

# 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)

## 2022-2023

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

## COMPUTER SCIENCE AND ENGINEERING Table of Content

S.No	Particulars	Page No
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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 Computer Science and Engineering Academic year (2021 - 2022) 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	2.56	2.42	94.36%
	solution of complex engineering problems.	apies and object and		POS - comm
	Problem analysis: Identify, formulate, review research literature, and	2.04	1.94	95.09%
PO2	analyze complex engineering problems reaching substantiated conclusions using first principles ofmathematics, natural sciences, and engineering sciences.	Function and as a me icons, bigs		alvibal stocha odmorn mi bas
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.	1.77	1.70	95.93%
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.	1.41	1.36	96.29%
PO5	Modern tool usage: Create, select, and apply appropriate techniques, resources, and	1.75	1.66	94.73%
	modern engineering and IT tools including prediction and modeling to		$\sim$	

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aning and a star	complex engineering activities with an understanding of the limitations.	หม่งว่า	SHITTERS	111282
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.	1.80	1.64	90.91%
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.	1.71	1.59	93.12%
PO8	Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.	1.81	1.81	100%
PO9	Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	1.47	1.46	99.30%
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.	1.42	1.31	
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.	1.94	1.92	98.71%
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.	1.55	1.41	90.66%

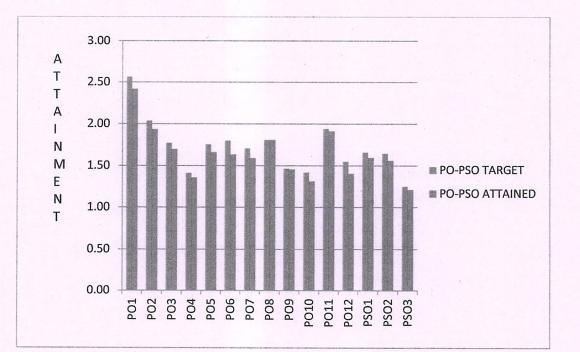
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PSO1	To analyze, design and develop computing solutions by applying foundational concepts of Computer Science and Engineering.	1.66	1.60	96.06%
PSO2	To apply software engineering principles and practices for developing quality software for scientific and business applications.	1.65	1.56	94.92%
PSO3	To adapt to emerging Information and Communication Technologies (ICT) to innovate ideas and solutions to existing/novel problems.	1.28	1.26	97.98%

#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### ACADEMIC YEAR 2021-2022

**CO-PO-PSO TARGET** 



PRINCIPAL H6D/CSE HOD / CSE PRINCIPAL SRI BHARATHI ENGINEERING SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN COLLEGE FOR WOMEN KAIKKURICHI. Ph.DAIKKURICHI - 622 303. AGAVATHIM Dr. S.THIL F PUDUKKOTTAI - 622 303 PUDUKKOTTAI DISTRICT PRINCIPAL SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.

#### SRI BHARATHI ENGINERRING COLLEGE FOR WOMEN, KAIKKURICHI

Department of Computer Science and Engineering

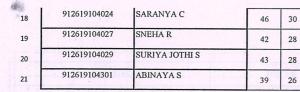
Internal Assessment -Attainment of Course Outcomes (Through Direct Assessment)

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ATT.	AINMENT LEVEL	2					· .				1			1	61	- 79%	ofthe	stude	nts sco	red mor	e tha	n targ	et	h.					-	- All	1				
		3												1	80% &	& ABC	OVE of	the st	udents	scored	more	than t	arget				·	and the		Side.	1:0	1			
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.NO	REG NO	NAME OF THE STUDENT	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	T			
		1.1	60	40							40	60							60	40		10	10	ala	Card	10	60	50	50	60	60				
1	912619104001	ANNAPOORANI M	43	29				1			13	20							45	30		7	8	S. W.	122	8	43	36	21	20	45				
2	912619104003	ARUNNAVAMEENA A	41	27	8.8						27	40							43	28		8	8			8	41	35	35	40	43	T			
3	912619104004	DAYANA P	39	26						1	27	40							47	31		8	9			7	39	34	36	40	47	T			
4	912619104005	DHARSHINI D	47	31			1				34	50		1		. 0			44	30		9	7			8	47	40	41	50	44	T			
5	912619104007	FAHMIDHA B	52	34	7						37	55			1	A	J		55	37		7	8	-		9	52	41	45	55	55	T			
6	912619104009	GULNAS FATHIMA S	56	37							38	56	5						56	38		8	8			7	56	45	46	56	56	T			
7	912619104010	HELAN J	56	38							35	52	1.N		201	1.0	DA	-191	56	38		8	8			9	56	46	43	52	56	T			
8	912619104011	KEERTHANA R	49	32							30	45	93	MIE	EN	11-13	14.52	1.54	43	29		9	7			7	49	41	37	45	43	T			
9	912619104012	MUTHULAKSHMI G	49	32							27	40	38.44	VVV	RO	4.4	D.J.	LUC,	47	31		7	8			9	49	39	35	40	47	T			
10	912619104013	MUTHU MEENAKSHI M	38	26						- 05	28	42	олж	0.00	1,000	03	9-1	50 M	47	31		7	9			8	38	33	37	42	47	Ť			
11	912619104014	NIROSHIKA R	43	29			11				27	40						1	47	32		8	8			9	43	37	35	40	47	T			
12	912619104017	PARAMESHWARI S	41	28							26	38							45	30		8	8			8	• 41	36	34	38	45	1			
13	912619104019	RANJANI K	43	28							21	31	1						44	29		7	9			7	43	35	30	31	44	T			
14	912619104020	RILWANA PARVEEN J	58	38							37	55							54	36		9	8			9	58	47	45	55	54	T			
5	912619104021	ROOPINA R	42	28	Ì						27	40							43	28		8	7			8	42	36	34	40	43	T			
16	912619104022	SANDHIYA B	41	27							29	43							44	29		7	9			8	41	34	38	43	44				
17	912619104023	SANTHI D	37	25							24	37					-		43	29		8	8			8	37	33	32	37	43	T			

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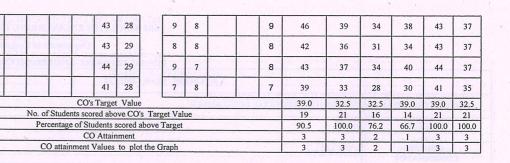


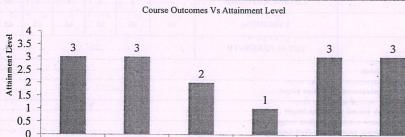
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Course Outcomes (C1, C2, C3, C4, C5 & C6)

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

#### SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN DEPARTMENT OF CSE COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION ACADEMIC YEAR : 2021 - 2022 (EVEN SEM) Batch:2019-2023

YEAR /SEM: III CSE / V I SUBJECT :CS8691(C311) / ARTIFICIAL INTELLIGENCE CO Attainment Level: 1 - (UPTO 60% ) 2- (61%-79%) TOTAL STRENGTH : 21

Datch.2019-202

3-(80% and Above)

S.NO	Register No	NAME	Univ. Grade	
1	912619104001	ANNAPOORANI M	В	
2	912619104003	ARUNNAVAMEENA A	В	
3	912619104004	DAYANA P	В	
4	912619104005	DHARSHINI D	В	
5	912619104007	FAHMIDHA B	A	
6	912619104009	GULNAS FATHIMA S	A	
7	912619104010	HELAN J	A	
8	912619104011	KEERTHANA R	В	
9	912619104012	MUTHULAKSHMI G	В	
10	912619104013	MUTHU MEENAKSHI M	B+	
11	912619104014	NIROSHIKA R	В	
12	912619104017	PARAMESHWARI S	U	
13	912619104019	RANJANI K	В	
14	912619104020	RILWANA PARVEEN J	A	
15	912619104021	ROOPINA R	В	
16	912619104022	SANDHIYA B	В	
17	912619104023	SANTHI D	В	
18	912619104024	SARANYA C	В	
19	912619104027	SNEHA R	В	
20	912619104029	SURIYA JOTHI S	U	
21	912619104301	ABINAYA S	U	
	No.	of O Grade	0	0
	No.	of A+ Grade	0	0
	No.	of A Grade	4	4
	No.	of B+ Grade	1	1
1	No.	of B Grade	13	13
	No.	of U Grade	3	3
		of UA Grade	0	0
	course outcome Attai		60	2
	ents above the target		18	
O-Attaini	ment University (	%)	85.71	

B.kan CFaculty

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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
C311.1	90.5	85.71	86.7	3
C311.2	100.0	85.71	88.6	3
C311.3	76.2	85.71	83.8	3
C311.4	66.7	85.71	81.9	3
C311.5	100.0	85.71	88.6	3
C311.6	100.0	85.71	88.6	3

#### Closure of the Quality Loop:

		CO-Target for Academic Year							
CO C311.1	14-	15	15-1	6	1	5-17	CO Attainment Gap for (%) 16-17		
	65	79.71	65	69	65	1			
C311.2	65	79.71	65			86.7		-	
C311.3	65			71.17	65	88.6	-	-	
C311.4		79.71	.65	63.15	65	83.8			
	65	79.71	65	75.11	65	81.9			
C311.5	65	79.71	65					-	
C311.6	65			73.57	65	88.6	-	-	
	63	79.71	65	68.44	65	88.6			

#### Expected CO-PO Level

Course	PO1	PO2	PO3	T	1										
C311.1	2	2	103	PO4	PO5	PO6	PO7	PO8	P09	PO10	PO11	PO12	PSO1	PSO2	PSO 3
C311.2	3		1	1	-	-	-			-	-		1	1	1
C311.3		2	2	1		-							2		
	2	2	1	.1									-	2	
C311.4	2	2	1									-	. 1	1	1
C311.5	2	1	1							-		-	1	1	2
C311.6	2	1				-		-	-	-	-	-	1	1	2
C311	2.2	. 1.8	1	1	-	-	•	-	-		-		1	1	
		1.0	1.2	1			-		-		-		1.2	12	13

				PO Attainment	Level										
Course	POI	PO2	PO3	P04	PO5	P06	PO7	PO8	1	1					
C311.1	2	2	1			100	FO	POS	P09	PO10	POII	PO12	PSO1	PSO2	PSO 3
C311.2	3	2	2			· · ·	ī	-			-	-	1	1	- 1
C311.3	2	2				· ·		-		-			2	2	1
C311.4	2	2					-		-		-	-	1	1	1
C311.5	2		1	1		-	-	-	-	-			1	11	2
C311.6	2		.1	1	-	-		-					ľ	1	2
	4		1	1		-			-						
C311	2.17	1.67	1.17										117	117	13

Course				Attainment of POs and I	PSOs:		2012								
Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSOI	0000	
C311	2.2	1.8	12					100	102	1010	FOIL	P012	PSOI	PSO2	PSO2
Attainm			1.2		-		-	-		-			1.2	1.2	1.3
ent	2.17	1.67	1.17	1	-								1.17	1.17	13
										1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					1.5

Comments by Program	1.	
Coordinato r	2.	
Remarks by HoD		

B. KAVIPRIYA

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SRI BHARATHI ENGINEERING



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#### DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

#### 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 target level in each POs and PSOs, the following corrective measures were taken.

S.NO	Name of the activity Proposed	Focussed POs and PSOs	
1	Value Added Course(VAC) -	PO1,PO2,PO3,PO4,PO5,PO10,PO9,PO12	
	Prototype Development using 3D printing Technology	PSO1,PSO2,PSO3	
2	Entrepreneurship Development Cell		
	(EDC) – Awareness about	PO6,PO7,PO8,PO11	
	Entrepreneurship, Innovation and Importance of an E & I cell		
3	Intellectual Property Rights (IPR) -	PO6,PO7,PO8,PO11	
	Role of IPR in Green Technologies		
4	Language and Communication		
	Technology (LCT) – Effect of	PO9,PO10	
	Technology in Intercultural		
	Communication.		
-	Soft Skill Program- Way from Campus	PO10	
	to Corporate.		
6	Life Skill Program- Entrepreneurship and Innovation	PO8	
	Information Communication		
7	<b>Technology (ICT) tools</b> – AI in	PO5, PO12	
	Communication Tools.		
	Research Methodology(RM)-Emerging		
8	Challenges in Deep Learning using CNN	PO1,PO2,PO3,PO4, PSO1,PSO2,PSO3	
	Keras algorithms		

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