



# 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**



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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**

### **CIVIL ENGINEERING**

#### **Table of Content**


S.No	Particulars	Page No
1	CO-PO-PSO Attainment Report	3 - 5
2	CO-PO Attainment Sample Sheet	6 - 8
3	Action taken Report	9



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 Kaikkurichi, Pudukkottai-622-303.

**Department of Civil Engineering**  
**Academic year: (2018 - 2019)**  
**PO-PSO ATTAINMENT**

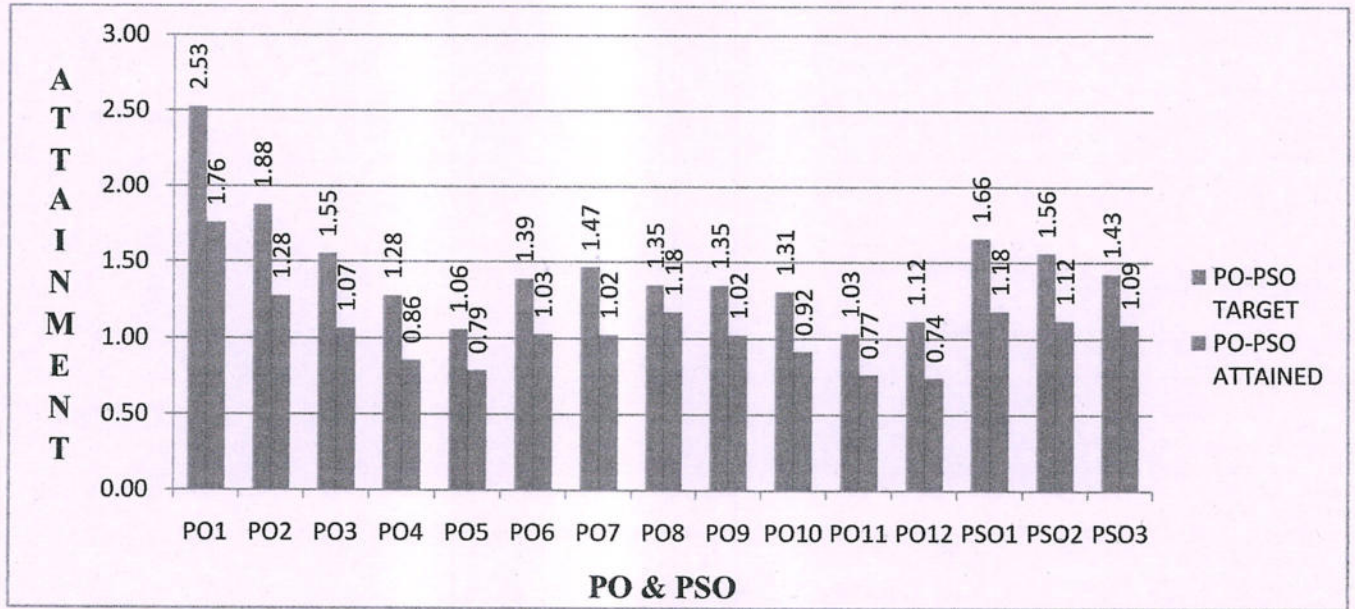
PO/PSO	STATEMENT	TARGET	ATTAINED VALUE	ATTAINMENT %
PO1	Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.	2.53	1.76	69.69%
PO2	Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of Mathematics, natural sciences, and engineering sciences.	1.88	1.28	67.94%
PO3	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.	1.55	1.07	68.60%
PO4	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.	1.28	0.86	67.16%
PO5	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.	1.06	0.79	74.73%
PO6	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.	1.39	1.03	73.93%
PO7	Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge and need for sustainable development.	1.47	1.02	69.74%
PO8	Apply ethical principles and commit to professional ethics and responsibilities	1.35	1.18	87.06

  
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	and norms of the engineering practice.			
<b>PO9</b>	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.	<b>1.35</b>	<b>1.02</b>	<b>75.84%</b>
<b>PO10</b>	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.	<b>1.31</b>	<b>0.92</b>	<b>70.10%</b>
<b>PO11</b>	Demonstrate knowledge and explaining 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.	<b>1.03</b>	<b>0.77</b>	<b>74.16%</b>
<b>PO12</b>	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.	<b>1.12</b>	<b>0.74</b>	<b>66.64%</b>
<b>PSO1</b>	Knowledge of Civil Engineering discipline Demonstrate in-depth knowledge of Civil Engineering discipline, with an ability to evaluate, analyze and synthesize existing and new knowledge.	<b>1.66</b>	<b>1.18</b>	<b>71.17%</b>
<b>PSO2</b>	Critical analysis of Civil Engineering problems and innovation Critically analyze complex Civil Engineering problems, apply independent judgment for synthesizing information and make innovative advances in a theoretical, practical and policy context.	<b>1.56</b>	<b>1.12</b>	<b>71.57%</b>
<b>PSO3</b>	Conceptualization and evaluation of engineering solutions to Civil Engineering Issues Conceptualize and solve Civil Engineering problems, evaluate potential solutions and arrive at technically feasible, economically viable and environmentally sound solutions with due consideration of health, safety, and socio cultural factors.	<b>1.43</b>	<b>1.09</b>	<b>76.58%</b>

  
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**CIVIL DEPARTMENT**  
**ACADEMIC YEAR 2018-2019**  
**CO-PO-PSO TARGET AND ATTAINMENT**



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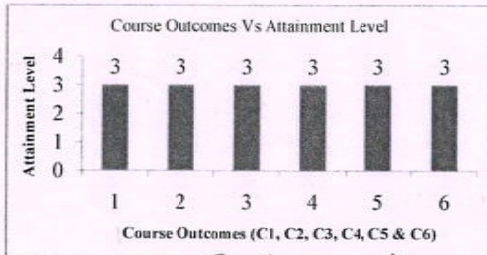
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Department of Civil Engineering

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

		ACADEMIC YEAR - 2018 - 19														BATCH						2016 - 2020										
COURSE CODE/TITLE		CE6504 Highway Engineering														COURSE OUTCOME						1	2	3	4	5	6					
YEAR/SEM		III/IV														TARGET(%)						65	65	65	65	65	65					
COURSE COORDINATOR		Mr.S.Vetrivel														TOTAL STRENGTH						12										
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	60	60	50
1	912616103001	AARTHIG	49	33						33	49					53	35		9	9			9	49	42	42	49	53	44			
2	912616103002	ANANTHIS	48	32						34	50					51	34		8	8			8	48	40	42	50	51	42			
3	912616103003	ANUSIYA C	51	34						35	53					45	30		7	7			8	51	41	42	53	45	38			
4	912616103004	KANIMOZHIP	49	33						37	55					52	34		8	8			8	49	41	45	55	52	42			
5	912616103005	LAVANYA.K	53	36						36	54					54	36		8	8			8	53	44	44	54	54	44			
6	912616103006	MASILAMANI M	55	37						33	50					48	32		8	8			8	55	45	41	50	48	40			
7	912616103007	MENAKAR	58	38						38	58					57	38		9	9			8	58	47	47	58	57	46			
8	912616103008	PRAVEENA.M	53	36						36	54					54	36		9	9			9	53	45	45	54	54	45			
9	912616103301	GOWSIKA N	51	34						37	55					51	34		8	8			8	51	42	45	55	51	42			
10	912616103302	KALISWARI M	56	38						37	55					57	38		9	9			9	56	47	46	55	57	47			
11	912616103303	MAHESWARI M	53	36						37	56					53	36		9	8			8	53	45	45	56	53	44			
12	912616103304	SARATHAPRITHA S	54	36						38	57					52	35		9	9			9	54	45	47	57	52	44			

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	12	12	12	12	12	12
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



*S. Vetrivel*  
Faculty Incharge

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Department of Civil Engineering

**COURSE OUTCOME ATTAINMENT - UNIVERSITY EXAMINATION**

**ACADEMIC YEAR : 2018 - 2019 (ODD SEM)**

**YEAR/SEM: III /V**

**Batch:2016-2020**

**SUBJECT : CE6504 Highway Engineering**

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

**TOTAL STRENGTH : 12**

S.NO	Register No	NAME	Univ. Grade	
1	912616103001	AARTHIG	C	
2	912616103002	ANANTHIS	U	
3	912616103003	ANUSIYA.C	UA	
4	912616103004	KANIMOZHI.P	E	
5	912616103005	LAVANYA.K	C	
6	912616103006	MASILAMANI.M	E	
7	912616103007	MENAKA.R	C	
8	912616103008	PRAVEENA.M	E	
9	912616103301	GOWSIKA N	U	
10	912616103302	KALISWARI M	E	
11	912616103303	MAHESWARI M	D	
12	912616103304	SARATHAPRITHA S	C	
No. of S Grade			0	0
No. of A Grade			0	0
No. of B Grade			0	0
No. of C Grade			4	4
No. of D Grade			1	1
No. of E Grade			4	4
No. of U Grade			2	2
No. of UA Grade			1	1
Target for course outcome Attainment			60	12
No of students above the target			5	
CO-Attainment University (%)			41.67	

*S. Venu*  
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
C304.1	100.0	41.67	53.3	1
C304.2	100.0	41.67	53.3	1
C304.3	100.0	41.67	53.3	1
C304.4	100.0	41.67	53.3	1
C304.5	100.0	41.67	53.3	1
C304.6	100.0	41.67	53.3	1

Expected CO-PO Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C304.1	3	2	2	2	-	-	-	-	1	1	1	1	2	1	1
C304.2	3	2	2	2	-	-	-	-	1	1	1	1	2	1	1
C304.3	3	2	2	2	-	-	-	-	1	1	1	1	2	1	1
C304.4	3	2	2	2	-	1	-	-	1	1	1	1	2	1	1
C304.5	3	2	2	2	-	-	-	-	1	1	1	1	2	1	1
C304.6	3	2	2	2	-	-	-	-	1	1	1	1	2	1	1
C304	3	2	2	2	-	1	-	-	1	1	1	1	2	1	1

PO Attainment Level

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C304.1	1	0.67	0.67	0.67	-	-	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304.2	1	0.67	0.67	0.67	-	-	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304.3	1	0.67	0.67	0.67	-	-	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304.4	1	0.67	0.67	0.67	-	0.33	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304.5	1	0.67	0.67	0.67	-	-	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304.6	1	0.67	0.67	0.67	-	-	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33
C304	1	0.67	0.67	0.67	-	0.33	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33

Attainment of POs and PSOs:

Course Code	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C304	3	2	2	2	-	1	-	-	1	1	1	1	2	1	1
Attainment	1	0.67	0.67	0.67	-	0.33	-	-	0.33	0.33	0.33	0.33	0.67	0.33	0.33

Comments by  
Program  
Coordinator

Remarks by HoD  
Name and Signature  
of the Faculty Member  
*[Signature]* S. VETRIVEL, A.P.I (U)

*[Signature]*  
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**DEPARTMENT OF CIVIL ENGINEERING**

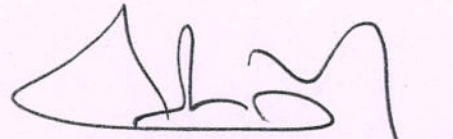
**ACTION TAKEN REPORT FOR CO-PO-PSO ATTAINMENT**


**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 & PSOS
1.	<b>Value Added Course (VAC)</b> - Corrosion of RC structures.	PO1,PO2,PO3,PO4,PO5,PO9,PO10, PO12, PSO1,PSO2,PSO3
2.	<b>Entrepreneurship &amp; Development cell (EDC)</b> - The Future of EdTech: Women Entrepreneurs Revolutionizing Education.	PO6,PO7,PO8,PO11
3.	<b>Intellectual Property Rights (IPR)</b> - IPR Strategies for Research and Development	PO6,PO7,PO8,PO11
4.	<b>Language and Communication Technology (LCT)</b> - Language for everyday life.	PO9,PO10
5.	<b>Soft Skill Program</b> - Enhancing soft skills for success and professional excellence.	PO10
6.	<b>Life Skill Program</b> - Physical and mental health.	PO8
7.	<b>Information Communication Technology (ICT) tools</b> - Collaborative tools for online teaching and learning.	PO5,PO12
8.	<b>Research Methodology (RM)</b> - Integrated Water Resources Management.	PO1,PO2,PO3,PO4,PSO1,PSO2,PSO3

  
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