

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-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2 Teaching-Learning and Evaluation 350

Key Indicator- 2.3. Teaching- Learning Process (40)

2021-2022 EXPERIENTIAL LEARNING CIVIL ENGINEERING

Activity	Number of Students Attended	Page No.
Internship	04	3
Project	04	10
Laboratory	16	15
TOTAL STUDENTS ATTENDED	24	-

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2 Teaching-Learning and Evaluation

Key Indicator- 2.3. Teaching- Learning Process (40)

350

2021-2022
CIVIL ENGINEERING
EXPERIENTIAL LEARNING
INTERNSHIP



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

Academic year 2021-2022

S.NO	REGISTER NO	NAME	YEAR/SEM	NAME OF THE LEARNING METHOD
	912618103005	Meenachi.K		EMBED IEINEN A TEADAM
1	912618103008	Sathya.M	177/7777	EXPERIENTIAL LEARNING
1	912618103009	Srividhya.S	IV/VII	INTERNSHIP- Shabee
	912618103010	Umamaheswari.K		Constructions, Pudukkottai

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

PRINCIPAL

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

HoD/Civil

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



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

Date: 30 | 06 | 24

BONAFIDE CERTIFICATE

This is to certify that the following students are bonafide students of this college studying VII semester of Final year B.E/ Civil Engineering during this academic year 2021-2022(Odd Semester).

S.NO	REG.NO	NAME OF THE STUDENT
1.	912618103005	MEENACHI.K
2.	912618103008	SATHYA.M
3.	912618103009	SRIVIDHYA.S
4.	912618103010	UMAMAHESWARI.K

This certificate is issued only for the purpose of attending INPLANT TRAINING in SHABEE CONSTRUCTIONS, PUDUKKOTTAI.

Dr. S.THILAGAVATHEM.E., Ph.D.

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

PRINCIPAL

PRINCIPAL

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

Ph: 04322 - 242768 Mobile: 99422 28029, 97509 28029

website: www.sbec.edu.in e-mail: sribharathienggcollege@gmail.com

20.12.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that MS.K.MEENACHI, studying B.E civil Engineering in Sri Bharathi Engineering College For Women, Kaikurichi, Pudukkottai has undergone In-plant Training in our concern from the date of 19.07.2021 – 15.08.2021.

During this training period, she learned the construction of brick work, centering and shuttering, placing of concreting, plastering and bar bending of various members in the buildings. Her performance and commitment towards the work were found to be good.

Dr. S.THILAGAVATHIM.E.,Ph.D.

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kalkkurchi - 622 303, Pudukkottai Dt. Er. K. BASHEER MOHAMED, B.E., M.Sc., (Rev), FIV.

SHABEE
CONSTRUCTION
Shop No. 12, KP Super Complex,
T.S. No. 4128, South 3-rd Street,
PUDUKKOTTAI-622 001.

SHABEE CONSTRUCTION

Shop #12, KP Super Complex, TS No: 4128, South 3rd Street, Near Supreme Cycles, Pudukkottai-1 Mobile: 98424 61166, 98428 77722, Office: 73737 16168

Er. K. BASHEER MOHAMED, B.E, M.Sc.(REV), FIV. 98424 61166

●Engineers●Architects
●Licensed Building surveyors
●Consultants●Contractors
●Building Promoters●Valuers

20.12.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that MS.M.SATHYA, studying B.E civil Engineering in Sri Bharathi Engineering College For Women, Kaikurichi, Pudukkottai has undergone In-plant Training in our concern from the date of 19.07.2021 – 15.08.2021.

During this training period, she learned the construction of brick work, centering and shuttering, placing of concreting, plastering and bar bending of various members in the buildings. Her performance and commitment towards the work were found to be good.

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

PRINCIPAL

SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN

Kalkkurchi - 622 303, Pudukkottai Dt.

Er. K. BASHEER MOHAMED, B.E., M.Sc., (Rev), FIV.

SHABEE
CONSTRUCTION
Shop No. 12, KP Super Complex,
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SHABEE CONSTRUCTION

Shop #12, KP Super Complex, TS No: 4128, South 3rd Street, Near Supreme Cycles, Pudukkottai-1 Mobile: 98424 61166, 98428 77722, Office: 73737 16168



Er. K. BASHEER MOHAMED, B.E, M.Sc.(REV), FIV. 98424 61166

Engineers Architects

Licensed Building surveyor

Consultants Contractors

Building Promoters Valuer

20.12.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that MS.S.SRIVIDHYA, studying B.E civil Engineering in Sri Bharathi Engineering College For Women, Kaikurichi, Pudukkottai has undergone In-plant Training in our concern from the date of 19.07.2021 – 15.08.2021.

During this training period, she learned the construction of brick work, centering and shuttering, placing of concreting, plastering and bar bending of various members in the buildings. Her performance and commitment towards the work were found to be good.

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

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt. Er. K. BASHEER MOHAMED, B.E., M.Sc., (Rev), FIV.,

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Shop No. 12, KP Super Complex,
T.S. No. 4128, South 3-rd Street,
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Shop #12, KP Super Complex, TS No: 4128, South 3rd Street, Near Supreme Cycles, Pudukkottai-1 Mobile: 98424 61166, 98428 77722, Office: 73737 16168



Er. K. BASHEER MOHAMED, B.E, M.Sc.(REV), FIV. 98424 61166

Engineers Architects
Licensed Building surveyors
Consultants Contractors
Building Promoters Valuers

20.12.2021

TO WHOMSOEVER IT MAY CONCERN

This is to certify that MS.K.UMAMAHESWARI, studying B.E civil. Engineering in Sri Bharathi Engineering College For Women, Kaikurichi, Pudukkottai has undergone In-plant Training in our concern from the date of 19.07.2021 – 15.08.2021.

During this training period, she learned the construction of brick work, centering and shuttering, placing of concreting, plastering and bar bending of various members in the buildings. Her performance and commitment towards the work were found to be good.

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

PRINCIPAL
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COLLEGE FOR WOMEN
Kaikkurchi - 622 303, Pudukkottai Dt.

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SHABEE CONSTRUCTION

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2

Teaching-Learning and Evaluation

350

Key Indicator- 2.3. Teaching- Learning Process (40)

2021-2022
CIVIL ENGINEERING
EXPERIENTIAL LEARNING
PROJECT



(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

Academic year 2021-2022

	BATCH NO	REGISTER NO	NAME	YEAR/SEM	TOPIC	NAME OF THE LEARNING METHOD
	1	912618103005	MEENACHI.K			EXPERIENTIAL
		912618103008	SATHYA.M	137/3/111	Experimental study of	LEARNING
		912618103009	SRIVIDHYA.S	IV/VIII	papercrete brick	METHOD-
		912618103010	UMAMAHESWARI.K			PROJECT

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SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt. HoD/Civil)

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

Internal Marks Report

College Code / Name

: 9126 - SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Branch Code / Name

: 103 - B.E. Civil Engineering

Semester: 08

University: AUC

Regulation: 2017

S.No	Register Number	Name	CE8021	CE8091	CE8811
1	912618103005	MEENACHI K	17	17	19
2	912618103008	SATHYA M	18	18	19
3	912618103009	SRIVIDHYA S	19	19	19
4	912618103010	UMAMAHESWARI K	17	17	19

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

PRINCIPAL





EXPERIMENTAL STUDY

OF

PAPERCRETE BRICK A PROJECT REPORT

Submitted by

K.MEENACHI 912618103005

M.SATHYA 912618103008

S.SRIVIDHYA 912618103009

K.UMAMAHESWARI 912618103010

In partial fulfilment for the award of the degree

Of

CIVIL ENGINEERING

in

BACHELOR OF ENGINEERING
SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN,
KAIKKURICHI,PUDUKKOTTAI-622 303
ANNA UNIVERSITY:CHENNAI 600 025.

JUNE 2022

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

PRINCIPAL

ANNA UNIVERSITY: CHENNAI 600 025

BONAFIDE CERTIFICATE

Certified that this project report "EXPERIMENTAL STUDY OF PAPERCRETE BRICK" is the bonafide work of MEENACHI.K (912618103005), SATHYA.M (912618103008), SRIVIDHYA.S (912618103009) and UMAMAHESWARI.K (912618103010) who carried out the project work under my supervision.

SIGNATURE

Ms.R.MANJU, M.E.,

HEAD OF THE DEPARTMENT,

Department of civil Engineering

Sri Bharathi Engineering

College for Women,

Kaikkurichi,

Pudukkottai - 622 303.

9.00

SIGNATURE

Ms.G.GAYATHRI, M.E.,

ASST.PROFESSOR,

Department of civil Engineering

Sri Bharathi Engineering

College for women,

Kaikkurichi,

Pudukkottai – 622 303.

Submitted for the project viva – voice examination held on 24:6:22

NTERNAL EXAMINER

EXTERNAL EXAMINER

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

(Approved by AICTE, New Delhi and Affiliated to Anna University, Chennai-25) Kaikkurichi, Pudukkottai, Tamil Nadu – 622 303, India

Criteria 2

Teaching-Learning and Evaluation

350

Key Indicator- 2.3. Teaching- Learning Process (40)

2021-2022
CIVIL ENGINEERING
EXPERIENTIAL LEARNING
LABORATORY



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DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

2021-2022 (LABORATORY COURSES-II Year)

CE8461

HYDRAULIC ENGINEERING LABORATORY

LTPC

0042

OBJECTIVE:

Students should be able to verify the principles studied in theory by performing the experiments in lab.

LIST OF EXPERIMENTS

A. Flow Measurement

- 1. Calibration of Rotameter
- 2. Calibration of Venturimeter / Orificemeter
- 3. Bernoulli's Experiment

B.Losses in Pipes

- 4. Determination of friction factor in pipes
- 5. Determination of min or losses

C. Pumps

- 6. Characteristics of Centrifugal pumps
- 7. Characteristics of Gear pump
- 8. Characteristics of Submersible pump
- 9. Characteristics of Reciprocating pump

D. Turbines

- 10. Characteristics of Pelton wheel turbine
- 11. Characteristics of Francis turbine/Kaplan turbine

E. Determination of Metacentric height

12. Determination of Metacentric height of floating bodies

TOTAL: 60 PERIODS

REFERENCES:

- 1. Sarbjit Singh."Experiments in Fluid Mechanics", Prentice Hall of India Pvt. Ltd, Learning Private Limited, Delhi, 2009.
- 2. "Hydraulic Laboratory Manual", Centre for Water Resources, Anna University, 2004.
- 3. Modi P.N. and Seth S.M., "Hydraulics and Fluid Mechanics", Standard Book House, New Delhi, 2000.
- 4. Subramanya K. "Flow in open channels", Tata McGraw Hill Publishing. Company, 2001.

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DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

LIST OF EQUIPMENTS

- 1. One set up of Rotometer
- 2. One set up of Venturimeter/Orifice meter
- 3. One Bernoulli's Experiment set up
- 4. One set up of Centrifugal Pump
- 5. One set up of Gear Pump
- 6. One set up of Submersible pump
- 7. One set up of Reciprocating Pump
- 8. One set up of Pelton Wheel turbine
- 9. One set up of Francis turbines/one set of kaplon turbine
- 10. One set up of equipment for determination of Metacentric height of floating bodies
- 11. One set up for determination of friction factor in pipes

12. One set up for determination of minor losses

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DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project, In-Plant Training, Industrial visit, Local visit)

Batch List

S.No	Register Number	Name of the student	Batch	Laboratory Course	Year/Department
1	912620103001	Aswini T	т	CE0461	
2	912620103002	Geetha M	1	CE8461-	
3	912620103003	Keerthi S		HYDRAULIC	II/ON III
4	912620103004	Subathra S Bhavani S		ENGINEERING	II/CIVIL
5	912620103301		II	LABORATORY	
6	912620103302	Megala V			

HoD/Civil

HOD / CIVIL SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 303

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

PRINCIPAL

SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Kaikkurchi - 622 303, Pudukkottai Dt.

Internal Marks Report

College Code / Name

: 9126 - SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Branch Code / Name

: 103 - B.E. Civil Engineering

Semester: 04

University: AUC

Regulation: 2017

S.No	Register Number	Name	CE8401	CE8402	CE8403	CE8404	CE8461	CE8481	CE8491	HS8461	MA8491
1	912620103001	ASWINI T	17	17	16	16	18,	19	18	18	15
2	912620103002	GEETHA M	18	19	19	19	20	19	19	19	17
3	912620103003	KEERTHI S	16	17	15	16	19	19	16	18	17
4	912620103004	SUBATHRA S	18	19	16	18	19	19	18	19	18
5	912620103301	BHAVANI S	15	15	15	15	18	18	15	17	14
6	912620103302	MEGALA V	17	16	16	16	19	19	16	18	15

Dr. S.THILAGAVATHI M.E., PK.D.,
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SRI BHARATHI ENGINEERING

COLLEGE FOR WOMEN Kaikkurchi - 622 303, Pudukkottai Dt.



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DEPARTMENT OF CIVIL ENGINEERING

Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

2021-2022 (LABORATORY COURSES-III Year)

CE8612

IRRIGATION AND ENVIRONMENTAL ENGINEERING DRAWING

L T P C 0 0 4 2

OBJECTIVE:

At the end of the semester, the student shall conceive, design and draw the irrigation and environmental engineering structures in detail showing the plan, elevation and Sections.

PART A: IRRIGATION ENGINEERING

1. TANK COMPONENTS

9

Fundamentals of design - Tank surplus weir - Tank sluice with tower head - Drawings showing foundation details, plan and elevation

2. IMPOUNDING STRUCTURES

6

Design principles - Earth dam - Profile of Gravity Dam

3. CROSS DRAINAGE WORKS

6

General design principles - Aqueducts - Syphon aqueduct (Type III) - Canal drop (Notch Type) - Drawing showing plan, elevation and foundation details.

4. CANAL REGULATION STRUCTURES

9

General Principles - Direct Sluice - Canal regulator - Drawing showing detailed plan, elevation and foundation details.

PART B: ENVIRONMENTAL ENGINEERING

1. WATER SUPPLY AND TREATMENT

15

Design and Drawing of flash mixer, flocculator, clarifier – Rapid sand filter – Service reservoirs – Pumping station – House service connection for water supply and drainage.

4. SEWAGE TREATMENT & DISPOSAL

15

Design and Drawing of screen chamber - Grit channel - Primary clarifier - Activated sludge process - Aeration tank - Trickling filter - Sludge digester - Sludge drying beds - Septic tanks and disposal arrangements.

TOTAL: 60 PERIODS

TEXTBOOKS:

- 1. Satya Narayana Murthy Challa, "Water Resources Engineering: Principles and Practice", New Age International Publishers, New Delhi, 2002.
- 2. Garg, S.K., "Irrigation Engineering and Design of Structures", New Age International Publishers, New Delhi, 1997.
- 3. Manual on Water Supply and Treatment, CPHEEO, Government of India, New Delhi, 1999.
- 4. Manual on "Sewerage and Sewage Treatment Systems- Part A, B and C" CPHEEO, Ministry of Urban Development, Government of India, New Delhi, 2013

REFERENCES:

- 1. Mohanakrishnan. A, "A few Novel and Interesting Innovative Irrigation Structures: Conceived, Designed and Executed in the Plan Projects in Tamil Nadu", Publ. No. 44 and Water Resources Development & Management Publ.No.43, IMTI Thuvakudy, Trichy, 2011.
- 2. Raghunath, H.M. "Irrigation Engineering", Wiley India Pvt. Ltd., New Delhi, 2011.
- 3. Sharma R.K., "Irrigation Engineering and Hydraulic Structures", Oxford and IBH Publishing Co., New Delhi, 2002.

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DEPARTMENT OF CIVIL ENGINEERING Experiential learning(Project,In-Plant Training,Industrial visit,Local visit)

- 4. Peary, H.S., ROWE, D.R., Tchobanoglous, G., "Environmental Engineering", McGraw-HillBook Co., New Delhi, 1995.
- 5. Metcalf and Eddy, "Wastewater Engineering, Treatment and Reuse", Tata McGraw-Hill, New Delhi, 2010.
- 6. Qasim, S.R., Motley, E.M and Zhu.G. "Water works Engineering Planning, Design and Operation", Prentice Hall, New Delhi, 2009.
- 7. Qasim, S. R. "Wastewater Treatment Plants, Planning, Design & Operation", CRC Press, New York, 2010

Batch List

S.No	Register Number	Name of the student	Batch	Laboratory Course	Year/Department
1	912619103001	Ajitha T			
2	912619103002	Aruljenifar C	T		
3	912619103003	Divya V	1	CE8612-	
4	912619103004	Mangaiyarkarasi G		IRRIGATION AND	
5	912619103005	Muthulakshmi S		ENVIRONMENTAL	****
6	912619103006	Praveena S		ENGINEERING	III/CIVIL
7	912619103007	Priyadharshini K		DRAWING	
8	912619103009	Ragavi V	II		
9	912619103301	Lilly John.J			
10	912619103302	Bhuvani.S			

HoD/Civil D / CIVIL

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SRI BHARATHI ENGINEERING
COLLEGE FOR WOMEN
KAIKKURICHI,
PUDUKKOTTAI - 622 333

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

PRINCIPAL

Internal Marks Report

College Code / Name

: 9126 - SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN

Branch Code / Name

: 103 - B.E. Civil Engineering

Semester: 06

University : AUC

Regulation: 2017

S.No	Register Number	Name	CE8005	CE8601	CE8602	CE8603	CE8604	CE8611	CE8612	EN8592	HS8581
1	912619103001	AJITHA T	17	17	17	16	17	18	18	17	18
2	912619103002	ARULJENIFAR C	18	19	18	17	17	18	18	17	18
3	912619103003	DIVYA V	14	10	11	13	10	17	16	10	16
4	912619103004	MANGAIYARKARASI G	16	16	16	16	16	18	18	16	17
5	912619103005	MUTHULAKSHMI S	18	19	19	17	18	20	19	17	19
6	912619103006	PRAVEENA S	17	16	15	15	16	18	19	16	18
7	912619103007	PRIYADHARSHINI K	18	19	18	17	18	19	19	18	19
8	912619103009	RAGAVI V	18	19	18	18	18	19	19	18	19
9	912619103301	LILLY JOHN J	17	17	17	15	17	19	19	17	19
10	912619103302	BHUVANI S	15	15	14	14	10	17	20	14	15

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

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