



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



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)

2021-2022

ATTAINMENT EVALUATION OF POs & COs

COMPUTER SCIENCE AND ENGINEERING

Table of Content

S.No	Particulars	Page No
1	CO-PO-PSO Attainment Report	3 - 5
2	CO-PO Attainment Sample Sheet	6 - 9
3	Action taken Report	10



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 solution of complex engineering problems.	2.56	2.42	94.36%
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.	2.04	1.94	95.09%
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 modern engineering and IT tools including prediction and modeling to	1.75	1.66	94.73%


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

	complex engineering activities with an understanding of the limitations.			
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	92.40%
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%

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

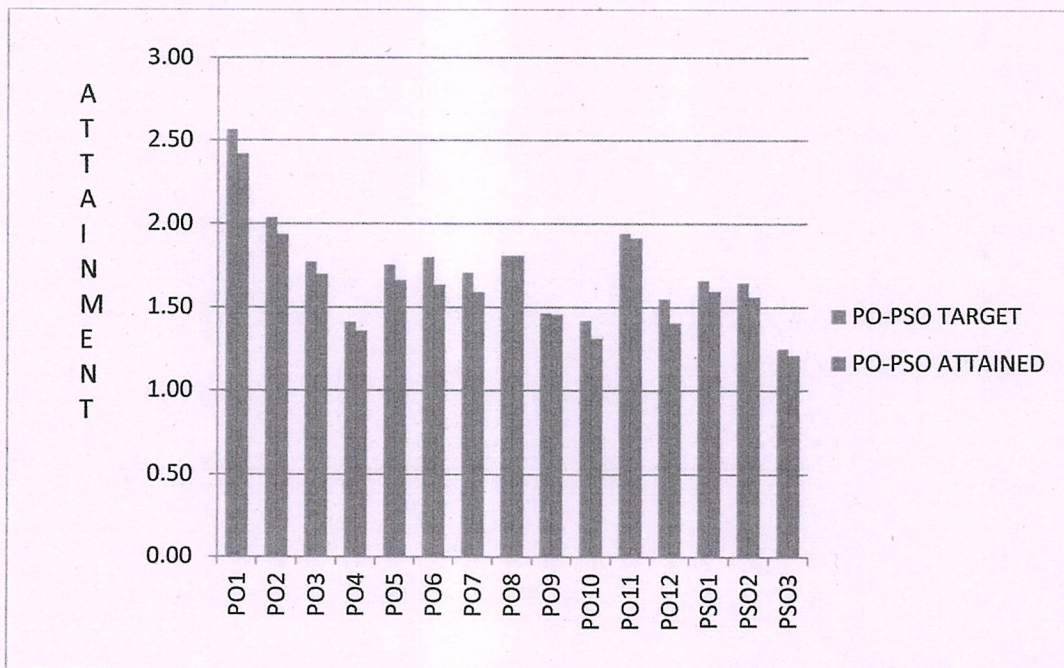
PRINCIPAL

**SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN**

Kaikkurchi - 622 303, Pudukkottai Dt.

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



[Signature]
H6D/ CSE
HOD / CSE
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 303.

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

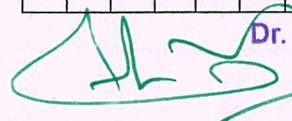
[Signature]
PRINCIPAL
PRINCIPAL
SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI - 622 303.
PUDUKKOTTAI DISTRICT

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN, KAIKKURICHI

Department of Computer Science and Engineering

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

		ACADEMIC YEAR - 2021 - 22														BATCH						2019 - 2023															
COURSE CODE/TITLE		CS8691(C311) / ARTIFICIAL INTELLIGENCE														COURSE OUTCOME						1	2	3	4	5	6										
YEAR/SEM		III / VI														TARGET(%)						65	65	65	65	65	65										
COURSE COORDINATOR		B.KAVIPRIYA														TOTAL STRENGTH						21															
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					
			60	40									40	60									60	40					10	10				10	60	50	50
1	912619104001	ANNAPOORANI M	43	29							13	20							45	30					7	8				8	43	36	21	20	45	38	
2	912619104003	ARUNNAVAMEENA A	41	27							27	40							43	28					8	8				8	41	35	35	40	43	36	
3	912619104004	DAYANA P	39	26							27	40							47	31					8	9				7	39	34	36	40	47	38	
4	912619104005	DHARSHINI D	47	31							34	50							44	30					9	7				8	47	40	41	50	44	38	
5	912619104007	FAHMIDHA B	52	34							37	55							55	37					7	8				9	52	41	45	55	55	46	
6	912619104009	GULNAS FATHIMA S	56	37							38	56							56	38					8	8				7	56	45	46	56	56	45	
7	912619104010	HELAN J	56	38							35	52							56	38					8	8				9	56	46	43	52	56	47	
8	912619104011	KEERTHANA R	49	32							30	45							43	29					9	7				7	49	41	37	45	43	36	
9	912619104012	MUTHULAKSHMI G	49	32							27	40							47	31					7	8				9	49	39	35	40	47	40	
10	912619104013	MUTHU MEENAKSHI M	38	26							28	42							47	31					7	9				8	38	33	37	42	47	39	
11	912619104014	NIROSHIKA R	43	29							27	40							47	32					8	8				9	43	37	35	40	47	41	
12	912619104017	PARAMESHWARI S	41	28							26	38							45	30					8	8				8	41	36	34	38	45	38	
13	912619104019	RANJANI K	43	28							21	31							44	29					7	9				7	43	35	30	31	44	36	
14	912619104020	RILWANA PARVEEN J	58	38							37	55							54	36					9	8				9	58	47	45	55	54	45	
15	912619104021	ROOPINA R	42	28							27	40							43	28					8	7				8	42	36	34	40	43	36	
16	912619104022	SANDHIYA B	41	27							29	43							44	29					7	9				8	41	34	38	43	44	37	
17	912619104023	SANTHI D	37	25							24	37							43	29					8	8				8	37	33	32	37	43	37	

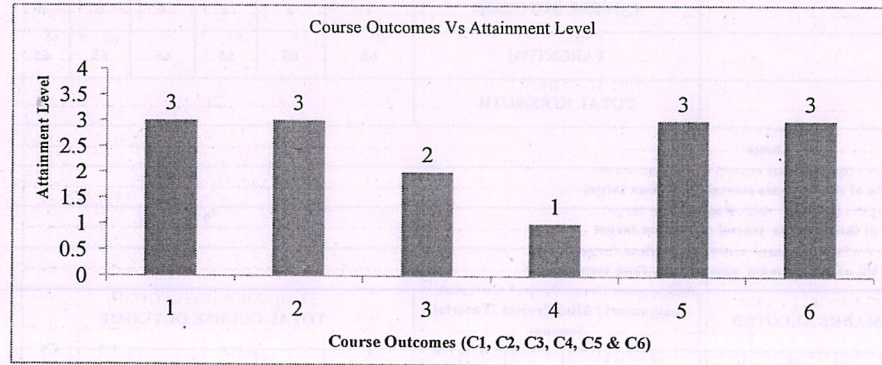

Dr. S. THILAGAVATHI M.E., Ph.D.,
 PRINCIPAL
 SRI BHARATHI ENGINEERING
 COLLEGE FOR WOMEN
 Kaikkurichi - 622 303, Pudukkottai Dt.

18	912619104024	SARANYA C	46	30
19	912619104027	SNEHA R	42	28
20	912619104029	SURIYA JOTHI S	43	28
21	912619104301	ABINAYA S	39	26

					26	38
					23	34
					27	40
					20	30

					43	28
					43	29
					44	29
					41	28

9	8			9	46	39	34	38	43	37
8	8			8	42	36	31	34	43	37
9	7			8	43	37	34	40	44	37
7	8			7	39	33	28	30	41	35



CO's Target Value	39.0	32.5	32.5	39.0	39.0	32.5
No. of Students scored above CO's Target Value	19	21	16	14	21	21
Percentage of Students scored above Target	90.5	100.0	76.2	66.7	100.0	100.0
CO Attainment	3	3	2	1	3	3
CO attainment Values to plot the Graph	3	3	2	1	3	3

Binaya
Faculty Incharge

[Signature]
HOD/CSE

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

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

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

YEAR /SEM: III CSE / V I

Batch:2019-2023

SUBJECT :CS8691(C311) / ARTIFICIAL INTELLIGENCE

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

TOTAL STRENGTH : 21

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

B. Kanika
Faculty

[Signature]
HOD/CSE

HOD / CSE

**SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 303**

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

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

Expected CO-PO Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	2	2	1	1	-	-	-	-	-	-	-	-	1	1	1
C311.2	3	2	2	1	-	-	-	-	-	-	-	-	1	1	1
C311.3	2	2	1	1	-	-	-	-	-	-	-	-	2	2	1
C311.4	2	2	1	1	-	-	-	-	-	-	-	-	1	1	1
C311.5	2	1	1	1	-	-	-	-	-	-	-	-	1	1	2
C311.6	2	1	1	1	-	-	-	-	-	-	-	-	1	1	2
C311	2.2	1.8	1.2	1	-	-	-	-	-	-	-	-	1.2	1.2	1.3

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	2	2	1	1	-	-	-	-	-	-	-	-	1	1	1
C311.2	3	2	2	1	-	-	-	-	-	-	-	-	1	1	1
C311.3	2	2	1	1	-	-	-	-	-	-	-	-	2	2	1
C311.4	2	2	1	1	-	-	-	-	-	-	-	-	1	1	1
C311.5	2	1	1	1	-	-	-	-	-	-	-	-	1	1	2
C311.6	2	1	1	1	-	-	-	-	-	-	-	-	1	1	2
C311	2.17	1.67	1.17	1	-	-	-	-	-	-	-	-	1.17	1.17	1.3

Attainment of POs and PSOs:

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311	2.2	1.8	1.2	1	-	-	-	-	-	-	-	-	1.2	1.2	1.3
Attainment	2.17	1.67	1.17	1	-	-	-	-	-	-	-	-	1.17	1.17	1.3

Comments by Program Coordinator	1.
	2.
Remarks by HoD	

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

HOD/CSE
 SRI BHARATHI ENGINEERING
 COLLEGE FOR WOMEN

B. Kavi Priya
 Name and Signature
 of the Faculty Member



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

ACTION TAKEN REPORT FOR CO- PO-PSO ATTAINMENT

ACADEMIC YEAR 2021-2022

In order to bridge the gap between 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) - Internet of Things with python	PO1,PO2,PO3,PO4,PO5,PO10,PO9,PO12 PSO1,PSO2,PSO3
2	Entrepreneurship Development Cell (EDC) – The Rise of Women-led E-commerce ventures	PO6,PO7,PO8,PO11
3	Intellectual Property Rights (IPR) – Patents, Copyright and trademarks: A Comprehensive guide to IPR Protection	PO6,PO7,PO8,PO11
4	Language and Communication Technology(LCT) - Modern Trends in English	PO9,PO10
5	Soft Skill Program -Critical Thinking	PO10
6	Life Skill Program -Meditation	PO8
7	Information Communication Technology(ICT) tools – Hands-on Training on Web Testing Tools	PO5, PO12
8	Research Methodology(RM) -Artificial Intelligence and Machine Learning in Engineering Research	PO1,PO2,PO3,PO4, PSO1,PSO2,PSO3

HOD/CSE

HOD / CSE

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

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

PRINCIPAL

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

PRINCIPAL

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