Feedback on Learning Outcomes - Department of CSE

Sample Feedback Forms - Pg. No.2

Feedback Analysis - Pg.No. □

CO PO Report-2015-2016 Computer Science & Engineering

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
1	15CS61	8.71	CO1 CO2 CO3 CO4 CO5 **5.81**	CO1 CO2 CO3 CO4 CO5 **5.81**	CO2 **8.71**	CO1 CO2 CO3 CO4 CO5 **6.97**		CO1 CO3 CO4 CO5 **6.53**		CO4 **5.81**						CO4 CO5 **5.81**	CO1 CO2 CO3 CO4 **6.53**	
2	15MAT11	7.36	CO1 CO2 CO3 CO4 CO5 **7.36**	CO1 CO2 CO3 CO4 CO5 **6.38**														
3	15PHY12	8.21	CO1 CO2 CO3 CO4 CO5 **8.21**	CO1 CO2 CO3 CO4 CO5 **5.47**														
4	15CIV13	7.36	CO1 CO2 CO3 CO4 CO5 **6.38**	CO1 CO2 CO3 CO4 CO5 **6.38**														
5	15EME14	6.5	CO1 CO2 CO3 CO4 CO5 **4.33**	CO1 CO2 CO3 CO4 CO5 **4.33**														
6	15ELE15	8.21	CO1 CO2 CO3 CO4 CO5 **7.66**	CO1 CO2 CO3 CO4 CO5 **6.02**														
7	15WSL16	10	CO1 CO2 CO3 CO4 CO5 **5.33**			CO1 CO2 CO3 CO4 CO5 **6.67**						CO1 CO2 CO3 CO4 CO5 **6.67**						
8	15PHYL17	10	CO1 CO2 CO3 CO4 CO5 **10**	CO1 CO2 CO3 CO4 CO5 **6.67**								CO1 CO2 CO3 CO4 CO5 **6.67**						
9	CPH	3.5						CO1 CO2 CO3 CO4 CO5 3.5		CO1 CO2 CO3 CO4 CO5 3.5				CO1 CO2 CO3 CO4 CO5 3.5				

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
10	15MAT21	7.36	CO1 CO2 CO3 CO4 CO5 **7.36**	CO1 CO2 CO3 CO4 CO5 **6.38**														
11	15CHE22	4.79	CO1 CO2 CO3 CO4 CO5 **3.19**	CO1 CO3 CO4 CO5 **3.19**														
12	15PCD23	8.21	CO1 CO2 CO3 CO4 CO5 **6.57**	CO1 CO3 CO4 CO5 **6.16**	CO1 CO2 CO3 CO4 CO5 **7.66**													
13	15CED24	9.07	CO1 CO2 CO3 CO4 CO5 **9.07**		CO1 CO2 CO3 CO4 CO5 **6.05**		CO3 CO4 CO5 **9.07**							CO1 CO2 CO3 CO4 CO5 **3.02**				
14	15ELN25	7.36	CO1 CO2 CO3 CO4 CO5 **6.38**	CO1 CO2 CO3 CO4 **4.91**														
15	15CPL26	10	CO1 CO2 **10**	CO1 CO2 CO3 CO5 **5.83**	CO5 **6.67**	CO3 CO4 **8.33**	CO4 **3.33**											
16	15CHEL27	10	CO1 CO2 CO3 CO4 CO5 **6.67**	CO1 CO2 CO3 CO4 CO5 **6.67**								CO3 CO4 CO5 **6.67**						
17	15CIV28	3.5						CO1 CO2 CO3 CO4 CO5 **2.33**	CO1 CO2 CO3 CO4 CO5 **2.33**	CO1 CO2 CO3 CO4 CO5 **2.33**				CO1 CO2 CO3 CO4 CO5 **2.33**				
18	15CS33	8.43	CO1 CO2 CO3 CO4 CO5 **7.31**	CO1 CO2 CO3 CO4 CO5 **5.06**	CO1 CO2 CO3 CO4 CO5 **7.87**										CO1 CO2 CO3 CO4 CO5 **5.62**		CO1 CO2 CO3 CO4 CO5 **7.87**	
19	15MAT31	7.91	CO1 CO2 CO3 CO4 CO5 **7.38**	CO3 CO4 CO5 **7.03**														

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20	15CS32	8.71	CO1 CO2 CO3 CO4 CO5 **5.81**		CO1 CO2 CO3 CO4 CO5 **5.81**										CO1 CO2 CO3 CO4 CO5 **5.81**			
21	15CS834	8.71	CO1 CO2 CO3 CO4 CO5 **6.97**	CO1 CO2 CO3 CO4 CO5 **7.55**	CO2 CO3 CO4 CO5 **7.26**	CO1 CO5 **2.9**											CO1 CO2 CO3 CO4 CO5 **5.81**	
22	15CS35	5.76	CO1 CO2 CO3 CO4 CO5 **3.84**		CO2 CO3 CO4 CO5 **3.84**		CO1 CO2 CO3 CO4 CO5 **3.84**								CO1 CO2 CO3 CO4 CO5 **3.84**			
23	15CSL37	9.14	CO1 CO3 **9.14**	CO1 CO2 CO4 **6.09**	CO1 CO2 CO4 **6.09**	CO1 CO2 CO5 **5.08**					CO1 CO2 **3.05**				CO1 CO2 **3.05**			
24	15CSL38	10	CO1 CO2 CO3 CO4 CO5 **6.67**	CO1 CO2 CO3 CO4 CO5 **10**	CO1 CO2 CO3 CO4 CO5 **10**							CO3 **6.67**					CO1 CO2 CO3 CO4 CO5 **6.67**	
25	15CS34	8.37			CO1 CO3 CO4 **5.58**		CO1 CO4 CO5 **5.58**								CO1 CO2 CO3 CO4 CO5 **8.37**		CO1 CO3 CO4 **2.79**	
26	15MAT41	9.07	CO1 CO2 CO3 CO4 CO5 **9.07**	CO1 CO2 CO3 CO4 CO5 **7.26**														
27	15CS42	9.06		CO3 **3.02**	CO1 CO2 CO5 **7.05**		CO3 CO4 **6.04**						CO4 **9.06**				CO1 CO2 CO3 **6.04**	CO1 CO2 CO3 CO5 **6.04**
28	15CS742	6.44	CO1 CO2 CO3 CO4 CO5 **4.29**	CO1 CO3 CO4 **5.72**	CO5 **6.44**	CO2 CO3 CO4 **6.44**	CO1 CO3 **5.37**									CO1 CO2 CO3 CO4 CO5 **4.29**		CO1 CO2 CO3 CO4 CO5 **4.29**
29	15CS43	7.21	CO1 CO2 CO3 CO4 CO5 **7.21**	CO1 CO2 CO3 CO4 **4.81**	CO2 CO3 CO4 CO5 **4.81**									CO5 **7.21**	CO1 **4.81**		CO2 CO3 CO4 CO5 **4.81**	CO2 CO3 CO4 **4.81**

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
30	15CS44	7.91	CO2 CO3 CO5 5.27	CO2 CO3 CO5 5.27	CO2 CO3 CO5 5.27	CO3 CO5 5.27	CO3 CO5 5.27								CO1 CO5 7.91		CO1 CO2 CO3 CO5 4.61	CO1 CO4 3.96
31	15CS45	8.56	CO1 CO2 CO3 CO4 CO5 5.71		CO1 CO2 CO3 CO4 CO5 5.71	CO1 CO2 CO3 CO4 CO5 5.71	CO1 CO2 CO3 CO4 CO5 5.71										CO1 CO2 CO3 CO4 CO5 5.71	CO1 CO2 CO3 CO4 CO5 5.71
32	15CS46	8.89	CO1 CO2 8.89	CO1 CO2 CO3 CO5 5.19	CO5 5.93	CO3 CO4 7.41	CO4 2.96									CO1 CO2 CO3 CO4 CO5 8.89		
33	15CSL47	5.09	CO1 CO2 CO4 CO5 4.67	CO3 CO4 CO5 3.39	CO1 CO2 CO4 CO5 4.24	CO3 CO5 5.09						CO2 CO4 CO5 5.09			CO2 CO4 CO5 3.39		CO1 CO2 CO3 CO4 CO5 5.09	
34	15CSL48	8.06	CO1 5.37	CO1 CO2 5.37	CO1 5.37		CO1 CO2 CO3 CO4 5.37				CO1 CO2 6.72		CO1 8.06	CO1 CO2 CO3 CO4 2.69	CO1 CO5 6.72	CO1 2.69	CO4 2.69	CO1 CO2 CO3 CO4 2.69
35	15CS651	8.29	CO1 CO2 CO3 CO4 CO5 2.76	CO2 CO3 CO4 CO5 5.53													CO2 CO3 CO4 CO5 5.53	
36	15CS51	8.54								CO5 5.69	CO1 CO2 CO3 CO4 CO5 5.69	CO1 CO2 CO3 CO4 CO5 5.69	CO1 CO3 CO4 CO5 2.85					CO5 2.85
37	15CS52	7.13	CO1 CO2 3.57	CO2 CO3 CO4 CO5 2.97												CO1 CO2 CO3 CO4 CO5 7.13		
38	15CS553	9.06	CO1 CO2 CO3 CO4 CO5 6.04	CO1 CO2 9.06	CO1 CO3 CO4 CO5 9.06	CO2 9.06	CO1 CO2 CO3 CO4 CO5 9.06							CO4 CO5 9.06		CO1 CO2 CO3 CO4 CO5 9.06	CO1 CO2 CO3 CO4 CO5 9.06	
39	15CS53	9.06	CO2 3.02	CO2 3.02	CO1 CO2 CO3 CO4 CO5 6.64												CO1 CO2 CO3 CO4 CO5 7.85	

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
40	15CS754	9.06			CO1 CO2 CO3 CO4 CO5 **5.44**		CO1 CO2 CO3 CO4 CO5 **9.06**							CO1 CO2 CO3 CO4 CO5 **6.04**	CO1 CO2 CO3 CO4 CO5 **6.04**	CO1 CO2 CO3 CO4 CO5 **6.04**		
41	15CS54	9.14	CO1 CO2 CO3 CO4 CO5 **8.53**	CO1 CO2 CO3 CO4 CO5 **8.53**		CO1 CO2 CO3 CO4 CO5 **8.53**											CO1 CO2 CO3 CO4 CO5 **8.53**	
42	15CSL57	9.03	CO1 CO2 CO3 CO4 CO5 **7.22**	CO2 **9.03**	CO1 **9.03**		CO1 CO2 **9.03**							CO1 CO2 CO3 **6.02**		CO1 CO2 CO3 **8.03**		CO1 CO2 **6.02**
43	15CSL58	10	CO1 CO2 CO3 CO4 CO5 **6.67**	CO1 CO3 CO4 CO5 **10**	CO1 CO2 CO3 CO4 CO5 **6.67**									CO3 CO5 **6.67**				CO1 CO3 **10**
44	15CS36	9.49	CO1 CO2 CO3 CO4 **9.49**	CO2 CO3 CO4 CO5 **7.12**		CO1 CO5 **6.33**											CO1 CO2 CO3 CO4 CO5 **6.33**	
45	15CS62	8.2	CO1 CO2 CO3 CO4 **5.47**			CO3 CO4 **5.47**	CO1 CO2 CO3 CO5 **8.2**											CO1 CO2 CO3 **5.47**
46	15CS63	9.57	CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 **9.57**	CO3 CO4 CO5 CO3 CO4 CO5 **6.38**	CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 **6.38**		CO4 **6.38**							CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 **6.38**	CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 **9.57**		CO1 CO2 CO3 CO4 CO5 CO1 CO2 CO3 CO4 CO5 **6.38**	
47	15CS564	8.54	CO1 CO2 **7.12**		CO1 CO2 CO3 CO4 CO5 **7.4**		CO1 **5.69**											CO1 CO2 CO3 CO4 CO5 **5.69**
48	15CS64	8.5	CO1 CO2 CO3 CO4 CO5 **6.8**	CO2 CO3 CO4 CO5 **7.79**	CO2 **2.83**										CO1 **2.83**		CO2 CO3 CO4 CO5 **2.83**	

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
49	15CS664	6.49	CO1 CO2 4.33	CO1 CO2 CO3 CO4 CO5 4.33		CO3 CO4 CO5 4.33												CO3 CO4 CO5 6.49
50	15CSL67	9.54		CO1 CO2 CO3 CO4 CO5 6.36		CO1 CO2 CO3 CO4 CO5 9.54	CO1 CO2 CO3 CO4 CO5 9.54								CO1 CO2 CO3 CO4 CO5 6.36		CO1 CO2 CO3 CO4 CO5 6.36	
51	15CSL68	9.89	CO1 CO2 CO3 CO4 CO5 9.89				CO1 CO2 CO3 CO4 CO5 9.89				CO2 CO4 CO5 9.89	CO3 CO5 9.89			CO1 CO2 CO3 CO4 CO5 6.59			
52	15CS71	8.11			CO1 CO2 CO3 CO4 CO5 8.11		CO1 CO2 CO3 CO4 CO5 4.87							CO1 CO2 CO3 CO4 CO5 3.24		CO1 CO2 CO3 CO4 CO5 8.11		CO1 CO2 CO3 CO4 CO5 7.03
53	15CS72	8.71	CO1 CO2 CO3 CO4 CO5 6.97	CO1 CO2 CO3 CO4 CO5 7.55	CO5 5.81										CO1 CO2 CO3 CO4 CO5 8.71			
54	15CS73	6.1	CO1 6.1	CO1 CO2 CO3 CO4 CO5 6.1	CO2 CO3 CO4 CO5 5.59	CO3 CO4 4.07	CO5 4.07								CO1 4.07		CO1 CO2 CO3 CO4 CO5 4.88	CO2 CO3 CO4 CO5 4.07
55	15CSL76	8.86	CO1 8.86	CO1 CO2 8.86	CO1 8.86	CO4 8.86	CO5 8.86				CO5 8.86	CO3 CO5 8.86					CO1 CO2 CO3 CO4 CO5 8.86	
56	15CSL77	9.77	CO1 CO2 CO3 CO4 CO5 9.77				CO1 CO2 CO3 CO4 CO5 9.77				CO2 CO4 CO5 9.77	CO3 CO5 9.77			CO1 CO2 CO3 CO4 CO5 6.51			
57	15CSP78	10	CO1 CO2 6.67	CO1 CO2 CO5 10	CO1 CO2 8.33	CO1 CO2 CO3 CO5 9.17	CO1 CO2 CO3 10	CO1 CO2 CO3 8.89	CO1 CO5 6.67	CO3 10	CO1 CO3 10	CO3 CO4 CO5 8.89	CO3 6.67	CO1 CO2 CO3 CO4 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10		
58	15CS81	7.21			CO1 CO2 7.21	CO3 CO4 7.21	CO5 7.21		CO1 4.81							CO1 CO2 CO3 CO4 CO5 7.21		

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
59	15CS82	8.54	CO1 CO2 CO3 CO4 CO5 8.54	CO3 CO4 CO5 8.54	CO1 CO2 8.54	CO1 CO2 8.54	CO1 CO2 8.54							CO1 CO2 CO3 CO4 CO5 8.54			CO1 CO2 CO3 CO4 CO5 8.54	
60	15CS84	10	CO1 CO2 CO3 CO4 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO3 10	CO1 CO3 10	CO1 CO2 CO3 CO4 10	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 10	CO1 CO2 CO3 CO4 8.33	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 3.33	CO1 CO2 CO3 CO4 6.67	CO1 CO2 CO3 CO4 10	CO1 CO2 CO3 CO4 6.67
61	15CSP85	9.54	CO1 CO2 6.36	CO1 CO2 9.54	CO1 CO2 CO4 8.48	CO1 CO2 CO3 CO4 8.75	CO1 CO2 CO3 9.54	CO1 CO2 CO3 8.48	CO1 6.36	CO3 9.54	CO1 CO3 9.54	CO3 CO5 7.95	CO3 6.36	CO1 CO2 CO3 CO4 CO5 9.54	CO1 CO2 CO3 CO4 CO5 9.54	CO1 CO2 CO3 CO4 CO5 9.54	CO1 CO2 CO3 6.36	CO1 CO2 CO3 6.36
62	15CSS86	10	CO1 CO2 CO3 CO4 CO5 10	CO3 CO4 CO5 6.67	CO1 CO2 CO3 CO4 CO5 6.67									CO1 CO2 CO3 CO4 CO5 6.67	CO1 CO2 CO3 CO4 CO5 10		CO1 CO2 CO3 CO4 6.67	

CO-PO FEEDBACK ANALYSIS AND ACTION TAKEN REPORT

ACADEMIC YEAR 2018-2019

POs	Target Level	Attainment Level	Observations	Action Taken
PO 1: Engineering Knowledge				
PO 1	6.97	5.55	20.37% of shortfall in attaining PO against the target level. This is due to the low CO contribution from the courses:15CS35,15CS742,15CSL47,15CS664,15CS73	Action 1: The course instructor(15CS35) has Conducted experiments using UML opensource tool and virtual lab Action 2: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 3: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 4: The course instructor(15CS664) has conducted additional sessions on Decorators, Iterators and generators, lambda functions. Django, Flask Action 5: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics

				Action 6: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment. Action 7: Skill development sessions will be arranged to improve the skills on basic knowledge towards software and computer hardware.
PO 2: Problem Analysis				
PO 2	7.18	5.3	26.08% of shortfall in attaining PO against the target level. This is due to the low CO contribution from the courses: 15CS52,15CS742,15CSL47,15CS664,15CS73	Action 1: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 2: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 3: The course instructor(15CS664) has conducted additional sessions on Decorators, Iterators and generators, lambda functions. Django, Flask Action 4: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 5: The course instructor(15CS52) has conducted additional sessions on IPV4 addressing scheme and VOIP: Voice Over Internet Protocol Action 6: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment. Action 7: Technical talk/Lecture has been arranged on recent advancements towards problem analysis.
PO 3: Design/Development of Solutions				

PO 3	7.84	5.24	33.07% of shortfall in attaining PO against the target level. This is due to the low CO contribution from the courses: 15CS35,15CS43,15CSL47,15CS81,15CS73	Action 1: The course instructor(15CS35) has Conducted experiments using UML opensource tool and virtual lab Action 2: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 3: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 4: The course instructor(15CS43) has Conducted additional sessions on algorithm design strategies – Brute force approach Action 5: The course instructor(15CS81) has conducted additional sessions on Raspberry Pi and Machine Learning. Action 6: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 4: Conduct investigation of complex problems				
PO 4	7.81	5.99	23.20% of shortfall in attaining PO against the target level. This is due to the low contribution from courses: 15CS81,15CS742,15CSL47,15CS664,15CS73	Action 1: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 2: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 3: The course instructor(15CS664) has conducted additional sessions on Decorators, Iterators and generators, lambda functions. Django, Flask

				Action 4: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 5: The course instructor(15CS81) has conducted additional sessions on Raspberry Pi and Machine Learning Action 6: Measures will be taken to ensure more participation from the stakeholders. Action 7: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 8: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 5: Modern tool usage				
PO 5	7.64	5.73	24.90% of shortfall in attaining PO against the target level. This is due to the low contribution from courses: 15CS35,15CS742,15CS73.	Action 1: The course instructor(15CS35) has Conducted experiments using UML opensource tool and virtual lab Action 2: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 3: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 4: Measures will be taken to ensure more participation from the stakeholders. Action 5: Encouraging the students to participate in group activities such as paper presentation and technical events.

				Action 6: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment. Action 7: Skill development sessions will be arranged to improve the skills on software development towards modern tool usages.
PO 6: The engineer and society				
PO 6	7.50	6.58	12.26% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses: 15CS61,15CS84.	Action 1: The course instructor(15CS61) has conducted additional sessions on Quantum Cryptography. Action 2: Measures will be taken to ensure more participation from the stakeholders. Action 3: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 4: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 7: Environment and Sustainability				
PO 7	7.78	5.38	30.75% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses: 15CS81	Action 1: The course instructor(15CS81) has conducted additional sessions on Raspberry Pi and Machine Learning Action 2: Measures will be taken to ensure more participation from the stakeholders. Action 3: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 4: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.

PO 8: Ethics				
PO 8	7.09	6.03	15.07% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses: 15CS61,15CS51	Action 1: The course instructor(15CS51) has conducted additional sessions on how to approach for loans for small and medium scale Entrepreneurial Ventures Action 2: The course instructor(15CS61) has conducted additional sessions on Quantum Cryptography Action 3: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 4: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 9: Individual and Team work				
PO 9	8.29	6.62	20.24% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses:15CS51	Action 1: The course instructor(15CS51) has conducted additional sessions on how to approach for loans for small and medium scale Entrepreneurial Ventures Action 2: Measures will be taken to ensure more participation from the stakeholders. Action 3: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 4: Encouraging the students to take part in team based technical activities like quiz and designing competitions. Action 5: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 10: Communication				

PO 10	8.32	6.13	26.41% of shortfall in attaining PO against the target level. This is due to the low CO contribution from the courses: 15CS51,15CSL47	Action 1: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 2: The course instructor(15CS51) has conducted additional sessions on how to approach for loans for small and medium scale Entrepreneurial Ventures Action 3: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment. Action 4: To improve the individual and group communications soft skill activities has been arranged.
PO 11: Project management and finance				
PO 11	7.05	4.7	33.14% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses:15CS51	Action 1: The course instructor(15CS51) has conducted additional sessions on how to approach for loans for small and medium scale Entrepreneurial Ventures Action 2: Measures will be taken to ensure more participation from the stakeholders. Action 3: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 4: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PO 12: Life Long Learning				
PO 12	5.98	5.34	11% of shortfall in attaining PO against the target level. This is due to the low contribution from indirect assessments and courses:15CSL48	Action 1: The course instructor(15CSL48) has conducted additional sessions on Advanced Topic on Tree. Action 2: Measures will be taken to ensure more participation from the stakeholders.

				Action 3: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment. Action 4: Technical talk/Lecture hour has been arranged on recent advancements towards lifelong learning.
PSO 1: Computer System Design				
PSO 1	7.13	5.92	16.97% of shortfall in attaining PSO against the target level. This is due to the low CO contribution from the courses: 15CS35,15CSL47,15CS73	Action 1: The course instructor(15CS35) has Conducted experiments using UML opensource tool and virtual lab Action 2: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 3: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 4: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PSO 2: Computer Communication and Internet Applications				
PSO 2	7.94	6.1	23.07% of shortfall in attaining PSO against the target level. This is due to the low contribution from indirect assessments and courses: 15CS61,15CS742,15CS52,15CS81	Action 1: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 2: The course instructor(15CS52) has conducted additional sessions on IPV4 addressing scheme and VOIP: Voice Over Internet Protocol

				Action 3: The course instructor(15CS81) has conducted additional sessions on Raspberry Pi and Machine Learning. Action 4: The course instructor(15CS61) has conducted additional sessions on Quantum Cryptography Action 5: Measures will be taken to ensure more participation from the stakeholders. Action 6: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 7: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PSO 3: Solve Computational Problems				
PSO 3	7.38	5.29	28.22% of shortfall in attaining PSO against the target level. This is due to the low contribution from indirect assessments and courses: 15CS43,15CS61,15CSL47,15CS73	Action 1: The course instructor(15CSL47) has conducted additional sessions on advance topics covered on trees Action 2: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 3: The course instructor(15CS43) has Conducted additional sessions on algorithm design strategies – Brute force approach Action 4: The course instructor(15CS61) has conducted additional sessions on Quantum Cryptography Action 5: Measures will be taken to ensure more participation from the stakeholders. Action 6: Encouraging the students to participate in group activities such as paper presentation and technical events.

				Action 7: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.
PSO4: Software System Design and Development				
PSO 4	7.29	3.94	46.02% of shortfall in attaining PSO against the target level. This is due to the low contribution from indirect assessments. 15CS742,15CS664,15CS73	Action 1: The course instructor(15CS742) has conducted demonstration of Amazon Web Services (AWS) Action 2: The course instructor(15CS664) has conducted additional sessions on Decorators, Iterators and generators, lambda functions. Django, Flask Action 3: The course instructor(15CS73) has conducted additional sessions on the Basics of Probability and Statistics Action 4: Measures will be taken to ensure more participation from the stakeholders. Action 5: Encouraging the students to participate in group activities such as paper presentation and technical events. Action 6: Hands on workshop will be arranged to improve the skills on software design and development. Action 7: Tutorial and additional lecture hour has been conducted for the courses having low CO attainment.

Signature of HOD

Signature of Principal