



# Bharath

## INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)



### BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

No.173, Agharam Road, Selayur, Chennai , T.N - 600 073.

Ref: BIHER/BIST/Civil//Spl/2019

Date: 02/01/2019

From  
Ms.S.Thendral,  
Department of Civil Engineering,  
BIHER

To  
The HOD  
Department of Civil Engineering,  
BIHER

Respected Sir

Sub – Permission to conduct value added course – reg.

I wish to inform you that, as it is decided to conduct the value added courses to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes. The eligibility of this course is open for UG students from department of civil engineering. So please permit us to conduct the value added course on Characterization of Construction Materials which is starting from 21/01/2019 to 04.02.2019.

Thanking you.

HOD  
Head of the Department  
Department of Civil Engineering  
Bharath Institute of Higher Education & Research  
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)  
Selayur, Chennai-600 073. INDIA





**BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**

No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

Ref: BIHER/BIST/Civil//Jan/2019

Date: 03/01/2019

**CIRCULAR**

The School of Civil and Infrastructure Engineering is planned to conduct a Value Added Course on Characterization of Construction Materials for the benefit of B.Tech students. This value added course is commences from **21/01/2019** to **04.02.2019** with the duration of 38 hours (Two hour per day).

It is important for higher education institutions to supplement the curriculum to make students better prepared to meet industry demands as well as develop their own interests and aptitudes.

**Eligibility:** Course is open for UG Students for Department School of Civil and Infrastructure Engineering.

**Registration:**

The registration form which is available in the university website should be duly filled by the participants and to be submitted to the Coordinator at least 5 days before the commencement of course.

**Contact:**

Ms.S.THENDRAL

Assistant Professor / School of Civil & Infrastructure Engineering,

Course Coordinator

Bharath Institute of Higher Education & Research.

Email id: thendral.cscivil@bharathuniv.ac.in

**HOD**

Head of the Department  
Department of Civil Engineering  
Bharath Institute of Higher Education & Research  
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Selaiyur, Chennai-600 073. INDIA



**BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH**  
**SCHOOL OF CIVIL AND INFRASTRUCTURE ENGINEERING**  
**LIST OF THE STUDENTS**

Sl.NO	Reg No	Name of the students	Email id	Contacts Number
1	U17CE071	MOGILI SRIKANTH	srikanthmogili0@gmail.com	9600052027
2	U17CE072	BHUKYA VENKATA NARASIMMA	venkatbhukya0456@gmail.com	9848550456
3	U17CE074	DHARASAN .K	dharasansweni16@gmail.com	7708581626
4	U17CE075	NIMMAKAYALA SURYAVAMSI REDDY	suryavamsireddy000@gmail.com	7780296604
5	U17CE076	KARRA ANAND RAVI TEJA	anandraviteji7@gmail.com	9618884649
6	U17CE077	KATTERAPALLI RAM MOHAN REDDY	ramureddy80084@gmail.com	8096798483
7	U17CE079	FAMOUSSTAR MANIK SYIEMLIEH	fsyiemlieh2@gmail.com	6382983568
8	U17CE080	CHINTHAM DINESH YADHAVU	chinthamdinesh143@gmail.com	6301926433
9	U17CE081	KATARU SAI KISHORE	saikishorenaidu888@gmail.com	9182814262
10	U17CE082	VEGINATI PAVAN KUMAR	pavanveginati143@gmail.com	6281916177
11	U17CE084	JASANTA LOKTONGBAM	Jasantaloktongbam1997@gmail.co	8837447621
12	U17CE085	MOHAMMED YUSUF .A	yusuffyuhana@gamil.com	9360172326
13	U17CE086	MUHAMMAD FARHAAN SHAREEFF Y.S	farhaanshareeff1999@gmail.com	8838159947
14	U17CE087	PEMCHAND KHWAIRAKPAM	premkhwairakpamcoool@gmail.c	7005828091
15	U17CE088	ADARSHON MARUWEIN	adhmar89@gmail.com	9600083712
16	U17CE089	NIHI OO CHALLAM	challamnihioo@gmail.com	8257854837
17	U17CE090	SHELJIN DHAS .H	sheljin007@gmail.com	8056235392
18	U17CE091	KHUNDRAK PAM ISHWORLAL	Khundrakpamishworlal@gmail.co	8794271910
19	U17CE094	PAVITHRANS .R	pavitharan143@gmail.com	9080564777
20	U17CE095	GOBBAKA SAI KIRAN	saikirangobbaka123@gmail.com	7674086461
21	U17CE096	NARESH .P	rockeynaresh001@gmail.com	8678961013
22	U17CE097	SANTHOSH .R	santhoshappu202@gmail.com	9543836104
23	U17CE099	KOREETHA MANIKANTA	maninani5678@gmail.com	9182365642
24	U17CE100	IROM ROSHAN KUMAR	blacksabbathirom@gmail.com	9366323457
25	U17CE101	BANDI SRIKANTH	srikanthbandi@gmail.com	7730009698
26	U17CE102	ANANDHU SATHYAN	sathyananandhu1@gmail.com	9840710259
27	U17CE103	CHAMMANDI SAIJAYANTHI	Saijayanthreddy1121@gmail.com	8639351859
28	U17CE105	MUHAMMAD NAZRUL ISLAM	ni1982490@gmail.com	7085994985
29	U17CE118	BOJJAM SAKETH KUMAR	sakethkumar.bojjam@gmail.com	9025726162
30	U17CE711	SONAM DORJEE	Sonamdorjee2906@gmail.com	7358038733



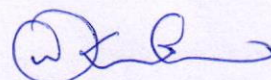
**Value Added Course**  
**Characterization of Construction Materials**

**Content of Syllabus**

S.No.	Syllabus Details	No. of Lecture Hours	Date	Time	Lecture Name
1.	Structural Construction Materials	2 hrs	21.01.2019	3 Pm To 5 pm	Ms.S. Thendral
2.	Characterization of Coatings for cellulose base materials	2 hrs	22.01.2019	3 Pm To 5 pm	Ms.S. Thendral
3.	Wood cell structure and chemical composition	2 hrs	23.1.2019	3 Pm To 5 pm	Ms.S. Thendral
4.	Larix decidua and Pinus sylvestris characteristics	2 hrs	24.01.19	3 Pm To 5 pm	Ms.S. Thendral
5.	Wood properties	2 hrs	25.1.2019	3 Pm To 5 pm	Ms.S. Thendral
6.	The wood-water relationship and dimensional stability	2 hrs	28.01.2019	3 Pm To 5 pm	Ms.S. Thendral
7.	Wood degradation	2 hrs	29.01.2019	3 Pm To 5 pm	Ms.S. Thendral
8.	Wood and weathering	2 hrs	30.1.2019	3 Pm To 5 pm	Ms.S. Thendral
9.	Wood modification: treatments for the improvement of wood properties	2 hrs	31.9.2019	3 Pm To 5 pm	Ms.S. Thendral
10.	Wood modification with alkoxysilanes	2 hrs	1.2.2019	3 Pm To 5 pm	Ms.S. Thendral
11.	Sol-gel deposition of alkoxysilane coatings	2 hrs	4.2.2019	3 Pm To 5 pm	Ms.S. Thendral
12.	2 Dip coating process	2 hrs	5.2.2019	3 Pm To 5 pm	Ms.S. Thendral
13.	Fluorinated and Phenyl	2 hrs	6.2.2019	3 Pm To	Ms.S. Thendral



	functionalized coatings: a comparison			5 pm	
14.	Biological tests	2 hrs	7.2.2019	3 Pm To 5 pm	Ms.S. Thendral
15.	Leaching and biological test	2 hrs	8.2.2019	3 Pm To 5 pm	Ms.S. Thendral
16.	NMR Study of Polyamidoamines PAAs (patent)	2 hrs	11.2.2019	3 Pm To 5 pm	Ms.S. Thendral
17.	Solid State NMR characterization of Cement base materials	2 hrs	12.2.2019	3 Pm To 5 pm	Ms.S. Thendral
18.	Modern cement pastes formulations	2 hrs	13.2.2019	3 Pm To 5 pm	Ms.S. Thendral
19.	Superplasticizer composition and mechanism of action	2 hrs	14.2.2019	3 Pm To 5 pm	Ms.S. Thendral



**HOD CIVIL**  
Head of the Department  
Department of Civil Engineering  
Bharath Institute of Higher Education & Research  
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Chennai - 600 075, India





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**Topic: Characterization of Construction Materials**

Type of Course: value added course

Department: School of Civil and infrastructure Engineering

Pre-Requisites: Basic Civil Engineering

Course Duration: 38 hours (21.1.2019)

Intended Audience: Civil Engineering Students

Industries Applicable To: Cement Companies, Concrete Producers, Construction Chemical manufactures, Construction companies

Coordinators: Ms S.Thendral & Mr. S. Rajesh

**Objective:**

- ❖ To understand various conventional construction materials, properties and their uses.
- ❖ Describe various latest and modern construction materials, properties and their uses
- ❖ To understand the general construction processes and their sequences
- ❖ To know the understand the various techniques which are useful for the substructures construction.




## **COURSE OUTLINE:**

The objective of the course is to introduce students to the characterization of construction materials and their behaviour, with a view of developing their understanding of the mechanisms that govern the performance of these materials. The course will be focused primarily on cement and concrete, and include a few techniques; the physics of the techniques and their application to cement science. Lab demonstrations and experiments will be covered.

The course will cover the fundamentals of materials science including the formation of chemical bonds, the properties of the states of matter, the development and the basic characteristics of the structure of materials, phase diagrams, concepts of theology, mechanical behavior and simple failure models, deterministic and stochastic fracture mechanics, and the treatment of composites. The construction materials treated in the course will include bricks and stone, metals and alloys, wood and wood products, concrete and other cement-based materials, and asphalt.

After receiving an introduction into fundamental principles of structural, physical and long term performance, students learn about materials and product manufacturing techniques how to they relate to mechanical and non mechanical properties of the various materials.

  
Head of the Department  
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INSTITUTE OF HIGHER EDUCATION AND RESEARCH

DEEMED-TO-BE UNIVERSITY



**NAAC**  
NATIONAL ASSESSMENT AND  
ACCREDITATION COUNCIL



## BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

### CERTIFICATE OF participation

This is to Certify that MOGILI SRIKANTH, from Bharath Institute of Higher Education and Research, has participated in value added course on '**Characterization of Construction Materials**' presented by **Ms.THENDRAL. S, Assistant Professor**, Organized by School of Civil & Infrastructure Engineering, Bharath Institute of Science & Technology, BIHER from 21.01.2019 To 14.2.2019.

  
Coordinator

  
Co-Coordinator

  
HOD

Head of the Department  
Department of Civil Engineering  
Bharath Institute of Higher Education & Research  
(Declared as Deemed to be University U/S 3 of UGC Act, 1956)  
Selaipur, Chennai-600 073. INDIA





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**SCHOOL OF CIVIL AND INFRASTRUCTURE ENGINEERING**

**VALUE ADDED COURSE - Characterization of Construction Materials**

**Date: 21.09.2019**

**Year/Sem: III /VI**



  
Head of the Department  
Department of Civil Engineering  
Bharath Institute of Higher Education & Research  
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Chennai-600 073, INDIA



# Online Feedback

## Value added course on Characterization of Construction Materials

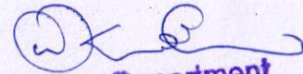
Sl.NO	Email Address	Name	Reg number	Institute	Designation *	Phone Number	Rating for the session (1 to 5)	Feedback *
1	srikanthmogili0@gmail.com	MOGILI SRIKANTH	U17CE071	Bharath Institute of higher education and research	Student	9600052027	5	It's great to learn new stuffs. thank you
2	venkatbhukya0456@gmail.com	BHUKYA VENKATA NARASI	U17CE072	Bharath Institute of higher education and research	Student	9848550456	5	Good
3	dharasansweni16@gmail.com	DHARASAN .K	U17CE074	Bharath Institute of higher education and research	Student	7708581626	4	Very good
4	survavamsireddy000@gmail.com	NIMMAKAYALA SURYAVAN	U17CE075	Bharath Institute of higher education and research	Student	7780296604	5	nice presentation almost covered all topics related to
5	anandraviteji7@gmail.com	KARRA ANAND RAVI TEJA	U17CE076	Bharath Institute of higher education and research	Student	9618884649	3	The software that is available in a variety
6	ramureddy80084@gmail.com	KATTERAPALLI RAM MOHA	U17CE077	Bharath Institute of higher education and research	Student	8096798483	4	Good session
7	fsyiemlieh2@gmail.com	FAMOUSSTAR MANIK SYIEM	U17CE079	Bharath Institute of higher education and research	Student	6382983568	4	good
8	chinthamdinesh143@gmail.com	CHINTHAM DINESH YADHA	U17CE080	Bharath Institute of higher education and research	Student	6301926433	5	Very informative video
9	saikishorenaidu888@gmail.com	KATARU SAI KISHORE	U17CE081	Bharath Institute of higher education and research	Student	9182814262	5	It was well efficient to know in detail.
10	pavanveginati143@gmail.com	VEGINATI PAVAN KUMAR	U17CE082	Bharath Institute of higher education and research	Student	6281916177	4	The session was very good
11	Jasantaloktongbam1997@gmail.com	JASANTA LOKTONGBAM	U17CE084	Bharath Institute of higher education and research	Student	8837447621	4	Good
12	yusuffyuhana@gmail.com	MOHAMMED YUSUF .A	U17CE085	Bharath Institute of higher education and research	Student	9360172326	4	Nice
13	farhaanshareeff1999@gmail.com	MUHAMMAD FARHAAN SHA	U17CE086	Bharath Institute of higher education and research	Student	8838159947	1	Very good
14	premkhwairakpamcoool@gmail.com	PEMCHAND KHWAIRAKPAM	U17CE087	Bharath Institute of higher education and research	Student	7005828091	4	Good
15	adlumar89@gmail.com	ADARSHON MARUWEIN	U17CE088	Bharath Institute of higher education and research	Student	9600083712	5	Excellent
16	challamnihioo@gmail.com	NIHI OO CHALLAM	U17CE089	Bharath Institute of higher education and research	Student	8257854837	5	Well organised courses



# Online Feedback

## Value added course on Characterization of Construction Materials

SI.NO	Email Address	Name	Reg number	Institute	Designation *	Phone Number	Rating for the session (1 to 5)	Feedback *
17	sheljin007@gmail.com	SHELJIN DHAS .H	U17CE090	Bharath Institute of higher education and research	Student	8056235392	5	The course was pretty good, and I've presentation clearly, It
18	Khundrakpamishworlal@gmail.com	KHUNDRAK PAM ISHWORLA	U17CE091	Bharath Institute of higher education and research	Student	8794271910	4	Very good
19	pavitharan143@gmail.com	PAVITHRAN .R	U17CE094	Bharath Institute of higher education and research	Student	9080564777	5	Excellent course that i have never seen.
20	saikirangobbaka123@gmail.com	GOBBAKA SAI KIRAN	U17CE095	Bharath Institute of higher education and research	Student	7674086461	5	Good explanation
21	rockeynaresh001@gmail.com	NARESH .P	U17CE096	Bharath Institute of higher education and research	Student	8678961013	5	good
22	santhoshappu202@gmail.com	SANTHOSH .R	U17CE097	Bharath Institute of higher education and research	Student	9543836104	5	good
23	maninani5678@gmail.com	KOREETHA MANIKANTA	U17CE099	Bharath Institute of higher education and research	Student	9182365642	5	Very much informative session.
24	blacksabbathirom@gmail.com	IROM ROSHAN KUMAR	U17CE100	Bharath Institute of higher education and research	Student	9366323457	3	Good
25	srikanthbandi@gmail.com	BANDI SRIKANTH	U17CE101	Bharath Institute of higher education and research	Student	7730009698	2	Over all session was use full and filled with contents
26	sathyananandhu1@gmail.com	ANANDHU SATHYAN	U17CE102	Bharath Institute of higher education and research	Student	9840710259	3	Good
27	Saijayanthreddy1121@gmail.com	CHAMMANDI SAIJAYANTHI	U17CE103	Bharath Institute of higher education and research	Student	8639351859	5	Good
28	ni1982490@gmail.com	MUHAMMAD NAZRUL ISLAM	U17CE105	Bharath Institute of higher education and research	Student	7085994985	4	It was very helpful
29	sakethkumar.bojjam@gmail.com	BOJJAM SAKETH KUMAR	U17CE118	Bharath Institute of higher education and research	Student	9025726162	4	Good
30	Sonamdorjee2906@gmail.com	SONAM DORJEE	U17CE711	Bharath Institute of higher education and research	Student	7358038733	5	thank you for the course offers

  
**Head of the Department**  
**Department of Civil Engineering**  
**Bharath Institute of Higher Education & Research**  
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Chennai - 600 076