

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 2022

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 Achieved)	Action taken
III	140311 Electronic s Circuits Design	CO1	2.8	1.1	2.46	2	-0.46	All CO Target achieved. Higher order thinking questions can be added in question paper
		CO2	2.7	0.9	2.34	2	-0.34	
		CO3	2.1	1.7	2.02	2	-0.02	
		CO4	2.6	2	2.48	2	-0.48	
		CO5	2.7	1.3	2.42	2	-0.42	
	140312 Digital Circuits & Systems	CO1	2.7	2.2	2.6	2	-0.6	Target for CO1, CO2, CO3 & CO5 have been achieved however target for CO4 has NOT been achieved. Following actions can be taken; - More assignment can be given for practise. - Conduct more quizzes.
		CO2	2.9	2.7	2.86	2	-0.86	
		CO3	2.8	2.3	2.7	2	-0.7	
		CO4	1.8	2	1.84	2	0.16	
		CO5	2.2	2.9	2.34	2	-0.34	
	140313 Network Theory	CO1	2.6	2	2.48	2	-0.48	All CO Target achieved. Higher order thinking questions can be added in question paper
		CO2	2.3	2.2	2.28	2	-0.28	
		CO3	2	2.2	2.04	2	-0.04	
		CO4	2.8	2.2	2.68	2	-0.68	
		CO5	2.7	2.9	2.74	2	-0.74	
	140314 Analog Communi cation	CO1	2.7	2.1	2.58	2	-0.58	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 can be added in assignments
		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	

V	140511 Data Science	CO1	1.7	1.7	1.7	2	<u>0.3</u>	Target for CO4 has 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	1.5	1.4	1.48	2	<u>0.52</u>	
		CO3	1.5	1.7	1.54	2	<u>0.46</u>	
		CO4	2.5	2.1	2.42	2	-0.42	
		CO5	1.4	2.1	1.54	2	<u>0.46</u>	
	140512 Microprocessor & Interfacing	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	2.4	2.24	2	-0.24	
		CO4	2.7	2.2	2.6	2	-0.6	
		CO5	1.6	1.9	1.66	2	<u>0.34</u>	
	140513 Linear Control Theory	CO1	2.2	1.8	2.12	2	-0.12	Target for CO1, CO2 & CO3 have achieved however target for CO4 & CO5 have 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	<u>0.42</u>	
		CO5	2.1	1.3	1.94	2	<u>0.06</u>	
	140514 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	2.7	1.8	2.52	2	-0.48	
		CO3	2.7	1.6	2.48	2	-0.48	
		CO4	1.4	1.7	1.46	2	<u>0.54</u>	
		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 actions can be taken; - More quizzes should be conducted. - Solution of
		CO2	2.4	1	2.12	2.25	<u>0.13</u>	
		CO3	0.7	1.8	0.92	2.25	<u>1.33</u>	
		CO4	2.3	1.8	2.2	2.25	<u>0.05</u>	
		CO5	3	2	2.8	2.25	-0.55	

								previous paper should be discussed.
	DE-3 Sattelite& RADAR Communi cation	CO1	2.2	2.6	2.28	2.25	-0.03	Target for CO1 & CO3 have achieved however target for CO2, 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	<u>0.45</u>	
		CO3	2.5	2.6	2.52	2.25	-0.27	
		CO4	1.2	2.2	1.4	2.25	<u>0.85</u>	
		CO5	1.1	2	1.28	2.25	<u>0.97</u>	
	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	<u>0.22</u>	
		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	2.4	2.8	2	-0.8	
		CO4	2.6	2.2	2.52	2	-0.52	
		CO5	2.3	1.9	2.22	2	-0.22	

Total No of courses	Total number of COs	Number of COs NOT attained target level	% of COs not attained	Action taken
12	60	19	32%	• 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.

Semester	Course code & name	Rubrics/ range (corresponding to level 1-2-3)
Semester - III	140311 Electronics Circuits Design	70-80-90
	140312 Digital Circuits & Systems	65-75-85
	140313 Network Theory	65-75-85
	140314 Analog Communication	70-80-90
Semester - V	140511 Data Science	65-75-85
	140512 Microprocessor & Interfacing	60-70-80
	140513 Linear Control Theory	70-80-90
	140514 Digital Communication	70-80-90
Semester - VII	DE-3 Microwave Engineering	65-75-85
	DE-3 Sattelite& RADAR Communication	55-65-75
	DE-3 VLSI Design	70-80-90
	OC-3 (MEMS)	65-75-85

Prof. D. K. Parsediya
OBE Coordinator

Dr. Vandana V. Thakare
HOD