

## **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

### **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



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

Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2 Teaching-Learning and Evaluation 350

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

2.6.2 Attainment of POs and COs are evaluated (20)

2018-2019

# ATTAINMENT EVALUATION OF POS & COS ELECTRONICS AND COMMUNICATION ENGINEERING

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### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Academic Year (2018 - 2019)

PO-PSO ATTAINMENT

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.	2.85	2.16	75.82
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	2.14	1.60	74.86
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.	1.83	1.40	76.33
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.	1.60	1.23	76.48
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.	1.57	1.24	79.12
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.	1.82	1.34	73.90
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.	1.67	1.16 or. S.THILAGA	69.67 VATHI M.E.,Ph.D

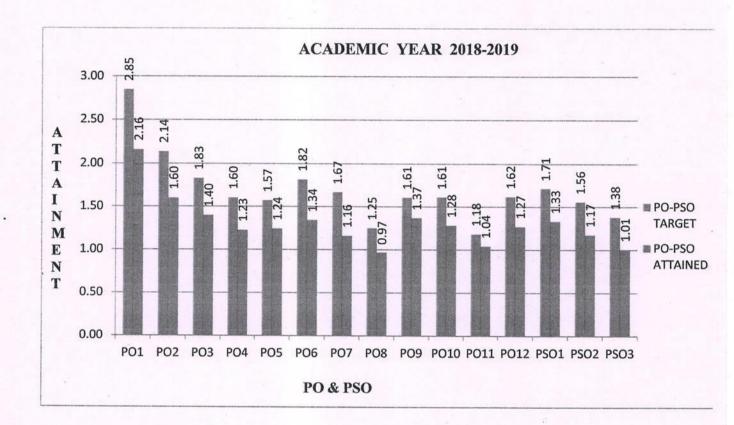
SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	1.25	0.97	77.45
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	1.61	1.37	85.18
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.	1.61	1.28	79.55
PÓ11	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.	1.18	1.04	88.08
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.	1.62	1.27	78.40
PSO1	Design, develop and analyze electronic systems through application of relevant electronics, mathematics and engineering principles	1.71	1.33	77.69
PSO2	Design, develop and analyze communication systems through application of fundamentals from communication principles, signal processing, and RF System Design & Electromagnetics.	1.56	1.17	75.40
PSO3	Adapt to emerging electronics and communication technologies and develop innovative solutions for existing and newer problems	1.38	1.01	73.00

Dr. S.THILAGAVATHI M.E., Ph.D.,

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkoitai Dt.

# ECE DEPARTMENT ACADEMIC YEAR 2018-2019 CO-PO-PSO ATTAINMENT



HoD/ECE HOD / ECE SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI, PUDUKKOTTAI - 622 303

PRINCIPAL PRINCIPAL

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

Dr. S.THILAGAVATHEM.E.,Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN

Kaikkurchi - 622 303, Pudukkottai Dt.



### (Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai) Kaikkuruchi, Pudukkottai- 622303.

Department of Electronics and communication Engineering

				ACADI	EMIC	YEAR	R - 201	8- 201	9	-													BA	тсн					2015 -	2019		
cou	RSE CODE/TITLE	EC6503 - Transmission Lines an	d Waveg	guides											-	5-312	- 100	e de la constante				со	URSE	OUTC	OME		1	2	3	4	5	1
	YEAR/SEM	ши						-	Series.		- SALE			SESTIE	===							- 9	TAR	GET(%	)		65	65	65	65	65	6
c	COURSE	Mis M SATHYA		TOTAL STRENGTH										16																		
		Level	2		Range									-																		
477		1													UP	TO 60	% of t	he stu	dents s	cored	more t	han ta	rget	-				A Dec 100			Dill -	
ALL	AINMENT LEVEL	2													61	- 795	of the	stude	mts sc	ured n	ore th	an tar	get	_								
		3			-								-		80% 8	& ABI	OVE of	the st	ludents	score	d mon	e than	target			_			-	-	-	
			IA	T1-N	IARK	SALI	OTE	D	14	AT 2 -	MAR	KS AI	LOT	EĐ		AT 3	MAR	KS A	LLOTI	ED	Assi	gamen		ii Proje	ct /Tute	orial /		TOTAL	COURS	E OUTCO	OME	
LNO	REG NO	NAME OF THE STUDENT	CI	C2	C3	C4	C5	C6	CI	C2	C3	C4	C5	C6	CI	C2	C3	Ci	C5	C6	CI	C2	СЗ	C4	C5	C6	CI	C2	C3	C4	C5	1
			60	10							40	60				-		-	60	40	-	10	10	-		10	60	50	50	60	60	5
1	912616106001	ABINAYA R	50	33							34	51							56	38		8	8			8	50	41	42	51	56	1
2	912616106002	AGALYA A	49	33							33	49							49	32		8	7			7	49	41	40	49	49	3
3	912616106003	ATCHAYA G	46	30							32	48			-				48	32		7	9			8	46	37	41	48	48	
4	912616106004	DEEPA N	56	37							34	51							57	38		9	7			8	56	46	41	51	57	1
5	912616106005	DHARANIYA A	49	33							34	51							50	34	4	8	7			7	49	41	41	51	50	1
6	912616106006	JEEVITHA U	53	35							35	53							52	34		8	9			8	53	43	44	53	52	4
7	912616166007	MAHESWARI V	50	34							36	53							50	34		9	9			9	50	43	45	53	50	1
8	912616106008	PAZHANIYAMMAL R	56	38							36	54							54	36		8	7			7	56	46	43	54	54	1
9	912616106009	PRIYANKA E	46	30							37	55							52	34		8	7			8	46	38	44	55	52	1
10	912616106010	ROJA A	59	39							38	57							56	38		7	9			8	59	46	47	57	56	4
11	912616106011	SHANMUGAPRIYA R	48	32							32	48							53	35		8	9			8	48	40	41	48	53	4
12	912616106012	SHIYAMALA E	47	31							33	50		2					50	34		8	7			7	47	39	40	50	50	4
13	912616196013	SIVABHARATHI P	42	28							33	49		-					48	32		8	7	OF THE REAL PROPERTY.		7	42	36	40	49	48	3
14	912616106014	SIVARUBINI S	59	39							38	57							58	38		9	8			9	59	48	46	57	58	4
15	912616106016	VINCY A	42	28							32	48			8				49	33		7	8			7	42	35	40	48	49	4
16	912616106302	SANKAVI M	44	30							32.4								51	34		9	9		111	9	44	39	41	49	51	1
														- 1						20												
		Course Outcomes Vs Atta	ainment	Level		-		-			7	-	-	-	No.	No of	Studer		Target red abo			es Vale	ne .		-		39,0 16	32.5 16	32.5	39.0 16	39.0 16	32
Δ		A SAME SAME TO SAME																	idents s								100.0	100.0	100.0	100.0	100.0	
3.5 3 2.5	3	3 3		3		3			3										) Attain Values								3	3	3	3	3	3

0.5 Course Outcomes (C1, C2, C3, C4, C5 & C6)

Dr. S.THILAGAVATHI M.E., Ph.D.,
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.



HOD / ECE SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN KAIKKURICHI,



### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN **DEPARTMENT OF ECE**

### **COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION**

ACADEMIC YEAR: 2018 - 2019(ODD SEM)

YEAR/ SEM: III /V

Batch:2015-2019

SUBJECT : EC6503 / Transmission Lines and Waveguides

CO Attainment Level: 1 - (UPTO 60%) 2- (61%-79%)

3-(80% and Above)

TOTAL STRENGTH:

16

S.NO	Register No	NAME	Univ. Grade	
1	912616106001	ABINAYA R	С	
2	912616106002	AGALYA A	С	
3	912616106003	ATCHAYA G	U	
4	912616106004	DEEPA N	D	
5	912616106005	DHARANIYA A	D	
6	912616106006	JEEVITHA U	Е	
7	912616106007	MAHESWARI V	В	
8	912616106008	PAZHANIYAMMAL R	Е	
9	912616106009	PRIYANKA E	D	
10	912616106010	ROJA A	В	
11	912616106011	SHANMUGAPRIYA R	E	
12	912616106012	SHIYAMALA E	С	
13	912616106013	SIVABHARATHI P	U	
14	912616106014	SIVARUBINI S	В	
15	912616106016	VINCY A	U	
16	912616106302	SANKAVI M	С	
	No	. of S Grade	0	0
	No	. of A Grade	0	0
	No	. of B Grade	3	3
	No	. of C Grade	3	3
	No	. of D Grade	3	3
	No	of E Grade	3	3
	No	3	3	
		of UA Grade	1	1
	course outcome Atta		60	16
	ents above the target		9	
O-Attain:	ment University	(%)	56.25	

Dr. S.THILAGAVATHI M.E., Ph.D. PRINCIPAL

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Overall Attainment Sheet - COs - POs & PSOs attainment calculation

со	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
C303.1	100.0	56,25	65.0	2
C303,2	100.0	56.25	65.0	2
C303,3	100.0	56.25	65.0	2
C303.4	100.0	56.25	65.0	2
C303.5	100.0	56.25	65.0	2
C303.6	100.0	56.25	65.0	2

#### Expected CO-PO Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	POS	PO9	PO10	PO11	PO12	PSO1	PSO2	PS03
C303.1	2	2	2	2		-	-			1		1			2
C303.2	3	2	2	2		-		-	-	1		1	-	-	2
C303.3	2	2	2	2					-	1		1			2
C303.4	3	2	2	2						1		1			2
C303.5	3	2	2 -	2		1.5			-	1		1		2	2
C303.6	3	2	2	2		-			-	1	-	1	-	-	2
C303	2.666666667	2	2	2						1		-		2	2

				PO Attainment Leve											
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C303.1	1,33	1.33	1.33	1.33	-				-	0.67		0.67		1002	1.33
C303.2	2	1.33	1.33	1.33	-				-	0.67		0.67			1.33
C303.3	1.33	1.33	1.33	1.33	-					0.67		0.67			1.33
C303.4	2	1.33	1.33	1.33	-					0.67		0.67			1.33
C303.5	2	1.33	1.33	1.33						0.67		0.67		1.33	1.33
C303.6	2	1.33	1.33	1.33						0.67		0.67		1.33	1.33
C303	1.78	1.33	1.33	1.33					-	0.67		0.67		1.33	1.33
										0.01		0.07		1,55	1.55

1				Attainment of POs and PSO	5:								1		
Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	·PO12	PSO1	PSO2	PSO3
C303	2.66666667	2	2	2	-			-		1		1		2	2
Attainment	1.78	1.33	1.33	1.33					-	0.67		0.67		1.33	1.33

Comments 1.
by Program
Coordinator 2.

Remarks by
HoD

Name and Signature ( NSOTHY)
of the Faculty Member

Dr. S.THILAGAVATHI M.E., Ph.D.,

PRINCIPAL SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt. HoD/ECE

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### DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### ACTION TAKEN REPORT FOR CO-PO-PSO ATTAINMENT **ACADEMIC YEAR 2018-2019**

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
1	Value Added Course (VAC) - "PCB Manufacturing and Designing of Basic Circuits"	PO1,PO2,PO3,PO4,PO5,PO10,PO9,PO12, PSO1,PSO2,PSO3
2	Entrepreneurship Development Cell (EDC) – Women in Data science: Leveraging Big Data for Entrepreneurial Success	PO6,PO7,PO8,PO11
3	Intellectual Property Rights (IPR) – IPR Strategies for Research and Development	PO6,PO7,PO8,PO11
4	Language and Communication Technology(LCT) - Communication Training	PO9,PO10
5	Soft Skill Program-Enhancing soft skills for success and Professional excellence	PO10
6	Life Skill Program-Physical and Mental Health	PO8
7	Information Communication Technology(ICT) tools – Collaborative Tools for Online Teaching and Learning	PO5, PO12
8	Research Methodology(RM) – Micro Electronics and VLSI Design	PO1,PO2,PO3,PO4, PSO1,PSO2,PSO3

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COLLEGE FOR WOMEN

PUDUKKOTTAI - 622 303 Dr. S.THILAGAVATHIM.E., Ph.D., PUDUKKOTTAI DISTRICT

SRI BHARATHI ENGINEERING **COLLEGE FOR WOMEN** Kaikkurchi - 622 303, Pudukkottai Dt.