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, Selaiyur, Chennai , T.N - 600 073.

Ref: BIHER/BIST/Civil//Spl/2021 **Date: 01/04/2021**

CIRCULAR

Many a times, the defined skill sets that are being imparted to students today with Programme Specific Objectives in educational institutions become redundant sooner than later due to rapid technological advancements. 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.

Hence a Value Added Course is offered by Department of School of Civil and Infrastructure Engineering, Bharath Institute of Higher Education & Research. The course offered is **Course on 3D Printing** with the duration of 30 hours (Two hour per day) and commences from **11/02/2021 to 23/03/2021(online).**

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.B.Kaviya
Assistant Professor / School of Civil and Infrastructure Engineering.,
Course Coordinator
Bharath Institute of Higher Education & Research.
Email id: kaviya.civil@bharathuniv.ac.in

HOD

Head of the Dept.
(Civil Engineering)
Bharath Institute of Higher
Education & Research.
Selaiyur, Chennai 600 073

SCHOOL OF CIVIL & INFRASTRUCTURE ENGINEERING

VALUE ADDED COURSE - COURSE ON 3D PRINTING

STUDENTS NAME LIST

SCHOOL OF CIVIL & INFRASTRUCTURE ENGINEERING

VALUE ADDED COURSE – COURSE ON 3D PRINTING

Sl.NO	Reg No	Name of the students	E-Mail ID
1	U15CE001	AADARSH KUMAR BHARDWAJ S	Aadha2012@gmail.com
2	U15CE002	ABDUL RAHMAN S A	raman18@gmail.com
3	U15CE003	ADITYA KUMAR RAJ	kumar147@gmail.com
4	U15CE004	AJIS KUMAR M	ajis@gmail.com
5	U15CE005	ANUJ YADAV	anuj yadav 406@ Gmail.com
6	U15CE006	ARAVINDAN D	arvnf@gmail.com
7	U15CE007	ARUN K	arun505@gmail.com
8	U15CE008	ARUN YOMSO	yomso316@gmail.com
9	U15CE009	AVULA UDAY KIRAN	udhyakiran46@gmail.com
10	U15CE010	BADUGU MANI BABU	manibabu949@gmail.com
11	U15CE011	BAJOPSKHEMLANG RYNTATHIANG	rtytaniang333@gmail.com
12	U15CE012	BAKKANOLLA MOHAN REDDY	mreddy@gmail.com
13	U15CE013	BELLAMKONDA LEELA MOHAN	mohan1999@gmail.com
14	U15CE014	BOYA NARESH	oya naresh v30@gmail.com
15	U15CE015	BUNGCHA MOIRANGTHEM	moirangthem l17@gmail.com
16	U15CE016	CHALLA BHAGAVAN	bhagavan 91@gmail.com
17	U15CE017	DABBADI ABHINAY KUMAR	ABHINAY KUMAR @gmail.com
18	U15CE018	DEIMONMITRE DKHAR	dkar69@gmail.com
19	U15CE020	DHANUSH KUMAR P	kumar2000@gmail.com
20	U15CE021	DHINAKARAN R	dhinakaran2791@gmail.com
21	U15CE022	DHINESH M	dinesh11@gmail.com
22	U15CE023	DIPENDRA KUMAR YADAV	kumar8264@gmail.com

23	U15CE024	EDEGABODDU NARASIMHA RAVITHEJA	rockzz371@gmail.com
24	U15CE025	GADHIRAJU NARENDRA VARMA	navarma@gmail.com
25	U15CE026	GANESH PERUMAL V	cperumal5@gmail.com
26	U15CE027	GANESH R	ganesh62@gmail.com
27	U15CE028	GARAPATI LALITHKISHOR	lathi4181@gmail.com
28	U15CE029	GOLLAPALLI VISHNUVARDHAN REDDY	rp7842197222@gmail.com
29	U15CE030	GOWTHAM L	gowtham664@gmail.com
30	U15CE031	GUDDETTI KEERTHANA	keerthina689@gmail.com
31	U15CE032	HARIS REYAZ	Hari56@gmail.com
32	U15CE033	HEMACHANDRAN	hemaran@gmail.com
33	U15CE034	IAISHAH SUCHIANG	UCHIANG192@yahoo.com
34	U15CE035	J SAI RAM MADHAV	Sairam43@gmail.com
35	U15CE036	JAWAHARRAJ M	jawidhu@gmail.com
36	U15CE037	JAWIDHUSSAIN J	jawhussan@gmail.com
37	U15CE038	JAYAPRABAKAR V	jayaprabakar V @gmail.com
38	U15CE039	JAYASOORYA V	jayasoorya v @gmail.com
39	U15CE040	JIJOWILSON	Jijowilson96 @gmail.com
40	U15CE041	KAMALESH KUMAR A	kamalkumr@gmail.com
41	U15CE042	KANGARI RANJEETH REDDY	Reddy56@gmail.com
42	U15CE043	KAPOOR M	Kapoor95@gmail.com
43	U15CE044	KAVITHA T	Sairam43@gmail.com
44	U15CE045	KISHOTH R	Kisthori95@gmail.com

Dept.
Engineering)
Sathyabama Institute of Higher
Education & Research
Sholinganallur, Chennai - 600 119.

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Topic: Course on 3D Printing

Type of Course: value added course / UG

Department of school of Civil and infrastructure Engineering

Pre-Requisites: Auto CAD

Course Duration: 30 hours (11 Feb' 2021)

Intended Audience: Civil Engineering Students

Industries Applicable To: All companies that deal with the Civil infrastructure development

Coordinators: B.Kaviya

Objective:

a) Demonstrate knowledge of key historical factors that have shaped manufacturing over the centuries
b) Explain current and emerging 3D printing applications in a variety of industries
c) Describe the advantages and limitations of each 3D printing technology
d) Evaluate real-life scenarios and recommend the appropriate use of 3D printing technology
e) Identify opportunities to apply 3D printing technology for time and cost savings
f) Discuss the economic implications of 3D printing including its impact on startup businesses and supply chains
g) Design and print objects containing moving parts without assembly This course aims to make the students well-versed with the latest scheduling techniques in construction projects.

COURSE OUTLINE:

3D printing opens up inspiring possibilities and opportunities, like the ability to produce a fully functional "machine" in one print. It is the only manufacturing process that can interlock parts within parts to produce functioning closed systems that require no assembly. Furthermore, because 3D printers produce objects directly from computer models, users can immediately hold, evaluate, test and use their ideas – and share them digitally with the world. The Internet revolutionized the creation, modification and dissemination of digital media. Now, 3D printing makes that possible for physical objects. 3D printing is reshaping the fields of art, design, architecture, science, technology and engineering by revolutionizing how things are made. Recognizing education as the foundation for career readiness, a means to drive future innovation, we're providing this curriculum completely free. Use it modularly to supplement an existing class, or teach an entirely new course in 3D printing.

Value Added Course

Course on 3D Printing

Content of Syllabus

S.No.	Syllabus Details	No. of Lecture hrs	Time	Date	Lecture name
1	Introduction to Projects	1	10.45 am to 11.45am	11-02-2021	Ms.B.Kaviya
2	Introduction to Projects	1	03.00 pm to 04.00 pm	12-02-2021	Ms.B.Kaviya
3	Introduction to 3D Printing	1	10.45 am to 11.45am	15-02-2021	Ms.B.Kaviya
4	Introduction to 3D Printing	1	03.00 pm to 04.00 pm	16-02-2021	Ms.B.Kaviya
5	What is a Mesh?	1	10.45 am to 11.45am	17-02-2021	Ms.B.Kaviya
6	What is a Mesh?	1	03.00 pm to 04.00 pm	18-02-2021	Ms.B.Kaviya
7	Ctrl+P	1	10.45 am to 11.45am	19-02-2021	Ms.B.Kaviya
8	Ctrl+P	1	03.00 pm to 04.00 pm	22-02-2021	Ms.B.Kaviya
9	Gear Systems Part I	1	10.45 am to 11.45am	23-02-2021	Ms.B.Kaviya
10	Gear Systems Part I	1	03.00 pm to 04.00 pm	24-02-2021	Ms.B.Kaviya
11	Gear Systems Part II	1	10.45 am to 11.45am	25-02-2021	Ms.B.Kaviya
12	Gear Systems Part II	1	03.00 pm to 04.00 pm	26-02-2021	Ms.B.Kaviya
13	Dynamic Surfaces and Chains	1	10.45 am to 11.45am	29-02-2021	Ms.B.Kaviya
14	Dynamic Surfaces and Chains	1	03.00 pm to 04.00 pm	01-03-2021	Ms.B.Kaviya
15	The Future of Fabrication	1	10.45 am to 11.45am	02-03-2021	Ms.B.Kaviya
16	The Future of Fabrication	1	03.00 pm to 04.00 pm	03-03-2021	Ms.B.Kaviya
17	Midterm Exam	1	10.45 am to 11.45am	04-03-2021	Ms.B.Kaviya
18	Midterm Exam	1	03.00 pm to 04.00 pm	07-03-2021	Ms.B.Kaviya

19	4D Printing	1	10.45 am to 11.45am	08-03-2021	Ms.B.Kaviya
20	4D Printing	1	03.00 pm to 04.00 pm	09-03-2021	Ms.B.Kaviya
21	4D Printing	1	10.45 am to 11.45am	10-03-2021	Ms.B.Kaviya
22	Parametric Design	1	03.00 pm to 04.00 pm	11-03-2021	Ms.B.Kaviya
23	Parametric Design	1	10.45 am to 11.45am	14-03-2021	Ms.B.Kaviya
24	Parametric Design	1	03.00 pm to 04.00 pm	15-03-2021	Ms.B.Kaviya
25	Prototype Printing	1	10.45 am to 11.45am	16-03-2021	Ms.B.Kaviya
26	Prototype Printing	1	03.00 pm to 04.00 pm	17-03-2021	Ms.B.Kaviya
27	Prototype Printing	1	10.45 am to 11.45am	18-03-2021	Ms.B.Kaviya
28	Prototype Printing & Testing	1	03.00 pm to 04.00 pm	21-03-2021	Ms.B.Kaviya
29	Prototype Printing & Testing	1	10.45 am to 11.45am	22-03-2021	Ms.B.Kaviya
30	Prototype Printing & Testing	1	03.00 pm to 04.00 pm	23-03-2021	Ms.B.Kaviya

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A GRADE NAAC NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

CERTIFICATE OF PARTICIPATION

This is to Certify that BOYA NARESH, from Bharath Institute of Higher Education and Research, has participated in value added course on '**Course on 3D Printing**' presented by **Ms.B.Kaviya., Assistant Professor,** Organized by School of Civil & Infrastructure Engineering, Bharath Institute of Science & Technology, BIHER from 11.02.2021 To 23.03.2021.

B Kaviya
Coordinator

HOD

Head of the Dept.
Civil Engineering
Bharath Institute of Higher Education & Research,
Selaiyur, Chennai

VALUE ADDED COURSE

Feedback Form

Event Name: Course on 3D Printing

Event Venue: Date: 11/2/21 to 23/2/2021

Name of participant: Arun. K.

1. How useful did you think this event was for you?

(Please circle the appropriate number where 1 = not at all useful and 5 = extremely useful)

1	2	3	4	5 ✓

2. Value added course is useful and well organized.

YES ✓	NO

3. Did you receive all the information you required at this Venue?

YES ✓	NO

4. **Would you like to attend any further Training Courses VAC**

YES ✓	NO