

# SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

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

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# **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



SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

### Criteria 2Teaching-Learning and Evaluation350

**Key Indicator-2.6. Student Performance and Learning Outcome (90)** 

2.6.2 Attainment of POs and COs are evaluated (20)

## 2020-2021

## ATTAINMENT EVALUATION OF POS & COS ELECTRONICS AND COMMUNICATION ENGINEERING

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#### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

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

#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year (2020 - 2021) <u>PO-PSO ATTAINMENT</u>

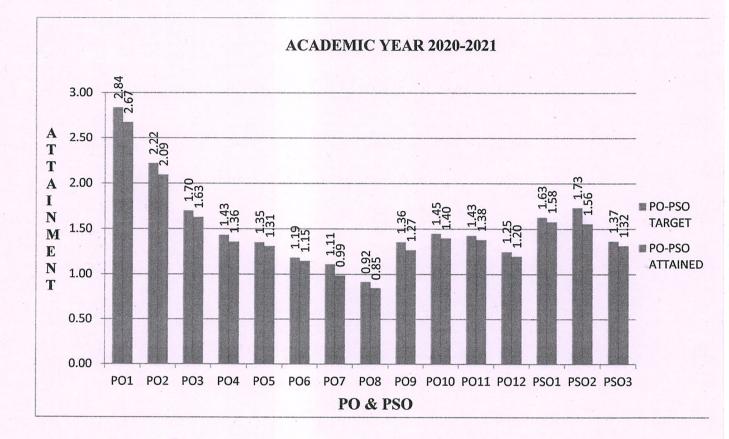
PO/PSO	STATEMENT	TARGET	ATTAINED VALUE	ATTAINMENT %
PO1	Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.	2.84	2.67	94.30
PO2	Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences	2.22	2.09	94.34
PO3	Design/development of solutions: 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.	1.70	1.63	95.73
PO4	Conduct investigations of complex problems: 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.	1.43	1.36	94.74
PO5	Modern tool usage: 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.	1.35	1.31	96.86
PO6	The engineer and society: 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.	1.19	1.15	96.88

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PO7	Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.	1.11	0.99	88.91
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	0.92	0.85	92.33
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	1.36	1.27	93.45
PO10	Communication: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.	1.45	1.40	96.62
PO11	Project management and finance: 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.	1.43	1.38	96.70
PO12	Life-long learning: 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.	1.25	1.20	96.00
PSO1	Design, develop and analyze electronic systems through application of relevant electronics, mathematics and engineering principles	1.63	1.58	96.96
PSO2	Design, develop and analyze communication systems through application of fundamentals from communication principles, signal processing, and RF System Design & Electromagnetics.	1.73	1.56	89.76
PSO3	Adapt to emerging electronics and communication technologies and develop innovative solutions for existing and newer problems	1.37	1.32	96.36

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### ECE DEPARTMENT ACADEMIC YEAR 2020-2021 CO-PO-PSO ATTAINMENT



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PRINCIPAL PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI - 622 303. PUDUKKOTTAI DISTRICT

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#### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai)

Kaikkuruchi, Pudukkottai- 622303.

Department of Electronics and communication Engineering

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

				ACAD	EMIC	Interr YEAR -				t-Att	ainm	ent of	Cou	rse O	utcom	ies (T	hroug	h Dir	ect A	ssess	ment)		BA	тсн					2017 - 2	021			
COU	RSE CODE/TITLE	EC8094-Satellite Communication	on												~							со	URSE	OUTC	OME	-	1	2	3	4	5	6	
	YEAR/SEM	IV /VIII			1				5							1			,				TAR	GET(%	)		65	65	65	65	65	65	
c	COURSE	Mrs. Mohana Priya. T. K																		-	-	то	TALS	TREN	GTH				18	1			
		Level	1		-										1				Rango		1						L						
		1													UP	TO 60	% of t				more t	han ta	rget								-		
ATT	AINMENT LEVEL	2					~														nore th					-							
		3				1									80% &	ABC	OVE of	the st	udents	scor	ed mor	e than	target				1						
			IA	T 1 - N	ARKS	S ALLO	TED		L	AT 2 -	MAR	KS AI	LOT		T		MAR				-		t / Min	ii Proje ninar	ct /Tut	orial /		TOTAL	COURSI	OUTC	OME		
S.NO	REG NO	NAME OF THE STUDENT	Cl	C2	C3	C4	C5	C6	CI	C2	C3	C4	C5	C6	CI	C2	C3	C4	C5	C6	CI	C2	C3	C4	C5	C6	Cl	C2	C3	C4	C5	C6	
			60	40		-					40	60							60	40		10	10			10	60	50	50	60	60	50	
1	912617106001	ABIRAMI S	53	35							37	55		-					53	35		9	9			8	53	44	46	55	53	43	
2	912617106002	ABISHEKA S	46	31	111						39	58							56	38		10	10			9	46	41	49	58	56	47	
3	912617106003	ATSHAYA R	50	33							30	45							55	36		9	9			8	50	42	39	45	55	44	
4	912617106004	BAVADHARANI A	48	32							30	45						1	56	37		9	9			8	48	41	39	45	56	45	
5	912617106005	BHUVANESHWARI B	57	38		1		1			35	53		1					52	34		9	9			9	57	47	44	53	52	43	
6	912617106006	DHIVYA L	48	32							37	55						1	52	34		9	10			9	48	41	47	55	52	43	
7	912617106007	GOWSALYA D	48	32					1		37	55							55	36		8	10			9	48	- 40	47	55	55	45	
8	912617106009	INDHUMATHI S	43	29					1		31	47	1.0			-			50	34		10	10			10	43	39	41	47	- 50	44	
9	912617106010	KANIMOZHI D	56	37							36	54							57	38		10	9			9	56	47	45	.54	57	47	
10	912617106011	KAVYA C	54	36					-		39	58			-		a hora		59	39	-	9	9	property sea		8	54	45	48	58	59	47	
11	912617106012	KEERTHANA G	43	29							37	56							54	36		8	. 9		-	9	43	37	-46	56	54	45	
12	912617106013	MAHESHWARI G	46	31							31	47							. 53	35		10	10			10	46	41	41	47	53	45	
13	912617106014	MANOHARI M	44	29							36	54		1					54	36		9	9			8	44	38	45	54	54	44	
14	912617106015	MARAGATHALAKSHMI S	55	37							35	53							53	35		9	9			8	52	46	44	54	59	43	
15	912617106017	SAFRIN NISHA S	55	37							36	53							52	34		10	10	-		10	55	47	46	53	52	44	
16	912617106018	SUBASHINI M	49	33							28	42					1		54	36		9	9			10	49	42	37	53	55	46	
17	912617106019	SUBASHINI T	47	31				2			35	52							55	36		9	9			9	52	40	44	52	59	45	
18	912617106020	VINTHIYA R	55.8	37.2						1	38	57				-			59	39		9	10			9	56	46	48	57	59	48	
		Course Outcomes Vs At	tainment	Level							7					No of	Stude	CO's	Targe	t Valu	ie D's Targ	et Val	10				39.0 18	32.5 18	32.5 18	39.0	39.0 18	32.5	
4	F J																	of Stu	dents s	scored	above 1						100.0	100.0	100.0	18 100.0	100.0		
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2.5 2 1.5 1 2 1.5 2.5 1 2.5											ud.		$\langle$		1		L			///	$\sim$	/		•									
0		2 3 Course Outcomes (CI	, C2, C3,	-		5		,	6		Þ		RI	BH	AR	PR	IN( HI	CIP.	AL GII	NE	ERI	ŇG		1	Þ.		s		HAR	ATH	11 EN		IEEF
	Facult Incharge											к									<b>NEN</b>		HODIELE COLLEGE FOR WOMEI KAIKKURICHI, PUDUKKOTTAL 622 20										

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#### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN DEPARTMENT OF ECE COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION ACADEMIC YEAR : 2020- 2021(EVEN)

YEAR /SEM: IV/VIII

Batch:2017-2021

SUBJECT : EC8094-Satellite Communication

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

 TOTAL STRENGTH :
 18

S.NO	Register No	NAME	Univ. Grade	
1	912617106001	ABIRAMI S	A+	
2	912617106002	ABISHEKA S	A+	
3	912617106003	ATSHAYA R	A+	
4	912617106004	BAVADHARANI A	A+	
5	912617106005	BHUVANESHWARI B	A+	
6	912617106006	DHIVYA L	A+	
7	912617106007	GOWSALYA D	A+	
8	912617106009	INDHUMATHI S	A+	
9	912617106010	KANIMOZHI D	A+	
10	912617106011	KAVYA C	A+	
11	912617106012	KEERTHANA G	A+	
12	912617106013	MAHESHWARI G	A+	
13	912617106014	MANOHARI M	A+	
14	912617106015	MARAGATHALAKSHMI S	A+	
15	912617106017	SAFRIN NISHA S	A+	
16	912617106018	SUBASHINI M	A+	
17	912617106019	SUBASHINI T	A+	
18	912617106020	VINTHIYA R	A+	
	No.	of O Grade	0	0
	No. c	of A+ Grade	18	18
		of A Grade	0	0
	No.o	f B+ Grade	0	0
	No.	of B Grade	0	0
	No.	of U Grade	0	0
		f UA Grade	0	0
	course outcome Attain	nment	60	18
	lents above the target		18	
CO-Attair	nment University (9	/0)	100.00	

Faculty

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HOD

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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
C410.1	100.0	100.00	100.0	3
C410.2	100.0	100.00	100.0	3
C410.3	100.0	100.00	100.0	3
C410.4	100.0	100.00	100.0	3
C410.5	100.0	100.00	100.0	3
C410.6	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	PS03
C410.1	3	3	2	2	1	1	#VALUE!		-	2	-	2	3	2	
C410.2	3	3	2	2	1	1	2.023		-	2		2	3	2	
C410.3	3	3	2	2	1	1	-	1	-	2	-	2	3	2	
C410.4	3	3	2	2	1	1	-		-	2	-	2	3	3	0.7
C410.5	3	3	2	2	1	1	-	-	-	2	1.5 - 8	2	3	2	
C410.6	3	3	2	2	1	1	-		-	2	-	2	3	2	1
C410	. 3	3	2	2	1	1	-	-		2	1 .	2	3	2	

				PO Attainment Leve		30.12.23	A. Property								
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C410.1	3	3	2	2	1	1	-	-	-	2	-	2	3	2	
C410.2	3	3	2	2	1	1	-	-	-	2	-	2	3	2	
C410.3	3	3	2	2	1	1	-	-	-	2		2	3	2	-
C410.4	3	3	2	2	1	1	-	-		2		. 2	3	2	
C410.5	3	. 3	2	2	1	1				2		2	3	2	
C410.6	.3	3	2	2	1	1				2		2	3	2	
C410	3	3	2	2	1	1	-		-	2		2	3	2	

			Α	ttainment of POs and PSO	S:										
Course Code	PO1	PO2	РОЗ	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C410	3	3	2	2	1	1	-	-	-	2	-	2	3	2	
Attainm ent	3	3	2	2	1	1	-	-	-	2	-	2	3	2	-

	-		
1.			
2.			
	1. 2.	1. 2.	1. 2.

hpryn T- K. Mohana Priya Name and Signature of the Faculty Member

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#### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

#### ACTION TAKEN REPORT FOR CO-PO-PSO ATTAINMENT ACADEMIC YEAR 2020-2021

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 and PSOs	
	Value Added Course (VAC) -		
1	"Fundamentals of MATLAB and its	PO1,PO2,PO3,PO4,PO5,PO10,PO9,PO	012,
	uses".	PSO1,PSO2,PSO3	
	Entrepreneurship Development Cell		
2	(EDC) –Innovative Approaches to	PO6,PO7,PO8,PO11	
	funding: A Guide for Women		
	Entrepreneurs.		
	Intellectual Property Rights(IPR) -		.~
3	Ethical Considerations in AI and IPR	PO6,PO7,PO8,PO11	
	Language and Communication		
4	Technology (LCT) - 7'Cs of	PO9,PO10	
	Communication.		
	Soft Skill Program - Leadership and		
5	Interpersonal skills.	PO10	
6	Life Skill Program – Mensural	PO8	
	Hygiene		
	Information and Communication		
7	Technology (ICT)tools-Integrating	PO5, PO12	
	Google workspace with other		
	Applications.		
8	Research Methodology(RM) -		
	Innovations in Recent Industrial	PO1,PO2,PO3,PO4, PSO1,PSO2,PSO2	3
	Applications		

HoD

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PRINCIPAL

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