

CO Attainment & Gap Analysis July – December 2024

Table.1: CO Attainment & Gap Analysis of II Year, III SEM

Course Code & Name	Course Outcomes	Direct CO Attainment	Indirect CO Attainment	Overall CO Attainment	Target Attainment	Gap in Attainment	Status of CO Attainment	Action Taken
3110321: Fluid Mechanics-I	CO 1	0.51	3.00	1.01	2.5	1.49	Not Attained	More explain fluid properties
	CO 2	0.52	3.00	1.01	2.5	1.49	Not Attained	More assignments to fluid flow and dimensional analysis
	CO 3	0.49	3.00	1.00	2.5	1.50	Not Attained	More assignments on fluid flow problems
	CO 4	0.52	3.00	1.02	2.5	1.48	Not Attained	More explain fluid characteristics
	CO 5	0.51	3.00	1.01	2.5	1.49	Not Attained	More explain various types of fluid flow & measurement technique
	C 6	2.28	3.00	2.42	2.5	0.08	Not Attained	More explain concept of laminar flow
3110321: Fluid Mechanics (Lab)	CO 1	3	3	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3	3	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3	3	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3	3	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
3110322: Theory of Structures-I	CO 1	0.50	3.00	1.00	2.5	1.50	Not Attained	More assignments and numerical problems to be given
	CO 2	0.49	3.00	0.99	2.5	1.51	Not Attained	
	CO 3	0.50	3.00	1.00	2.5	1.50	Not Attained	

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	CO 4	0.48	3.00	0.98	2.5	1.52	Not Attained	
	CO 5	0.49	3.00	0.99	2.5	1.51	Not Attained	
3110323: Geotechnical Engineering	CO 1	0.63	3.00	1.10	2.5	1.40	Not Attained	More explain different properties of rock & soil
	CO 2	0.48	3.00	0.98	2.5	1.52	Not Attained	More explain flow & shear parameter of soil
	CO 3	0.44	3.00	0.95	2.5	1.55	Not Attained	More assignments on stress distribution & shear failure
	CO 4	0.46	3.00	0.97	2.5	1.53	Not Attained	More assignments on shear strength parameters
	CO 5	0.40	3.00	0.92	2.5	1.58	Not Attained	More assignments on stability of slopes
3110323: Geotechnical Engineering (Lab)	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
3110324: Transportation Engineering	CO 1	0.71	3.00	1.16	2.5	1.34	Not Attained	More explain principle of planning & geometric design
	CO 2	0.56	3.00	1.05	2.5	1.45	Not Attained	More explain physical properties of highway materials
	CO 3	0.56	3.00	1.05	2.5	1.45	Not Attained	More explain concept of traffic engineering
	CO 4	0.56	3.00	1.05	2.5	1.45	Not Attained	More assignments on design of pavement
	CO5	0.57	3.00	1.06	2.5	1.44	Not Attained	More explain provision of drainage & maintenance

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3110324: Transportation Engineering (Lab)	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
3110324: Self Learning	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
1000005: Project Management & Financing	CO 1	0.57	3.00	1.05	2.5	1.45	Not Attained	More explain attributes of project
	CO 2	2.38	3.00	2.50	2.5	0.00	Attained	-
	CO 3	2.09	3.00	2.27	2.5	0.23	Not Attained	More assignments to analyse project network
	CO 4	1.68	3.00	1.94	2.5	0.56	Not Attained	More assignments on cost of projects
	CO5	2.37	3.00	2.50	2.5	0.00	Not Attained	More explain different option to arrange finances

Table.2: CO Attainment& Gap Analysis of III Year, V SEM

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Course Code & Name	Course Outcomes	Direct CO Attainment	Indirect CO Attainment	Overall CO Attainment	Target Attainment	Gap in Attainment	Status of CO Attainment	Action Taken
2110520: Data Science	CO 1	2.32	3.00	2.45	2.5	0.05	Not Attained	More explain different techniques
	CO 2	2.37	3.00	2.50	2.5	0.00	Attained	
	CO 3	0.44	3.00	0.95	2.5	1.55	Not Attained	More assignments on data visualization techniques
	CO 4	0.55	3.00	1.04	2.5	1.46	Not Attained	More assignments on data analysis
	CO 5	2.10	3.00	2.28	2.5	0.22	Not Attained	More assignments on data science technique
	CO 6	1.88	3	2.10	2.5	0.396	Not Attained	More assignments on performance of algorithm
2110521: Waste Water Engineering	CO 1	0.79	3.00	1.24	2.5	1.26	Not Attained	More explain concept of waste water engineering
	CO 2	2.57	3.00	2.66	2.5	-0.16	Attained	-
	CO 3	0.76	3.00	1.21	2.5	1.29	Not Attained	More explain techniques for sewage treatment
	CO 4	0.82	3.00	1.25	2.5	1.25	Not Attained	More assignment to analyse sewerage system
	CO 5	0.82	3.00	1.26	2.5	1.24	Not Attained	More assignments to sewerage system
2110512: Estimating, Costing & Contracting	CO 1	1.55	3.00	1.84	2.5	0.66	Not Attained	More explain estimation, costing & contracting
	CO 2	0.78	3.00	1.22	2.5	1.28	Not Attained	More assignments to estimate area,

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	CO 3	0.80	3.00	1.24	2.5	1.26	Not Attained	More explain rate analysis
	CO 4	2.27	3.00	2.42	2.5	0.08	Not Attained	More assignments to determine rates & value
	CO 5	2.54	3.00	2.63	2.5	-0.13	Attained	-
2110513: S.D.D. (RCC)	CO 1	2.09	3.00	2.27	2.5	0.23	Not Attained	More explain and assignments to design beam, column, slabs & foundation
	CO 2	2.14	3.00	2.31	2.5	0.19	Not Attained	
	CO 3	0.39	3.00	0.92	2.5	1.58	Not Attained	
	CO 4	1.96	3.00	2.17	2.5	0.33	Not Attained	
	CO 5	0.41	3.00	0.93	2.5	1.57	Not Attained	
2110514: Railway, Airport and Tunnel Engineering	CO 1	0.44	3.00	0.95	2.5	1.55	Not Attained	More explain the various elements of railway
	CO 2	0.44	3.00	0.95	2.5	1.55	Not Attained	More illustrate various gauges, signals etc.
	CO 3	0.44	3.00	0.95	2.5	1.55	Not Attained	More explain airport planning & tunnel
	CO 4	0.43	3.00	0.94	2.5	1.56	Not Attained	More assignments on design runway & taxiway
	CO 5	0.45	3.00	0.96	2.5	1.54	Not Attained	More explain construction methods of tunnel.

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2110515: Minor Project-I	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
2110516: Self Learning	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be

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1000006: Disaster Management	CO 1	2.36	3.00	2.48	2.5	0.02	Not Attained	More explain disaster prevention & mitigation approaches
	CO 2	2.36	3.00	2.49	2.5	0.01	Not Attained	More explain global & national disasters
	CO 3	1.35	3.00	1.68	2.5	0.82	Not Attained	More explain impacts of various disasters
	CO 4	0.55	3.00	1.04	2.5	1.46	Not Attained	More explain disaster risk reduction
	CO 5	2.36	3.00	2.49	2.5	0.01	Not Attained	More explain linkage between disasters, environment and development

Table.3: CO Attainment& Gap Analysis of IV Year, VII SEM

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Course Code & Name	Course Outcomes	Direct CO Attainment	Indirect CO Attainment	Overall CO Attainment	Target Attainment	Gap in Attainment	Status of CO Attainment	Action Taken
110731: Hydraulic Structure	CO 1	0.40	3.00	0.92	2.5	1.58	Not Attained	More explain design of gravity dams
	CO 2	0.42	3.00	0.93	2.5	1.57	Not Attained	More explain design of earth dams
	CO 3	0.41	3.00	0.93	2.5	1.57	Not Attained	More explain design of cross drainage works
	CO 4	0.71	3.00	1.17	2.5	1.33	Not Attained	More assignments on spillway & energy dissipators
	CO 5	0.41	3.00	0.93	2.5	1.57	Not Attained	More explain the components of hydro projects
110732: Advanced Structural Design	CO 1	2.24	3.00	2.39	2.5	0.11	Not Attained	More assignments on design.
	CO 2	0.41	3.00	0.93	2.5	1.57	Not Attained	
	CO 3	0.43	3.00	0.94	2.5	1.56	Not Attained	
	CO 4	1.89	3.00	2.11	2.5	0.39	Not Attained	
	CO 5	1.89	3.00	2.11	2.5	0.39	Not Attained	
110734: Industrial Waste Management	CO 1	2.88	3.00	2.90	2.5	-0.40	Attained	-
	CO 2	2.54	3.00	2.63	2.5	-0.13	Attained	-
	CO 3	2.50	3.00	2.60	2.5	-0.10	Attained	-
	CO 4	2.93	3.00	2.94	2.5	-0.44	Attained	-

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	CO 5	2.68	3.00	2.74	2.5	-0.24	Attained	-
110716: Software Application to Civil Engineering Problems	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
110717: Creative Problem Solving	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified

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	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
110718: SIP-III	CO 1	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 2	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 3	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 4	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
	CO 5	3.00	3.00	3.00	2.5	-0.50	Attained	Rubrics for the level can be modified
9110211: Industrial Waste Management for Smart City	CO 1	2.36	3.00	2.49	2.5	0.01	Not Attained	More explain principles & concept of waste management
	CO 2	2.92	3.00	2.94	2.5	-0.44	Attained	-
	CO 3	2.93	3.00	2.94	2.5	-0.44	Attained	-
	CO 4	2.34	3.00	2.47	2.5	0.03	Not Attained	More explain effective & efficient waste management

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								system
9110212: Safety Quality & Management	CO 1	2.36	3.00	2.49	2.5	0.01	Not Attained	More explain quality management system
	CO 2	2.92	3.00	2.94	2.5	-0.44	Attained	-
	CO 3	2.93	3.00	2.94	2.5	-0.44	Attained	-
	CO 4	2.34	3.00	2.47	2.5	0.03	Not Attained	More explain the quality control
	CO 5	2.63	3.00	2.70	2.5	-0.20	Attained	-