



# SRI BHARATHI

ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)  
Kaikkurichi, Pudukkottai -622 303

[www.sbec.edu.in](http://www.sbec.edu.in)

## NAAC DOCUMENTS



Quality Indicator Frame Work

Criterion – 2

Teaching-Learning and Evaluation

Submitted by

**IQAC**

**Internal Quality Assurance Cell**

**Sri Bharathi Engineering College for Women**



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Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

<b>Criteria 2</b>	<b>Teaching-Learning and Evaluation</b>	<b>350</b>
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## **Key Indicator- 2.6. Student Performance and Learning Outcome (90)**

2.6.2 Attainment of POs and COs are evaluated (20)

**2022-2023**

## **ATTAINMENT EVALUATION OF POs & COs**

### **ELECTRICAL AND ELECTRONICS**

### **ENGINEERING**

#### **Table of Content**

<b>S.No</b>	<b>Particulars</b>	<b>Page No</b>
1	CO-PO-PSO Attainment Report	3 - 4
2	CO-PO Attainment Sample Sheet	5 - 7
3	Action taken Report	8



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KAIKKURICHI, PUDUKKOTTAI-622-303

### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Academic year (2022 - 2023)

#### PO-PSO ATTAINMENT

PO/PSO	STATEMENT	TARGET	ATTAINED VALUE	ATTAINMENT %
PO1	Apply knowledge of mathematics, basic science and engineering science	2.79	2.23	79.86
PO2	Identify, formulate and solve engineering problems.	2.48	2.00	80.45
PO3	Design an electrical system or process to improve its performance, satisfying its constraints	2.13	1.76	82.55
PO4	Conduct experiments in electrical and electronics systems and interpret the data	1.89	1.58	84.03
PO5	Apply various tools and techniques to improve the efficiency of the system	1.72	1.48	86.26
PO6	Conduct themselves to uphold the professional and social obligations	1.80	1.60	88.92
PO7	Design the system with environment consciousness and sustainable development	1.71	1.42	83.42
PO8	Interacting industry, business and society in a professional and ethical manner	1.91	1.85	96.81
PO9	Function in a multidisciplinary team.	1.82	1.75	96.08
PO10	Proficiency in oral and written Communication	1.65	1.39	84.30
PO11	Implement cost effective and improved system	1.93	1.84	95.41
PO12	Continue professional development and learning as a life-long activity.	1.41	1.18	83.37
PSO1	Ability to understand the principles and working of electrical components, circuits, systems and control that are forming a part of power generation, transmission, distribution, utilization, conservation and energy saving. Students can assess the power management, auditing, crisis and energy saving aspects.	2.72	2.24	82.22
PSO2	Ability to apply mathematical methodologies to solve problems related with electrical engineering using appropriate engineering tools and algorithms.	1.98	1.60	80.75
PSO3	Computing and Research Ability: Ability to use knowledge in various domains to identify research gaps and hence to provide solution which leads to new ideas and innovations.	1.60	1.42	88.84

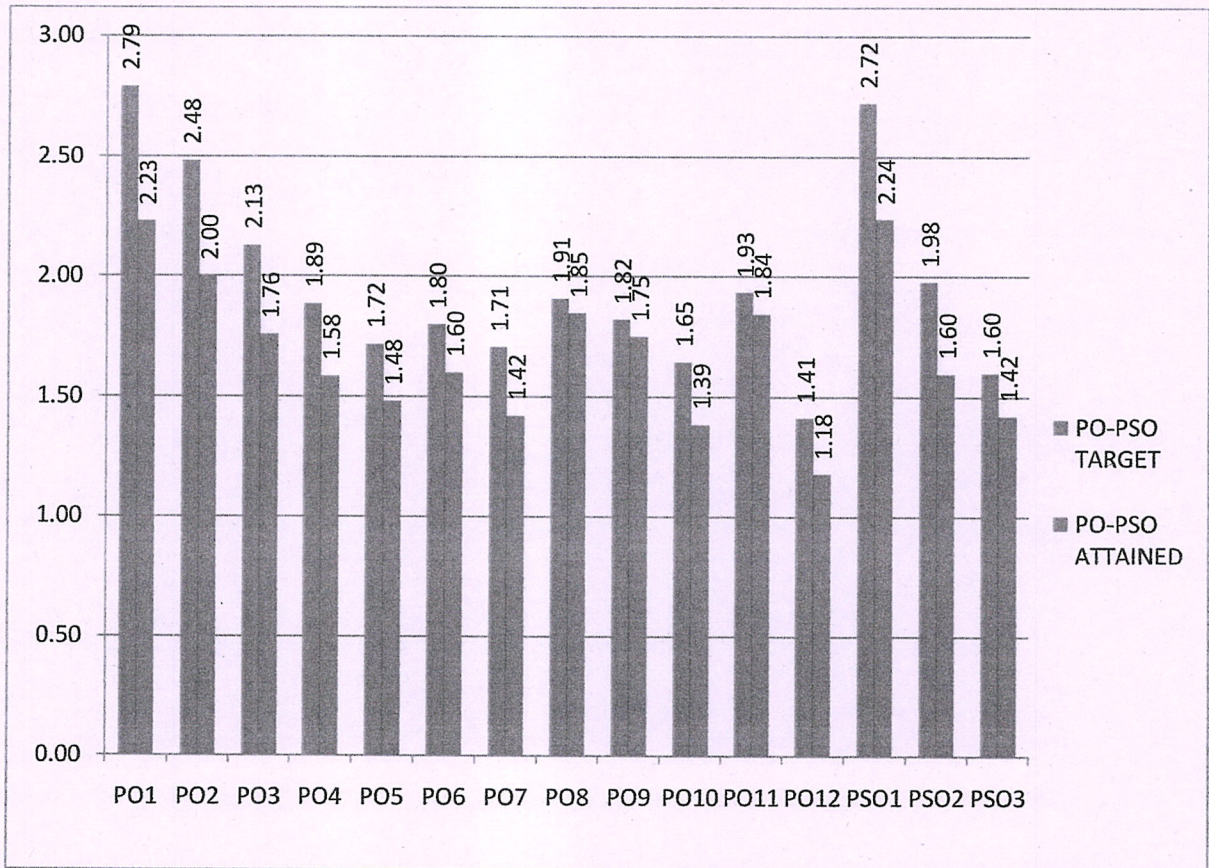
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COLLEGE FOR WOMEN

Kaikkurichi - 622 303, Pudukkottai Dt.

**EEE DEPARTMENT**  
**ACADEMIC YEAR 2022-2023**  
**CO-PO-PSO TARGET AND ATTAINMENT**



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**PUDUKKOTTAI DISTRICT**

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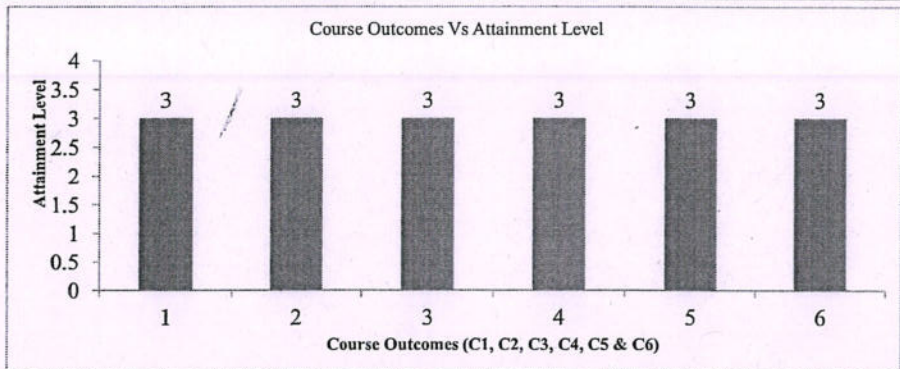
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Department of Electrical and Electronics Engineering

Internal Assessment - Attainment of Course Outcomes (Through Direct Assessment)

ACADEMIC YEAR - 2022 - 2023														BATCH				2021 - 2025																				
COURSE CODE/TITLE		EE3403/MEASUREMENTS AND INSTRUMENTATION												COURSE OUTCOME				1	2	3	4	5	6															
YEAR/SEM		II/IV												TARGET(%)				65	65	65	65	65	65															
COURSE COORDINATOR		Mrs.P. BOWNILA												TOTAL STRENGTH				2																				
ATTAINMENT LEVEL		Level		Range																																		
		1		UP TO 60% of the students scored more than target																																		
		2		61 - 79% of the students scored more than target																																		
		3		80% & ABOVE of the students scored more than target																																		
S.NO	REG NO	NAME OF THE STUDENT	IAT 1 - MARKS ALLOTTED						IAT 2 - MARKS ALLOTTED						IAT 3 - MARKS ALLOTTED						Assignment / Mini Project / Tutorial / Seminar						TOTAL COURSE OUTCOME											
			C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6	C1	C2	C3	C4	C5	C6						
			40	30	30										40	30	30										10	10			10	10	40	40	40	40	40	40
1	912621105001	GOKULAPRAVEENA A	30	22	22										28	21	21										7	8			8	8	30	29	30	28	29	29
2	912621105004	SUMITHRA S	31	23	23										37	28	28										8	8			9	8	31	31	31	37	37	36

CO's Target Value	26.0	26.0	26.0	26.0	26.0	26.0
No. of Students scored above CO's Target Value	2	2	2	2	2	2
Percentage of Students scored above Target	100.0	100.0	100.0	100.0	100.0	100.0
CO Attainment	3	3	3	3	3	3
CO attainment Values to plot the Graph	3	3	3	3	3	3



*P. Bown*  
Faculty Incharge

*[Signature]*  
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DEPARTMENT OF EEE

COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION

ACADEMIC YEAR : 2022 - 2023 (EVEN SEM)

YEAR/SEM : II/IV

Batch: 2021-2025

SUBJECT : EE3403 - MEASUREMENTS AND INSTRUMENTATION

CO Attainment Level: 1 - (UPTO 60%) 2- (61%-79%) 3-(80% and Above)

TOTAL STRENGTH : 2

S.NO	Register No	NAME	Univ. Grade
1	912621105001	GOKULAPRAVEENA A	B
2	912621105004	SUMITHRA S	B+

No. of O Grade	0	0
No. of A+ Grade	0	0
No. of A Grade	0	0
No. of B+ Grade	1	1
No. of B Grade	1	1
No. of U Grade	0	0
No. of UA Grade	0	0
Target for course outcome Attainment	60	2
No of students above the target	2	
CO-Attainment University (%)	100.00	

*P. Devi*  
Faculty Incharge

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Overall Attainment Sheet – COs - POs & PSOs attainment calculation

CO	CO-Attainment Internal (CO-INT) (Avg. Attainment of All section) (%)	CO-Attainment University (CO-UNI) (Avg. Attainment of All section) (%)	Direct CO Attainment (0.20xCO-INT + 0.80xCO-UNI) (%)	CO Attainment Level
C214.1	100.0	100.00	100.0	3
C214.2	100.0	100.00	100.0	3
C214.3	100.0	100.00	100.0	3
C214.4	100.0	100.00	100.0	3
C214.5	100.0	100.00	100.0	3
C214.6	100.0	100.00	100.0	3

Expected CO-PO Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C214.1	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1
C214.2	3	3	2	2	-	-	-	-	-	2	-	2	3	1	1
C214.3	3	3	2	2	-	2	-	-	-	2	-	2	3	1	1
C214.4	3	3	2	2	-	-	-	2	-	2	-	-	3	1	1
C214.5	3	3	2	2	-	-	-	-	-	2	-	-	3	1	1
C214.6	3	3	2	2	-	-	-	-	-	2	-	-	3	1	1
C214	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C214.1	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1
C214.2	3	3	2	2	-	-	-	-	-	2	-	2	3	1	1
C214.3	3	3	2	2	-	2	-	-	-	2	-	2	3	1	1
C214.4	3	3	2	2	-	-	-	2	-	2	-	-	3	1	1
C214.5	3	3	2	2	-	-	-	-	-	2	-	-	3	1	1
C214.6	3	3	2	2	-	-	-	-	-	2	-	-	3	1	1
C214	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1

Attainment of POs and PSOs:

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C214	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1
Attainment	3	3	2	2	-	2	-	2	-	2	-	2	3	1	1

Comments by Program Coordinator	1. 2.
Remarks by HoD	

*P. Bouri*  
Name and Signature  
of the Faculty Member

(Mrs. P. BOURNILA)

*[Signature]*  
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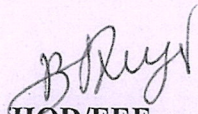
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### ACTION TAKEN REPORT FOR CO- PO-PSO ATTAINMENT

#### ACADEMIC YEAR 2022-2023

In order to bridge the gap between the attained level with respect to the target level in each POs and PSOs, the following corrective measures were taken.

S.NO	NAME OF THE ACTIVITY PROPOSED	FOCUSED POS & PSOS
1.	<b>Value Added Course (VAC)</b> -Foundational Electronics & PCB Designing	PO1,PO2,PO3,PO4,PO5,PO9,PO10,PO12, PSO1,PSO2,PSO3
2.	<b>Entrepreneurship &amp; Development Cell (EDC)</b> - Awareness about Entrepreneurship, Innovation and Importance of an E&I cell.	PO6,PO7, PO8, PO11
3.	<b>Intellectual Property Right (IPR)</b> - Role of IPR in green technologies.	PO6,PO7, PO8, PO11
4.	<b>Language and Communication Technology (LCT)</b> – Effect of Technology in Intercultural Communication.	PO9, PO10
5.	<b>Soft Skill Programme</b> - Way from Campus to Corporate.	PO10
6.	<b>Life Skill Program</b> -Entrepreneurship and Innovation	PO8
7.	<b>Information Communication Technology (ICT)</b> tools- AI in communication tools.	PO5 ,PO12
8.	<b>Research Methodology (RM)</b> - Industrial Engineering.	PO1,PO2,PO3,PO4, PSO1,PSO2,PSO3

  
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