



**CANARA ENGINEERING COLLEGE**

BENJANAPADAVU – 574219, Bantwal Taluk, D K District, Karnataka

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# Feedback on Learning Outcomes - Department of ECE

Sample Feedback forms - Pg. No. 2  
Feedback Analysis - Pg. No. 10



## Criteria-7 CO PO Report

Admission Year: Select Branch: [Print Report](#)

## CO PO Report-2017-2018 Electronics & Communication Engineering

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	17MAT11	8.03	CO1 CO2 CO3 CO4 CO5 8.03	CO1 CO2 CO3 CO4 CO5 6.96												
2	17CHE12	3.37	CO1 CO2 CO3 CO4 CO5 2.25	CO1 CO3 CO4 CO5 2.25												
3	17PCD13	4.26	CO1 CO2 CO3 CO4 CO5 3.41	CO1 CO3 CO4 CO5 3.2	CO1 CO2 CO3 CO4 CO5 3.98											
4	17CED14	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			

Sl. No.	Course Code	CO Attainment 10 Scale														
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
5	17ELN15	9.4	CO1 CO2 CO3 CO4 CO5 8.15	CO1 CO2 CO3 CO4 6.27												
6	17CPL16	9.54	CO1 CO2 CO3 CO4 CO5 8.27	CO1 CO2 CO3 CO4 CO5 8.27								CO1 CO3 CO5 8.48				
7	17CHEL17	10	CO1 CO2 CO3 CO4 CO5 6.67	CO1 CO2 CO3 CO4 CO5 6.67								CO3 CO4 CO5 6.67				
8	17CIV18	3.07						CO1 CO2 CO3 CO4 CO5 2.05	CO1 CO2 CO3 CO4 CO5 2.05	CO1 CO2 CO3 CO4 CO5 2.05				CO1 CO2 CO3 CO4 CO5 2.05		
9	17MAT21	7.43	CO1 CO2 CO3 CO4 CO5 7.43	CO1 CO2 CO3 CO4 CO5 6.44												
10	17PHY22	9.66	CO1 CO2 CO3 CO4 CO5 9.66	CO1 CO2 CO3 CO4 CO5 6.44												
11	17CIV23	10	CO1 CO2 CO3 CO4 CO5 8.67	CO1 CO2 CO3 CO4 CO5 8.67												
12	17EME24	9.91	CO1 CO2 CO3 CO4 CO5 9.91	CO2 CO3 6.61					CO1 CO4 6.61						CO1 CO2 CO3 CO4 CO5 6.61	
13	17ELE25	8.29	CO1 CO2 CO3 CO4 CO5 5.53	CO1 CO2 CO3 CO4 CO5 2.76											CO1 CO2 CO3 CO4 CO5 2.76	

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
14	17WSL26	10	CO1 CO2 CO3 CO4 CO5 6.67								CO1 CO2 CO3 CO4 CO5 6.67	CO1 CO2 CO3 CO4 CO5 6.67				
15	17PHYL27	10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 6.67								CO1 CO2 CO3 CO4 CO5 6.67				
16	17MAT31	6.4	CO1 CO2 CO3 CO4 CO5 5.97	CO3 CO4 CO5 4.98											CO2 CO3 CO4 4.27	
17	17EC32	8.97	CO1 CO2 CO3 CO4 CO5 5.98	CO1 CO2 CO3 CO4 CO5 5.98			CO3 CO4 CO5 2.99								CO1 CO2 CO3 CO4 CO5 5.98	CO3 2.99
18	17EC33	4.77	CO1 CO2 CO3 CO4 CO5 3.18	CO1 CO2 CO3 CO4 CO5 3.18			CO1 CO4 CO5 3.18								CO1 CO2 CO3 CO4 CO5 4.77	CO1 CO3 CO4 3.18
19	17EC34	5.49	CO1 CO2 CO3 CO4 CO5 5.49	CO1 CO2 CO4 CO5 5.49	CO2 CO4 1.83		CO2 CO4 3.66				CO2 CO4 3.66			CO2 CO4 1.83	CO1 CO2 CO3 CO4 CO5 3.66	
20	17EC35	9.49	CO1 CO2 CO3 CO4 CO5 9.49	CO1 CO2 CO3 CO4 CO5 6.33			CO4 9.49							CO4 9.49	CO1 CO2 CO3 CO4 CO5 9.49	CO1 CO2 CO3 CO4 CO5 3.16
21	17EC835	7.43	CO1 CO2 CO3 CO4 CO5 4.95	CO1 CO2 CO3 CO4 CO5 4.95			CO5 4.95									CO1 CO2 CO3 CO4 CO5 4.95
22	17EC36	9.4	CO1 CO2 CO3 CO4 CO5 8.15	CO1 CO2 CO3 CO4 CO5 6.89											CO1 CO2 CO3 CO4 CO5 3.13	CO1 CO2 CO3 CO4 CO5 5.64

Sl. No.	Course Code	CO Attainment 10 Scale											PSO1	PSO2		
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			PO11	PO12
23	17ECL37	8.29	CO1 CO2 CO3 CO4 CO5 8.29	CO1 CO2 CO3 CO4 CO5 8.29											CO1 CO2 CO3 CO4 CO5 8.29	CO1 CO2 CO3 CO4 CO5 8.29
24	17ECL38	10	CO1 CO2 CO4 CO5 10	CO1 CO2 CO5 6.67								CO1 CO2 CO4 CO5 10	CO3 6.67		CO1 CO2 CO3 CO4 CO5 10	CO3 3.33
25	17CPH39	0.76						CO1 CO2 CO3 CO4 CO5 0.76		CO1 CO2 CO3 CO4 CO5 0.76				CO1 CO2 CO3 CO4 CO5 0.76		
26	17MAT41	10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 8											CO1 CO2 CO3 CO4 9.17	CO3 CO4 CO5 7.78
27	17EC42	9.31	CO1 CO2 CO3 CO4 CO5 9.31	CO1 CO2 CO3 CO4 CO5 8.07			CO1 CO2 CO3 CO4 CO5 6.21							CO1 CO2 CO4 CO5 6.21	CO1 CO2 CO3 CO4 CO5 6.21	CO1 CO2 CO3 CO4 CO5 3.1
28	17EC43	2.93	CO1 CO2 CO3 CO4 CO5 2.93	CO1 CO2 CO3 CO4 CO5 2.93			CO2 CO3 CO4 2.93							CO2 CO3 CO4 2.93	CO1 CO2 CO3 CO4 CO5 2.93	CO1 CO2 CO3 CO4 CO5 0.98
29	17EC44	9.83	CO1 CO2 CO3 CO4 CO5 9.83	CO1 CO2 CO3 CO4 CO5 7.86	CO2 CO5 6.55	CO4 6.55									CO1 CO2 CO3 CO4 CO5 8.52	CO1 CO2 CO3 CO4 CO5 9.83
30	17EC744	5.07	CO1 CO2 CO3 CO4 CO5 5.07	CO1 CO2 CO3 CO4 CO5 5.07											CO1 CO2 CO3 CO4 CO5 3.38	CO1 CO2 CO3 CO4 CO5 5.07
31	17EC45	9.49	CO1 CO2 CO3 CO4 CO5 9.49	CO1 CO2 CO3 CO4 CO5 9.49			CO2 CO3 CO4 CO5 9.49					CO2 CO3 CO4 CO5 9.49		CO5 6.33	CO1 CO2 CO3 CO4 CO5 9.49	CO1 CO4 CO5 7.38

Sl. No.	Course Code	CO Attainment 10 Scale	CO Attainment													PSO	
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
32	17EC46	8.76	CO1 CO2 CO3 CO4 CO5 5.84	CO1 CO2 CO3 CO4 CO5 6.42			CO2 CO3 CO4 CO5 8.76							CO1 CO4 CO5 5.84	CO1 CO2 CO3 CO4 CO5 7.01	CO3 CO4 CO5 7.79	
33	17ECL47	8.57	CO1 CO2 CO3 CO4 CO5 8.57	CO1 CO2 CO3 CO5 8.57			CO1 CO2 CO3 CO5 8.57				CO1 CO2 8.57	CO3 CO5 8.57			CO1 CO2 CO3 CO4 CO5 7.43	CO1 CO2 CO5 5.71	
34	17ECL48	4.4	CO1 CO2 CO3 CO4 CO5 3.52	CO1 CO2 CO3 CO4 CO5 4.4		CO1 CO2 CO3 CO4 CO5 4.4					CO1 CO2 CO3 CO4 CO5 4.4				CO1 CO2 CO3 4.4	CO1 CO2 CO4 CO5 4.4	
35	17KK49	9.07										CO1 CO2 CO3 9.07		CO1 CO2 CO3 9.07			
36	17ES51	4	CO5 1.33	CO1 CO2 CO5 3.11	CO1 CO2 CO5 3.56	CO3 CO4 CO5 1.78		CO3 0	CO3 0	CO3 CO4 CO5 3.11	CO1 CO2 CO3 CO4 CO5 3.2	CO2 CO4 CO5 4	CO4 CO5 4	CO3 CO4 CO5 4			
37	17EC751	7.43	CO1 CO2 CO3 CO4 CO5 5.94	CO2 CO3 CO4 CO5 5.57											CO1 CO2 CO3 CO4 CO5 6.44	CO1 CO2 CO3 CO4 CO5 6.93	
38	17EC52	9.14	CO1 CO2 CO3 CO4 CO5 9.14		CO1 CO2 CO3 CO4 CO5 5.48		CO1 CO2 CO3 CO4 CO5 7.92					CO1 CO2 CO4 CO5 6.09			CO1 CO2 CO3 CO4 CO5 5.48	CO1 CO2 CO3 CO4 CO5 9.14	
39	17EC53	10	CO1 CO2 CO4 CO5 10	CO2 CO3 CO4 CO5 8.33			CO1 CO3 CO4 CO5 10								CO1 CO2 CO3 CO4 CO5 10	CO3 CO4 CO5 6.67	
40	17EC654	10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10											CO4 6.67	CO1 CO2 CO3 CO4 CO5 10	

Sl. No.	Course Code	CO Attainment 10 Scale											PSO1	PSO2		
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10			PO11	PO12
41	17EC54	9.74	C01 C02 C03 C04 C05 9.74	C01 C02 C03 C04 C05 8.44											C04 C05 3.25	C01 C02 C03 C04 C05 7.14
42	17EC555	3.57	C01 C02 C03 C04 C05 3.57	C01 C02 C03 C04 C05 3.57			C02 2.38								C01 C02 C03 C04 C05 3.57	C03 3.57
43	17ECL57	7.54	C01 C02 C03 C04 C05 7.54		C01 C02 C03 C04 C05 4.52		C01 C02 C03 C04 C05 7.54					C01 C02 C03 C04 C05 6.03			C01 C02 C03 C04 C05 7.54	C01 C02 C03 C04 C05 7.54
44	17ECL58	9.31	C01 C02 C03 C04 C05 9.31	C01 C02 C03 C05 9.31			C01 C02 C03 C05 9.31				C01 C02 9.31	C03 C05 9.31			C01 C02 C03 C04 C05 8.07	C01 C02 C03 C05 6.21
45	17EC61	10	C01 C02 C03 C04 C05 10	C01 C02 C03 C04 C05 8	C01 C03 8.33	C02 C04 C05 8.89									C01 C02 C03 C04 C05 9.33	C01 C02 C03 C04 C05 10
46	17EC562	2.67	C01 C02 C03 C04 C05 2.67	C01 C02 C03 C04 C05 2.67			C01 C02 C03 C04 C05 1.78								C01 C02 C03 C04 C05 1.78	
47	17EC62	10	C01 C02 C03 C04 C05 10	C01 C02 C03 C04 C05 10			C02 C05 6.67								C01 C02 C03 C04 C05 10	
48	17EC63	9.66	C01 C02 C03 C04 C05 9.66	C01 C02 C03 C04 C05 9.66			C05 6.44							C05 6.44	C01 C02 C03 C04 C05 9.66	
49	17CS664	10		C01 C02 C03 C04 C05 10	C03 C04 C05 8.89		C01 C02 C03 C04 C05 8.67								C01 C02 C03 C04 C05 3.33	

Sl. No.	Course Code	CO Attainment 10 Scale	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
50	17EC64	10	C01 C02 C03 C04 C05 10	C01 C02 C03 C04 C05 10			C01 C02 C03 C05 10	C03 3.33							C02 C03 C04 4.44	C01 C02 C03 C04 C05 10
51	17ECL67	9.14	C01 C02 C03 C04 C05 9.14	C01 C02 C03 C05 9.14			C01 C02 C03 C05 9.14				C01 C02 9.14	C03 C05 9.14			C01 C02 C03 C04 C05 7.92	C01 C02 C03 C04 C05 7.92
52	17ECL68	4.11	C01 C02 C03 C04 C05 4.11	C01 C02 C03 C05 4.11			C01 C02 C03 C05 4.11				C01 C02 4.11	C03 C05 4.11			C01 C02 C03 C04 C05 3.56	C01 C02 C03 C04 C05 3.56
53	17EC71	10	C01 C02 C03 C04 7.5	C01 C02 C03 C04 3.33			C05 3.33									C01 C02 C03 C04 C05 10
54	17EC72	4.43	C01 C02 C03 C04 C05 4.13	C01 C02 C03 C04 C05 2.66	C01 C02 C03 C05 2.66		C01 C02 C03 C04 C05 4.43				C01 C02 C03 C04 C05 2.95	C01 C02 C03 C04 C05 4.43		C01 C02 C03 C04 C05 4.43	C01 C02 C03 C04 C05 4.43	
55	17EC73	9.57	C01 C02 9.57	C01 C02 9.57	C03 C04 C05 9.57	C03 C04 C05 6.38	C02 C03 C04 C05 6.38								C01 C02 C03 C04 C05 5.74	
56	17ECL76	10	C01 C02 C03 C04 C05 9.33	C01 C02 C03 C04 C05 8	C01 C02 C03 C04 C05 8.67	C01 C02 C03 C04 C05 7.33	C01 C02 10								C01 C02 C03 C04 C05 10	C01 C02 C03 C04 C05 10
57	17ECL77	10	C01 C02 C03 C04 C05 10	C01 C02 C03 C05 10			C01 C02 C03 C05 10				C01 C02 10	C03 C05 10			C01 C02 C03 C04 C05 8.67	
58	17ECP78	9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	C01 C02 C03 C04 C05 9.07	



Sl. No.	Course Code	CO Attainment 10 Scale	PO												PSO		
			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	
59	17EC81	10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10												CO1 CO2 CO4 6.67	CO1 CO2 CO3 CO4 CO5 10
60	17EC82	10	CO1 CO2 CO3 CO4 CO5 8.67	CO2 CO3 CO4 CO5 10												CO1 CO2 CO3 CO4 CO5 8.67	CO1 CO2 CO3 CO4 CO5 9.33
61	17EC84	10					CO3 6.67	CO1 10	CO2 10	CO2 CO5 10	CO3 CO4 CO5 10	CO3 10	CO3 CO4 10	CO1 CO2 10	CO1 CO2 8.33	CO1 CO2 8.33	
62	17ECP85	10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10	CO1 CO2 CO3 CO4 CO5 10		
63	17ECS86	10	CO2 10				CO2 CO4 10	CO1 CO3 CO5 7.78	CO1 CO3 CO5 7.78	CO1 CO3 CO5 7.78	CO1 CO2 CO3 10	CO2 CO3 CO4 10		CO2 CO3 CO4 CO5 9.17	CO3 CO4 CO5 3.33	CO3 CO4 CO5 3.33	





# CANARA ENGINEERING COLLEGE

Benjanapadavu, Bantwal Taluk  
Mangalore – 574219



Electronics and Communication Engineering Department

## CO-PO FEEDBACK ANALYSIS AND ACTION TAKEN REPORT

ACADEMIC YEAR 2020-2021

POs	Target Level	Attainment Level	Observations	Action Taken
<b>PO1: Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.				
PO1	7.24	7.53	<ul style="list-style-type: none"><li>• Attained 4% higher than the target level</li><li>• Higher attainment level is because of good performance of students in SEE and CIE</li><li>• High contributing courses for attainment 17EC32, 17EC35, 17EC36, 17ECL37, 17ECL38, 17MAT41, 17EC42, 17EC44, 17EC45, 17EC46, 17ECL47, 17EC52, 17EC53, 17EC654, 17EC54, 17ECL57, 17ECL58, 17EC61, 17EC62, 17EC63, 17EC64, 17ECL67, 17EC71, 17EC73, 17ECL76, 17ECL77, 17ECP78, 17EC81, 17EC82, 17EC84, 17ECP85 and 17ECS86</li><li>• Student feedback is low</li><li>• Attainment level is good</li></ul>	<p><b>Action 1:</b> Target level for AY 2018-19 will be increased</p> <p><b>Action 2:</b> Continuous efforts are made to achieve the new set target level</p>

<b>PO2: Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.				
<b>PO2</b>	<b>6.4</b>	<b>7.06</b>	<ul style="list-style-type: none"> <li>• Attained 10.31% higher than the target level</li> <li>• Higher attainment level is because of good performance of students in SEE and CIE</li> <li>• High contributing courses for attainment 17EC32, 17EC35, 17EC36, 17ECL37, 17ECL38, 17MAT41, 17EC42, 17EC44, 17EC45, 17EC46, 17ECL47, 17EC53, 17EC654, 17EC54, 17ECL57, 17ECL58, 17EC61, 17EC62, 17EC63, 17CS664, 17EC64, 17ECL67, 17EC71, 17EC73, 17ECL76, 17ECL77, 17ECP78, 17EC81, 17EC82, 17EC84, 17ECP85 and 17ECS86</li> <li>• Student feedback is low</li> <li>• Attainment level is good</li> </ul>	<p><b>Action 1:</b> Target level for AY 2018-19 will be increased</p> <p><b>Action 2:</b> Continuous efforts are made to achieve the new set target level</p>
<b>PO3: Design/development of solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.				
<b>PO3</b>	<b>6.79</b>	<b>6.59</b>	<ul style="list-style-type: none"> <li>• Shortfall of 2.94% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17EC34, 17ES51, 17EC52, 17ECL57 and 17EC72</li> <li>• Student feedback is low</li> <li>• Attainment level is satisfactory</li> </ul>	<p><b>Action 1:</b> Design-based problems by using more analogies with reference to the Laboratory course 17ECL38 were initiated to strengthen the CO in 17EC34 and to improve CO attainment of 17EC34, more MOORE and MEALY Design problems were explained in class</p> <p><b>Action 2:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization is to be explained in much better detail and made to be</p>

				<p>appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p> <p><b>Action 3:</b> More problems of different types on various topics were solved to strengthen the CO in 17EC52</p> <p>To make students to have hold on the subjects and topics, initially, very easy problems were solved and gradually problems were made more tougher and tougher</p> <p>Tried to convince topics by visually explaining how various signals using MATLAB</p> <p>More and more problems were taken on filter design</p> <p><b>Action 4:</b> Tutorial classes were conducted to strengthen the CO in 17EC52, and additional experiments were conducted to improve the attainment of CO in 17ECL57</p> <p>Every code is explained line by line</p> <p>Theoretical concept is explained before taking up every experiment</p>
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				<p><b>Action 5:</b> To attain more higher outcome in 17EC72, students will be given with more practical examples</p> <p>To attain more higher outcome students will be given more assignments to practice derivation and problems</p>
<p><b>PO4: Conduct investigations of complex problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.</p>				
PO4	7.3	6.91	<ul style="list-style-type: none"> <li>• Shortfall of 5.34% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17EC44, 17ECL48 and 17ES51</li> <li>• Student feedback is low</li> <li>• Attainment level is satisfactory</li> </ul>	<p><b>Action 1:</b> Design-based problems by using more analogies with reference to the Laboratory course 17ECL48 were initiated to strengthen the CO in 17EC44</p> <p><b>Action 2:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p>

<b>PO5: Modern tool usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.				
<b>PO5</b>	<b>6.57</b>	<b>7.02</b>	<ul style="list-style-type: none"> <li>• Attained 6.84% higher than the target level</li> <li>• Higher attainment level is because of good performance of students in SEE and CIE</li> <li>• High contributing courses for attainment 17EC32, 17EC35, 17ECL37, 17EC42, 17EC45, 17EC46, 17ECL47, 17EC52, 17EC53, 17ECL57, 17ECL58, 17EC62, 17EC63, 17CS664, 17EC64, 17ECL67, 17EC71, 17EC73, 17ECL76, 17ECL77, 17ECP78, 17EC84, 17ECP85 and 17ECS86</li> <li>• Attainment level is good</li> </ul>	<p><b>Action 1:</b> Target level for AY 2018-19 will be increased</p> <p><b>Action 2:</b> Continuous efforts are made to achieve the new set target level</p>
<b>PO6: The engineer and society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.				
<b>PO6</b>	<b>9.17</b>	<b>6.58</b>	<ul style="list-style-type: none"> <li>• Shortfall of 28.24% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17CPH39, 17ES51 and 17ECP78</li> <li>• Attainment level is satisfactory</li> </ul>	<p><b>Action 1:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p>

<b>PO7: Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.				
<b>PO7</b>	<b>9.36</b>	<b>8.04</b>	<ul style="list-style-type: none"> <li>• Shortfall of 14.10% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17ES51, 17ECP78 and 17ECS86</li> <li>• Attainment level is very good</li> </ul>	<p><b>Action 1:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p>
<b>PO8: Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.				
<b>PO8</b>	<b>8.84</b>	<b>6.62</b>	<ul style="list-style-type: none"> <li>• Shortfall of 25.11% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17CPH39, 17ES51 and 17ECS86</li> <li>• Attainment level is satisfactory</li> </ul>	<p><b>Action 1:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p>

				<p>To attain outcome project management and project design are to be explained in detail</p> <p><b>Action 2:</b> Conduction of sessional in Theory/Labs in conformance to strict and uniform practices taking care to note deviations from ethical practices under the review of the disciplinary committee</p> <p><b>Action 3:</b> Students need to be made aware of Lapses/misbehavior/unethical practices by an interaction after which they acknowledge it openly and apologize for it</p> <p><b>Action 4:</b> Students are encouraged to take a serious note of giving due credence to original contributors in their thesis in Projects/seminar</p> <p><b>Action 5:</b> College calendar makes note of ethical practices for a student which is further crystallized in the college prayer</p>
<b>PO9: Individual and teamwork:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.				
PO9	7.55	7.07	<ul style="list-style-type: none"> <li>• Shortfall of 6.35% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17EC34, 17ECL48, 17ES51, 17ECL68 and 17EC72</li> <li>• Attainment level is good</li> </ul>	<p><b>Action 1:</b> Design-based problems by using more analogies with reference to the Laboratory course 17ECL38 were initiated to strengthen the CO in 17EC34</p> <p><b>Action 2:</b> To improve attainment, Mini projects</p>



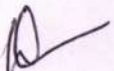
				<p>and major projects are to be conducted</p> <p><b>Action 3:</b> Design-based problems by using more analogies with reference to the Laboratory course 17ECL48 were initiated to strengthen the CO in 17EC44</p> <p><b>Action 4:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are is to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p> <p><b>Action 5:</b> To attain more higher outcome in 17EC72, students will be given with more practical examples</p> <p>To attain more higher outcome students will be given more assignments to practice derivation and problems</p>
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<b>PO10: Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.			
<b>PO10</b>	<b>7.17</b>	<b>6.7</b>	<ul style="list-style-type: none"> <li>• Shortfall of 6.55% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17ECL38, 17ES51, 17EC52, 17ECL57, 17ECL68 and 17EC72</li> <li>• Attainment level is satisfactory</li> </ul> <p><b>Action 1:</b> Design-based problems by using more analogies with reference to the Laboratory course 17ECL38 were initiated to strengthen the CO in 17EC34</p> <p><b>Action 2:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project design are to be explained in detail</p> <p><b>Action 3:</b> Tutorial classes were conducted to strengthen the CO in 17EC52, and additional experiments were conducted to improve the attainment of CO in 17ECL57</p> <p>Every code is explained line by line</p> <p>Theoretical concept is explained before taking up every experiment</p>

				<p><b>Action 4:</b> To improve attainment of 17ECL68, concepts related to Switches, Routers are to be explained with lectures/YouTube videos</p> <p><b>Action 5:</b> To attain more higher outcome in 17EC72, students will be given with more practical examples</p> <p>To attain more higher outcome students will be given more assignments to practice derivation and problems</p> <p><b>Action 6:</b> To strengthen CO, advised to concentrate more on Report writing for the activities – Project work, Seminars and Industrial Training</p>
<p><b>PO11: <i>Project management and finance:</i></b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.</p>				
PO11	8.94	8.32	<ul style="list-style-type: none"> <li>• Shortfall of 6.93% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the course 17ES51</li> <li>• Attainment level is very good</li> </ul>	<p><b>Action 1:</b> To attain outcome of course 17ES51 in topics on management and planning, organizing, staffing and directing activities in an organization are to be explained in much better detail and made to be appreciated well</p> <p>To attain outcome topics on ethics in business and family business and entrepreneurship and ideation setting up SSI and institutes to seek technical/ financial support are to be explained in more detail</p> <p>To attain outcome project management and project</p>

				design are to be explained in detail <b>Action 2:</b> To strengthen CO, advised to concentrate more on Managing the Project works, Mini Projects and Activities conducted under Professional society
<b>PO12: Life-long learning:</b> Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.				
<b>PO12</b>	<b>6.04</b>	<b>6.12</b>	<ul style="list-style-type: none"> <li>• Attained 1.32% higher than the target level</li> <li>• Higher attainment level is because of good performance of students in SEE and CIE</li> <li>• High contributing courses for attainment 17EC35, 17EC42, 17EC45, 17EC46, 17ECP78, 17EC84, 17ECP85 and 17ECS86</li> <li>• Attainment level is satisfactory</li> </ul>	<b>Action 1:</b> To strengthen CO, advised to concentrate more on Project work, Mini Projects and Seminars  <b>Action 2:</b> Target level for AY 2018-19 will be increased  <b>Action 3:</b> Continuous efforts are made to achieve the new set target level
<b>PSO1:</b> Capability to assess and solve mechanical and interdisciplinary engineering problems to meet needs of the society				
<b>PSO1</b>	<b>6.81</b>	<b>6.2</b>	<ul style="list-style-type: none"> <li>• Shortfall of 8.95% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17MAT31, 17EC32, 17EC33, 17EC34, 17EC36, 17EC42, 17EC43, 17EC744, 17ECL48, 17EC751, 17EC52, 17EC654, 17EC54, 17EC555, 17EC562, 17CS664, 17EC64, 17ECL68, 17EC72, 17EC73, 17EC81 and 17ECS86</li> <li>• Attainment level is satisfactory</li> </ul>	<b>Action 1:</b> To improve attainment, conduction of more Technical activities and to Emphasize on Mini Projects and Projects were initiated
<b>PSO2:</b> Possesses adequate interpersonal skills to solve managerial and technical issues.				

PSO2	6.81	6.2	<ul style="list-style-type: none"> <li>• Shortfall of 8.95% in the attainment level</li> <li>• Lower attainment is due to below average performance in VTU exam in the courses 17EC32, 17EC33, 17EC35, 17EC835, 17EC36, 17ECL38, 17EC42, 17EC43, 17EC744, 17ECL47, 17ECL48, 17EC751, 17EC654, 17EC53, 17EC555, 17ECL58, 17EC562, 17CS664, 17EC64, 17ECL68, 17EC72 and 17ECS86</li> <li>• Attainment level is satisfactory</li> </ul>	<p><b>Action 1:</b> To improve attainment, conduction of more Technical activities and to Emphasize on Mini Projects and Projects were initiated</p>
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Signature of HOD

  
Signature of Principal