge about tolerances and fits of specific joints in mechanical assembling (bearings assembling, conical assembling, screwed assembling, chock, connecting gears); • knowledge about the methods and universal equipments to control the linear and angular dimensions and geometrical parameters at the simple machines parts integrated in mechanical structures.
Course description[8]	Interchangeability, limit deviation, tolerance, fit, dimensional precision, form and relative position precision, roughness parameters, dimensional chains, control, measurement, inspection, measuring method, measuring instruments(gauge blocks, calipers, micrometers), measuring devices (indicator devices, measuring microscope), measuring errors, measuring result.

Assesment			Sche-dule[9]	Percentage in the final grade(minimum grade)[10]
A. Final assessment form[11]: Exam	Class tests along the semester	%		70% (minimum 5)
	Home works	%		
	Other activities	%		
	Examination procedures and conditions: Probe 1: to resolve numerical applications; working conditions: the standard with ISO limit deviations; percent of the final grade: 60% Probe 2: to answer to two theoretical subjects; working conditions,; percent of the final grade 40 %;	100 % (mini-mum 5)	Exam period	
B. Seminar	Activity during seminar			% (minimum 5)
C. Laboratory	Acttvity during laboratory			30% (minimum 5)
D. Project	Activityduringproject			% (minimum 5)

Course organizer	Assistant Professor Emilian PĂDURARU, Ph.D	
Teaching assistants	Assistant Professor Emilian PĂDURARU, Ph.D	

[9]For continuous assessment: weeks 1 – 14, for final assessment – colloquium: week 14, for final assessment-exam: exam period
[10]A minimum grade might be imposed for some assessment stages
[11]Exam or colloquium