

Bonam Venkata Chalamayya Institute of Technology & Science
 (Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada, Accredited by NAAC with 'A' Grade)
 Batlapalem, Amalapuram, Indupalli Post, E. G. Dist, A.P, India - 533 201
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Department of Electrical & Electronics Engineering

P17. Record of list of assessment tools used for PO and PSO & attainment values. Observation and actions taken based on the results of each Pos/ PSO in the last 3 years

PO ATTAINMENT POINTS

Table 1. PO Attainment Points (2019-2023 Batch)

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C111					1.90	2.15	2.10		2.15	2.11		2.11		
C112	2.56	2.60	2.60											
C113	2.24	2.25												
C114	2.60	2.62	2.63									2.73		
C115	2.31	2.31	2.30		2.31			2.30	2.31	2.31		2.31	2.31	2.30
C116									3.00	3.00		3.00		
C117	3.00	3.00			3.00									
C118	3.00	3.00	3.00									3.00		
C119	2.1	2.1	2.0			2.2	2.1	2.2						2.2
C121	2.04	2.02	2.00											
C122	1.93	1.93	1.93											
C123	1.74	1.75											1.75	
C124	2.46	2.44	2.45		2.60								2.46	2.43
C125	2.06	2.02	2.07										2.07	
C126	2.0	2.0	2.1											
C127	3.00	3.00			3.00								3.00	
C128									3.00	3.00		3.00		
C129	2.9	3.0	2.9	3.0	3.0			2.0		2.9	2.9		3.0	2.9
C211	2.00	1.97	2.00		2.13								2.00	1.97
C212	1.97	1.96												
C213	2.15		2.18		2.14									
C214	2.07	2.08												

C215	2.68	2.66	2.67											2.68	2.68
C216	2.75	2.80	2.80								2.78				
C217	3.00	3.00	3.00											3.00	3.00
C218	2.91	2.94							2.92	2.92					
C219	2.1	2.1	2.0			2.2	2.1	2.2							2.2
C221	2.60	2.60	2.60		2.60										
C222	1.97	1.97	1.97												
C223	2.11	2.07	2.09		2.27									2.12	2.08
C224	2.60	2.60			2.60									2.60	2.60
C225	2.63	2.63	2.64											2.64	
C226	2.63	2.63	2.72	2.60											
C227	3.00	3.00								3.00					
C228	2.73	2.73	2.68		2.70									2.70	
C229						2.2	2.1	2.3			2.4				
C311	2.14	2.14	2.13		2.15										2.15
C312	2.36	2.38	2.37		2.36										
C313	2.51	2.53	2.57		2.60								2.48	2.55	
C314	1.71	1.75	1.87											1.7	
C315	2.42	2.53	2.37	2.42	2.53		2.33							2.40	
C316	3.00	3.00			3.00					3.00					
C317	3.00	3.00	3.00		3.00									3.00	3.00
C318	2.76	2.79	2.85		2.78					2.79	2.84			2.79	
C319	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0		2.0
C321	1.87	1.88	1.82		1.84										
C322	2.26	2.29	2.28		2.15										2.15
C323	2.33	2.30	2.35	2.30										2.40	2.40
C324	2.35	2.34		2.35	2.33									2.37	2.37
C3254	2.80	2.80	2.80			2.80									2.80
C326	2.37	2.43	2.40	2.33	2.30									2.40	2.30
C327	2.93	2.94	2.93		2.60									2.92	3.00
C328	3.00	3.00	3.00		3.00					3.00	3.00			3.00	
C329								2.2	2.2	2.2	2.2				

C411	2.2	2.2			2.2									2.3
C412	2.25	2.24	2.25											
C413	2.65	2.69	2.53	2.73		2.73							2.77	2.77
C4141	2.36	2.32	2.33		2.35									
C4154	2.73		2.73		2.73									
C4162	2.80	2.80	2.80		2.80								2.80	2.80
C417	2.80	2.80							2.80				2.80	2.80
C418	2	2		2	2	2	2	2	2	2	2			2
C419	2.7	2.7	2.7	2.7	2.7				2.7	2.7	2.7			2.7
C421	2.36	2.36	2.37		2.36									
C422	2.39	2.40	2.38										2.39	
C423	2.36	2.38	2.37		2.36									
C424	2.5	2.4	2.6	2.5	2.8				2.7	2.7	2.8			2.7
No of Courses Contributing to each PO-PSO Count	62	60	48	11	35	8	7	8	15	14	7	8	27	26
% of Courses Contributing to each PO-PSO	92.54	89.55	71.64	16.42	52.24	11.94	10.45	11.94	22.39	20.90	10.45	11.94	40.30	38.81
Sum	151.94	147.25	117.09	26.88	87.20	18.27	14.71	17.19	39.49	36.10	17.36	20.63	68.60	64.56
Direct Attainment through Courses	2.45	2.45	2.44	2.44	2.49	2.00	1.78	2.15	2.63	2.58	2.48	2.58	2.54	2.48

POs ATTAINMENT LEVELS
TABLE 2. POs Attainment Levels 2019-23 Batch

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS01	PS02
Direct Attainment	2.45	2.45	2.44	2.44	2.49	2.00	1.78	2.15	2.63	2.58	2.48	2.58	2.54	2.48
Indirect Attainment	2.35	2.46	1.95	2.14	1.9	2.38	2.38	2.38	2.2	1.95	2	1.99	2.26	1.98

Over all Attainment	2.44	2.46	2.34	2.42	2.39	2.28	2.14	2.38	2.57	2.56	2.34	2.44	2.43	2.41
Target	2.01	1.84	1.73	1.98	1.63	2.06	1.90	2.16	1.86	1.98	1.88	1.55	1.61	1.58

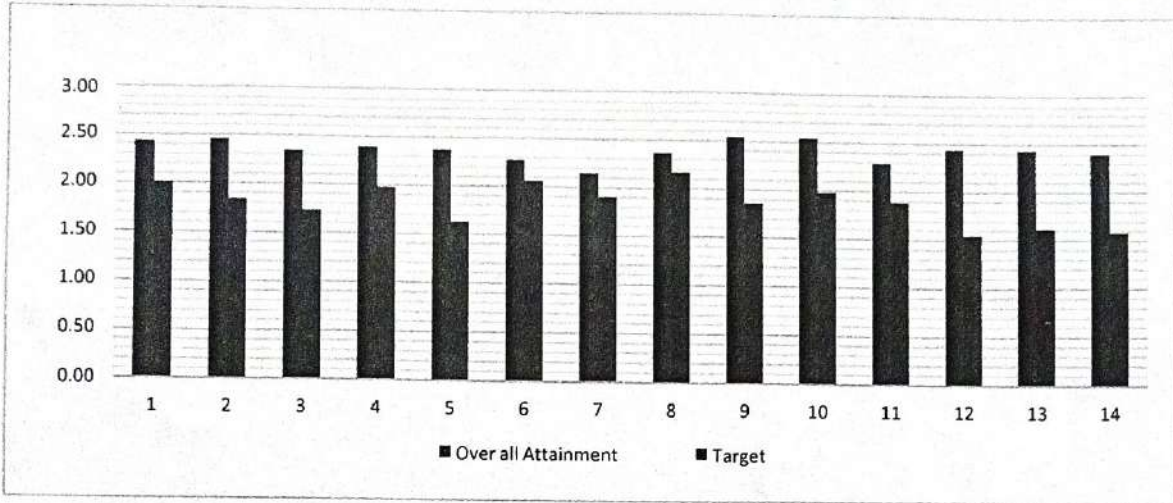


Fig. 1 Bar Chart representing PO-PSO ATTAINMENT OF 2019-23 BATCH

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 ELECTRICAL & ELECTRONICS ENGG.,
 B.V.C. INSTT. OF TECH. & SCIENCE
 AMALAPURAM-533 221, E.G.DT., A.P.

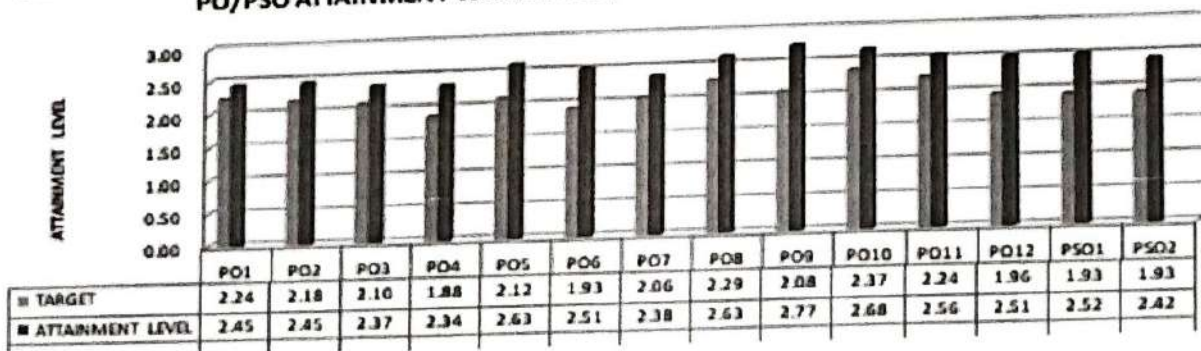


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55	Intellectual Property Rights (IPR) & Patents	C329	-	-	2.80	-	-	2.80	-	-	-	-	-	-	-	-
56	Microwave and Optical Communication Engineering	C411	2.54	2.54	2.47	2.67	2.40	2.40	2.67	-	-	-	-	-	2.56	-
57	Data Communications & Computer networks	C412	2.78	2.80	-	2.80	-	-	-	-	-	-	-	-	2.79	-
58	Digital Image and Video Processing	C413	2.32	2.09	2.22	2.21	1.86	-	-	-	-	-	1.86	-	2.32	-
59	Communication Standards and Protocols	C414	1.75	1.71	1.79	-	-	-	1.75	-	-	-	-	-	2.64	-
60	Embedded Systems	C415	2.65	2.60	2.57	-	-	-	-	-	-	-	2.80	-	2.80	-
61	Internet of Things Lab	C423	2.80	2.80	2.80	2.80	2.80	2.80	-	-	-	-	-	-	3.00	-
62	Microwave and Optical Communication Engineering LAB	C417	3.00	3.00	-	-	3.00	-	-	-	-	-	-	-	3.00	-
63	Project - Part I	C418	3.00	3.00	3.00	-	3.00	-	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
64	Wireless Communication	C421	2.73	2.73	2.73	-	-	-	-	-	-	-	-	-	2.73	-
65	Cyber Security & Cryptography	C422	2.51	2.50	2.53	-	-	-	-	-	-	-	-	-	2.50	-
66	Project - Part II	C423	3.00	3.00	3.00	3.00	3.00	3.00	3.00	-	3.00	3.00	3.00	3.00	3.00	3.00
No of Courses Contributing to each PO- PSO			59	54	47	22	29	11	9	7	11	12	9	13	48	13
% of Courses Contributing to each PO- PSO			88%	81%	70%	33%	43%	16%	13%	10%	16%	18%	13%	19%	72%	19%
PO ATTAINMENT LEVEL:			2.48	2.45	2.50	2.55	2.66	2.77	2.67	2.78	2.88	2.75	2.69	2.66	2.53	2.66

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
TARGET	2.24	2.18	2.10	1.88	2.12	1.93	2.06	2.29	2.08	2.37	2.24	1.96	1.93	1.93
ATTAINMENT LEVEL	2.45	2.45	2.37	2.34	2.63	2.51	2.38	2.63	2.77	2.68	2.56	2.51	2.52	2.42

PO/PSO ATTAINMENT WITHOUT CO/EXTRA CURRICULAR ACTIVITIES



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PO Attainment Points (2019-2023 Batch)

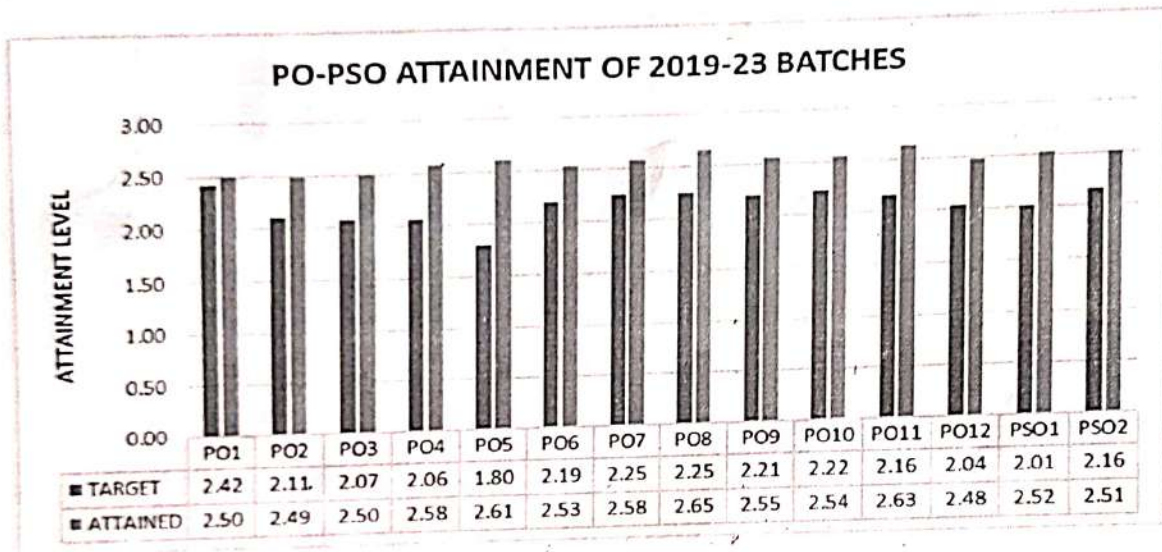
COURSE-PO ATTAINMENT																
BATCH: 2019-23																
S. No	COURSE NAME	COURSE CODE	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
1	English	C111					2.3		2.2	2.5	2.2	2.3	2.2	2.3	2.2	
2	Mathematics - I	C112	2.01	2.018889	1.93											
3	Applied Chemistry	C113	2.023333	2.068571	2.035		2.07								2.028	2.0175
4	Fundamentals of Computer Science	C114	2.06	2.04	2.05		2.2								2.06	2.03
5	Engineering Drawing	C115	2.438333	2.4475	2.4225		2.48								2.436	2.425
6	English Lab	C116									2.6	2.6		2.6		2.6
7	Applied Chemistry Lab	C117	2.692308	2.7			2.6									
8	IT Workshop	C118	2.9		2.88		2.933333									
9	Environmental Science	C119	2.23	2.255	2.38			2.23	2.224545		2.23	2.205714				2.234
10	Mathematics - II	C121	2.085556	2.018889	2.13											
11	Mathematics - III	C122	2.013333	2.01	1.93											
12	Applied Physics	C123	1.93	1.93											1.93	
13	Programming for Problem Solving using C	C124	2.378333	2.364545	2.31										2.374	
14	Digital Logic Design	C125	2.678333	2.731429	2.708333		2.67								2.69	2.695
15	Applied Physics Lab	C126	2.64	2.64			2.64								2.64	
16	Communication Skills Lab	C127				2.6	2.65									
17	Programming for Problem Solving using C Lab	C128	3	3	3										3	
18	Engineering	C129	3	3	3		3	3	3		3	3	3			

	Management Systems Lab		333 3	6	307 7		5								285 7	
38	Professional Ethics & Human Values	C229						2.23 4			2.22 25	2.23 285 7		2.22 625	2.24 285 7	
39	Socially Relevant Project*	C221 0	3	3	3	3	3	3	3	3	3	3	3	3	3	
40	Data Warehousing and Data Mining	C311	2.75 333 3	2.81 166 7	2.8	2.79 222 2	2.74 4	2.73				2.75		2.75 333 3	2.73	
41	Computer Networks	C312	2.62 5	2.63 857 1	2.64 5		2.4							2.6	2.65	
42	Compiler Design	C313	2.6	2.6	2.56 5	2.6	2.56 5									
43	Artificial Intelligence	C314	2.61 333 3	2.58 714 3	2.59 666 7		2.53							2.61	2.63	
44	Software Testing Methodologies	C315	2.41 384 6	2.40 636 4	2.39 75	2.41	2.38	2.38						2.39	2.52	
45	Computer Networks Lab	C316	2.93 428 6	2.94 25	2.95 714 3	2.88 2	2.92 333 3			2.96 666 7			2.87	3	2.94 25	
46	AI Tools & Techniques Lab	C317	3	3	3	3	3							3	3	
47	Data Mining Lab	C318	3	3	3	3	3	3				3		3	3	
48	Employability Skills-II*	C319			2.17			2.29 222 2	2.25		2.22 25	2.27 3	2.23			
49	Web Technologies	C321	2.6	2.33 5	2.44		2.43 727 3	2.5		2.43 153 8			2.45 125	2.36	2.44 857 1	2.5
50	Distributed Systems	C322	2.44	2.43 25	2.4	2.4									2.45 2	2.4
51	Design and Analysis of Algorithms	C323	2.67 8	2.67 25	2.73	2.7									2.67	2.68
52	(NPTEL/SW AYAM)/IRS	C324	2.47 625	2.54 545 5	2.55 8	2.43 5	2.6	2.53	2.6	2.48 714 3	2.44	2.42 333 3		2.38 8	2.47 571 4	2.53 375
53	Open Elective- I (Inter Disciplinary): Essentials of Analog & Digital Electronics	C325	2.90 25	2.89 166 7	2.87										2.89 6	
54	Managerial Economics and Financial Accountancy	C326	2.63	2.73	2.73								2.71 285 7			
55	Web Technology	C327	2.97 272		3	2.97 272	2.97				2.98 181		2.95 714		2.96	2.98

	es Lab		7			7					8		3			
56	Industrial Training / Skill Development Programs / Research Project in higher learning institutes	C328	3	3		3									3	
57	Cryptography and Network Security	C411	2.846667	2.788333	2.8	2.807778	2.856	2.87				2.85		2.846667	2.87	
58	UML & Design Patterns	C412	2.9	2.85	2.9		2.9							2.890909		
59	Machine Learning	C413	2.903846	2.892727	2.898182	2.89	2.903846			2.89			2.908	2.89	2.89	
60	Open Elective -II (Inter Disciplinary): Embedded Systems	C414	2.746	2.8		2.676667									2.746	
61	Software Project Management	C415	2.371429	2.354286	2.354286	2.34	2.346667	2.373333			2.36	2.32	2.36	2.364444	2.4	2.4
62	Cloud Computing	C416	2.169231	2	2.05	2.12							2.072727	2.090909	2.05	2.169231
63	UML Lab	C417	2.933333	2.914286	2.933333		2.8								2.92	2.95
64	Project-I	C418		3	3	3	3	3	3	3	3	3	3	3	3	3
65	IPR & Patents	C419	2.277	2.235	2.17		2.21	2.24		2.241667				2.21		
66	Management and Organizational Behavior	C421									2.73	2.786	2.831818			
67	Open Elective- III (Inter Disciplinary): Environmental Pollution & Control	C422			2.73	2.73	2.73		2.73	2.73				2.73	2.73	2.73
68	DevOps	C423	2.8	2.65	2.628571		2.6									2.663636
69	Project- II	C424		3	3	3	3	3	3	3	3	3	3	3	3	3
No of Courses Contributing			57	57	57	31	39	19	12	11	14	13	17	18	49	37

to each PO-PSO														
% of Courses Contributing to each PO-PSO	90%	88%	73%	31%	49%	12%	10%	12%	16%	18%	4%	18%	73%	21%
PO ATTAINMENT LEVEL:	2.55	2.54	2.55	2.63	2.66	2.58	2.63	2.71	2.61	2.59	2.68	2.53	2.57	2.56
DIRECT ATTAINMENT	2.04	2.03	2.04	2.10	2.13	2.07	2.10	2.16	2.08	2.07	2.15	2.02	2.06	2.05
INDIRECT ATTAINMENT	2.85	2.91	2.82	2.84	2.85	2.79	2.79	2.81	2.79	2.72	2.87	2.86	2.95	2.94
	0.57	0.58	0.56	0.57	0.57	0.56	0.56	0.56	0.56	0.54	0.57	0.57	0.59	0.59
TARGET	2.42	2.11	2.07	2.06	1.80	2.19	2.25	2.25	2.21	2.22	2.16	2.04	2.01	2.16
ATTAINED	2.61	2.61	2.61	2.67	2.70	2.62	2.66	2.73	2.64	2.62	2.72	2.60	2.64	2.63

Bar Chart Representing PO-PSO ATTAINMENT OF 2019-23 BATCHES



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Department of CSE
BVCITS, Amalapuram**

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