MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR (M.P.)

(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Department of Electronics Engineering

CO Attainment (Direct & Indirect) for the session July - Dec 2021

Semester	Course	CO	Direct CO Attainment	Indirect CO Attainment (using feedback)	Total CO Attainment (in %)	Target CO Attainments in terms of levels	Gap Analysis (Target Attainment - Attainment Achived)	Action taken
III	140301 Electronics Circuits Design	CO1	2.5	2.0	2.4	2	-0.4	All CO Target achieved. Higher order thinking questions can be added in question paper
		CO2	2.6	2.0	2.48	2	-0.48	
		CO3	2.7	1.3	2.42	2	-0.42	
		CO4	2.6	2.0	2.48	2	-0.48	
		CO5	2.7	1.3	2.42	2	-0.42	
	140302 Electronics Measurement & Instrumentation	CO1	2.6	2.2	2.52	2	-0.52	Target for CO1, CO2, CO3 & CO4 have achieved however target for CO5 has NOT achieved. Following actions can be taken; • More assignment can be given for practise. • Conduct more quizzes.
		CO2	2.9	2.6	2.84	2	-0.84	
		CO3	2.8	2.3	2.7	2	-0.7	
		CO4	2.2	2.9	2.34	2	-0.34	
		CO5	1.8	2.4	1.92	2	**0.08**	
	140303 Network Theory	CO1	2.6	2.0	2.48	2	-0.48	Target for CO1, CO2 & CO3 have achieved however target for CO4 & CO5 have NOT achieved. Following actions can be taken; • Numerical based tutorials can be given for practise. • Numerical problems should be solved during class. • Assign mini projects.
		CO2	2.3	2.2	2.28	2	-0.28	
		CO3	2.0	2.2	2.04	2	-0.04	
		CO4	1.8	2.2	1.88	2	**0.12**	
		CO5	1.7	2.9	1.94	2	**0.06**	
	140304 Signals & Systems	CO1	2.7	1.6	2.48	2	-0.48	Target for CO1 & CO5 have achieved however target for CO2, CO3 & CO4 have NOT achieved. Following actions can be taken;. • Conduct more tutorial classes. • More numerical
		CO2	2.1	1.3	1.94	2	**0.06**	
		CO3	1.7	2.2	1.8	2	**0.2**	
		CO4	1.1	1.6	1.2	2	**0.8**	
		CO5	2.4	1.3	2.18	2	-0.18	

								can be added in assignments
V	140502 EMT	CO1	2.5	2.3	2.46	2	-0.46	Target for CO1, CO2, CO3 & CO4 have achieved however target for CO5 has NOT achieved. Following actions can be taken; • Solution of tutorial/assignment should be discussed. • Conduct additional classes.
		CO2	2.1	2.3	2.14	2	-0.14	
		CO3	2.2	2.5	2.26	2	-0.26	
		CO4	2.7	2.2	2.6	2	-0.6	
		CO5	1.5	1.9	1.58	2	**0.42**	
	140503 Data Communication	CO1	1.7	1.7	1.7	2	**0.3**	Target for CO4has achieved however target for CO1, CO2, CO3 & CO5 have NOT achieved. Following actions can be taken; • More assignments should be given and solutions should be discussed • Conduct doubt clearing session regularly.
		CO2	1.8	1.4	1.72	2	**0.28**	
		CO3	1.5	1.7	1.54	2	**0.46**	
		CO4	2.5	2.1	2.42	2	-0.42	
		CO5	1.4	2.1	1.54	2	**0.46**	
	140504 Linear Control Theory	CO1	2.2	1.8	2.12	2	-0.12	Target for CO1, CO2 & CO3 have achieved however target for CO4 & CO5have NOT achieved. Following actions can be taken; • Mini projects should be given. • Numerical problems should be solved in class.
		CO2	2.6	1.3	2.34	2	-0.34	
		CO3	2.1	1.8	2.04	2	-0.04	
		CO4	1.6	1.5	1.58	2	**0.42**	
		CO5	2.1	1.3	1.94	2	**0.06**	
	140505 Digital Communication	CO1	2.3	1.7	2.18	2	-0.18	Target for CO1, CO2 CO3 & CO5 have achieved however target for CO4 has NOT achieved. Following actions can be taken; • Conduct more tutorials session • Numerical based assignment should be given.
		CO2	2.6	1.8	2.44	2	-0.44	
		CO3	2.7	1.6	2.48	2	-0.48	
		CO4	1.4	1.7	1.46	2	**0.54**	
		CO5	2.7	1.6	2.48	2	-0.48	
VII	DE-3 Microwave Engineering	CO1	2.9	1.2	2.56	2.25	-0.31	Target for CO1 & CO5 have achieved however target for CO2, CO3 & CO4 have NOT achieved. Following
		CO2	2.4	1.0	2.12	2.25	**0.13**	
		CO3	0.7	1.8	0.92	2.25	**1.33**	

								Remarks
		CO4	2.3	1.8	2.2	2.25	0.05	actions can be taken;
		CO5	2.9	1.9	2.7	2.25	-0.45	• More quizzes should be conducted. • Solution of previous paper should be discussed.
	DE-3 Sattelite & RADAR Communication	CO1	2.2	2.6	2.28	2.25	-0.03	Target for CO1 has achieved however target for CO2, CO3, CO4 & CO5 have NOT achieved. Following actions can be taken; • More tutorial should be solved in class. • Conduct presentation sessions.
		CO2	1.7	2.2	1.8	2.25	0.45	
		CO3	1.5	2.6	1.72	2.25	0.53	
		CO4	1.2	2.2	1.4	2.25	0.85	
		CO5	1.1	1.9	1.26	2.25	0.99	
	DE-3 VLSI Design	CO1	2.3	1.3	2.1	2	-0.1	Target for CO1, CO2, CO4 & CO5 have achieved however target for CO3 has NOT achieved. Following actions can be taken; • Case study on VLSI circuit should be given. • Conduct more remedial classes.
		CO2	2.4	0.7	2.06	2	-0.06	
		CO3	2.2	0.1	1.78	2	0.22	
		CO4	2.9	0.3	2.38	2	-0.38	
		CO5	2.5	0.3	2.06	2	-0.06	
	OC-3 (MEMS)	CO1	2.9	1.9	2.7	2	-0.7	All CO Target achieved. Difficulty level of questions can be increase in question paper
		CO2	2.9	2.3	2.78	2	-0.78	
		CO3	2.9	2.5	2.82	2	-0.82	
		CO4	2.6	2.2	2.52	2	-0.52	
		CO5	2.2	1.9	2.14	2	-0.14	

Total No of courses	Total number of COs	Number of COs NOT attained target level	% of COs not attained	Action taken
12	60	22	37%	• More assignments/ tutorials should be given & solutions should be discussed related to specific CO • Conduct additional Classes focused on specific CO. • Assign mini projects. • Conduct Interaction/ expert session.