

From

The HOD-EC,
SVCE

3-Aug-2018

To

The Principal,
SVCE

Respected Sir,

Sub: Request to conduct Seminar and Workshop on 3D-Printing Technology - reg

As suggested by you, the department will include the budget for purchasing a low cost 3D-Printer in the budget proposal for the next academic year 2019-20. In the present academic year (2018-19) budget has not been allocated for purchase of this equipment which is not in curriculum.

Being an emerging technology, the faculty members are also not familiar in this field. Hence we request you to kindly permit us to organize a free seminar followed by a two day workshop using the industry experts from Retech Solutions, Chennai, to both students and faculty members. This will enable the faculty members to gain some insight into the new technology and conduct such events in future to the students on our own. We request your permission to organize the workshop on 3D-Printing for the first time using industry experts. After purchase of low cost 3D-Printer, faculty members can train the students by conducting such workshops in future.

Autarky
HOD-EC

To: HOD-EC
Permitted to organize the Workshop this time
S. Prakash
6/8/18

A one day Workshop
on
3D-PRINTING Technology
(24th August 2018)



The Department of Electronics and Communication Engineering is organizing, one day workshop titled “3D-PRINTING Technology” on 24th Aug 2018

ABOUT THE WORKSHOP

The seminar and workshop are intended to give insights into **3D printing processes and manufacturing, Mechanical components, Electrical components, and ARDUINO basic programming** to the students.

3D printing is a form of additive manufacturing technology where a three dimensional object is created by laying down successive layers of material. It produce physical 3D models from digital data by printing layer by layer. It can make physical models of objects either designed with a CAD program. It is used in a variety of industries including jewelry, footwear, industrial design, architecture, engineering and construction, automotive, aerospace, dental and medical industries, education and consumer products.

The workshop will serve as a forum for experts from our college and the leading companies (M/s Rotech Solutions Pvt. Ltd., which offers Engineering Software Solutions and Industry standard tools leading to synergy of technologies in embedded design) to share their knowledge with the students & also this will be an eye opener for the students those who are desiring to get a job in hardware based companies.

WORKSHOP CONTENT

- ◆ 3D printing processes and manufacturing,
- ◆ Mechanical components
- ◆ Electrical components
- ◆ ARDUINO basic programming

RESOURCE PERSON:

Mr.E.Arun kumar
Vice-President,
Rotech Solutions Pvt. Ltd

CONVENER

Dr.S.Muthukumar
HOD, ECE Department

CO-ORDINATOR

Dr.S.R.Malathi,Asso.Prof-EC
Ms.T J Jeyaprabha, AP-EC

CO-COORDINATORS

Ms.R Kousalya, AP-EC
Ms.B.Sarala, AP-EC
Ms.M Anushya, AP-EC
Ms.M.Vidya, AP-EC
Ms.S Reethi, AP-EC

NUMBER OF PARTICIPANTS

Total No. of Students- 60

REGISTRATION FEE

Rupees 200/-



Registration Form

Name: _____

Branch: _____

Course/year: _____

Phone: _____

E Mail: _____

Preferred Tool: _____

Payment Details: _____

(Signature)



SRI VENKATESWARA COLLEGE OF ENGINEERING
Sriperumbudur - 602 117

**DEPARTMENT OF ELECTRONICS AND
COMMUNICATION ENGINEERING**

Cordially invites you to the

Seminar

on

3D-Printing Technology

Presented by

Mr.E.Arun kumar,

Vice-President, Retech Solutions Pvt Ltd

Venue : Function Hall


Date : 18th August 2018

Time : 10.30 a.m to 12.00 p.m

ALL ARE CORDIALLY INVITED

A Report on
Workshop On 3D Printing
Organized on 24/8/18 by the Department of ECE
Sri Venkateswara College of Engineering ,Sriperumbudur

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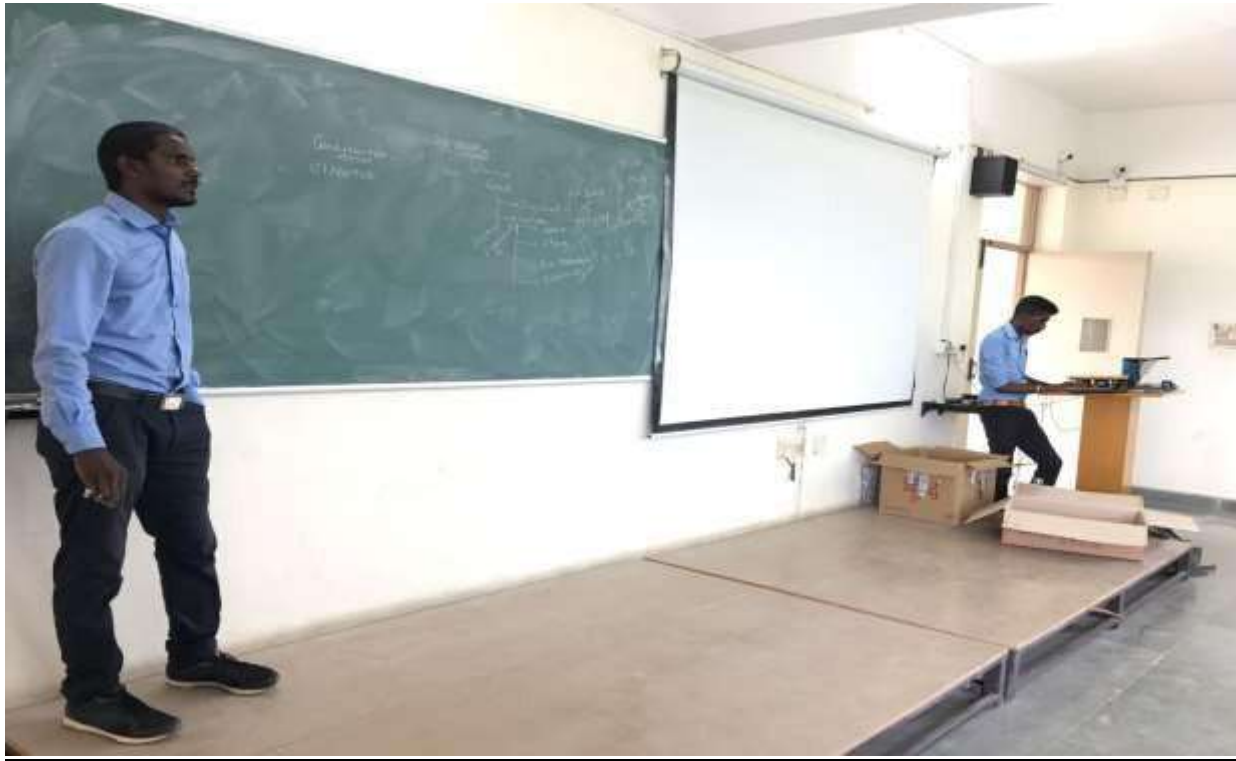
E Mail: _____

Preferred Tool: _____

Payment Details: _____

(Signature)

A seminar on 3D-Printing Technology was organized by the Department of ECE on 18/8/2018. About 120 of third year ECE students attended the seminar. The technical session was on introduction to 3D printing and 2D Plotting technology, it was handled by Mr. E.Arunkumar, ME(Ph.D), Vice President, ReTech Solutions Pvt. Ltd., Chennai.



In continuation of the Seminar, the Department of ECE organized, a one day workshop on “**3D Printing Technology**” on 24/8/18. The event was organized by Dr.S.Muthukumar, Dr.S.R.Malathi, Associate Professor and Ms.T.J.Jeyaprabha, Assistant Professor. The event was coordinated by Ms.R.Kousalya, Ms.B.Sarala, Ms.M.Anushya, Ms.M.Vidya, and Ms.S.Reethi, Assistant Professors, Department of ECE. About 60 ECE students participated in the workshop.



The forenoon session started with an welcome address given by Ms.T.J.Jeyaprabha, Assistant Professor. The welcome address was continued by the technical talk given by Mr. E.Arunkumar, ME(Ph.D), Vice President , ReTech Solutions Pvt. Ltd, Chennai. He presented a detailed lecture on 3D printing and 2D plotting process which involves in displaying an object in 3 dimensional structure and 2 dimensional plotting. Afternoon session was continued with demonstration and hands on session on 3D printing. The application of these printers in automobiles, biomedical, manufacturing and industry sectors was introduced by the technical expert.



Technical person also shared his experience to begin the startup. Students gave a very good response and gave a feedback that the workshop was very interactive and eye

opener for them to begin a start up in their future career.





The valedictory address was followed by certificate distribution to the participants. The event was successfully completed with our National Anthem.

T. S. Srinivas

EVENT COORDINATOR

Dr. Thirumala

Head of the Department
Electronics and Communication Engineering
Sri Venkateswara College of Engineering
Sriperumbudur - 602 117, India



“Technology drives the world.

We are the people who are behind the technology”

3D PRINTING

3D PRINTING

TOPICS TO BE COVERED

Session-1

- ✓ Introduction
 - ❖ What is 3d printing
 - ❖ History
 - ❖ Terminology
- ✓ General Principles
 - ❖ Modeling
 - ❖ Printing
 - ❖ Finishing

Session-2

- ✓ Additive processes
 - ❖ Extrusion deposition (Fused deposition modeling)
 - ❖ Granular materials binding
 - ❖ Lamination
 - ❖ Photo polymerization
 - ❖ Mask image projection based stereo lithography

Session-3

- ✓ Applications of Additive Manufacturing
 - ❖ Prototyping
 - ❖ Modeling
 - ❖ Custom parts

- ❖ Design
- ❖ Research
- ✓ Challenges Facing Additive Manufacturing

Session-4

- ✓ Components of 3d printer
 - ❖ Mechanical components
 - Frames
 - Slider and ram
 - Leadscrew
 - Bearings
 - Belt and pulley arrangements
 - Flexible shaft coupling
 - Extruder
 - ❖ Electrical components
 - Switch mode power supply (SMPS)
 - ARDUINO mega board
 - RAMPS 1.4
 - Stepper motor drive
 - Stepper motor
 - LCD display
 - Thermistor
 - Heat bed
 - Limit switch

Session-5

- ✓ ARDUINO basic programming
- ✓ Application software
 - ❖ ARDUINO IDE
 - ❖ 3D MODELING SOFTWARE (SOLIDWORKS)
 - ❖ SLIC3R
 - ❖ PRONTERFACE

SRI VENKATESWARA COLLEGE OF ENGINEERING
DEPARTMENT OF ECE

S.NO	ROLL NO	NAME	YEAR/SECTI ON	SIGNATURE
1	160701102	M. PRANAV KARNTH	3/B/ECE	<i>[Signature]</i>
2	160701146	R.S. Murthy	3/C/ECE	<i>[Signature]</i>
3	160701169	Venkateshwarar Venkesh K	3/C/ECE	<i>[Signature]</i>
4	160701149	SRIRAM-E	3/C/ECE	<i>[Signature]</i>
5	160701117	R. Raghu Raj Mohan	3/B/ECE	<i>[Signature]</i>
6	160701098	V. Vittalish	3/B/ECE	<i>[Signature]</i>
7	160701168	S. Venkatasamanan	3/C/ECE	<i>[Signature]</i>
8	160701501	N. Madhu Sudhanan	3/C/ECE	<i>[Signature]</i>
9	160701107	A. Praveen	3/B/ECE	<i>[Signature]</i>
10	160701105	K. Prathap Rane	3/B/BCP	<i>[Signature]</i>
11	160701091	S. P. Muthukumar	2/B/ECE	<i>[Signature]</i>
12	160701082	A. Manish Bharathi	3/B/ECE	<i>[Signature]</i>
13	160701090	S. Muthiah Bhuvaneshwar	3/B/ECE	<i>[Signature]</i>
14	160701103	S. Prasanna	3/B/ECE	<i>[Signature]</i>
15	160701143	Shwaram	3/C/ECE	<i>[Signature]</i>
16	160701136	Sathyanarayana R	3/C/ECE	<i>[Signature]</i>
17	160701132	Santhosh Kumar K	3/C/ECE	<i>[Signature]</i>
18	160701160	Sruya Narayanan T.G.	3/C/ECE	<i>[Signature]</i>
19	16070158	V. G. Sureshan	3/C/ECE	<i>[Signature]</i>
20	160701171	M. Vigneshwar	3/C/ECE	<i>[Signature]</i>
21	160701124	Sri Nishikhal	3/C/ECE	<i>[Signature]</i>
22	160701153	M.K. Subramaniya Ramar	3/C/ECE	<i>[Signature]</i>
23	160701129	D.M. Sameer	3/C/ECE	<i>[Signature]</i>
24	160701172	K. Vinay Anand	3/C/ECE	<i>[Signature]</i>
25	160701150	N-SRIVISHAVU	3/C/ECE	<i>[Signature]</i>
26	170701036	K. Gokulakrishnan	2nd/A/ECE	<i>[Signature]</i>
27	170701010	T.K. Ajith	2/A/ECE	<i>[Signature]</i>
28	160701068	S. Karthikeyan	3 rd /B/ECE	<i>[Signature]</i>
29	160701093	S. MUTHOMANICKAM	3/B/ECE	<i>[Signature]</i>
30	160701061	S. Jaya Prakash	3/B/ECE	<i>[Signature]</i>
31	170701092	S. Nithish	II/B/ECE	<i>[Signature]</i>
32	170701062	D. KEERTHI RAJ	II/B/ECE	<i>[Signature]</i>
33	170701072	R. Lakshmi Narayanan	II/B/ECE	<i>[Signature]</i>
34	170701127	Shanmugam S	II/C/ECE	<i>[Signature]</i>
35	170701136	Sudesh Kumar S	II/C/ECE	<i>[Signature]</i>
36	170701121	K. Sandeep Pai	II/C/ECE	<i>[Signature]</i>
37	170701118	K. Srirom	II/C/ECE	<i>[Signature]</i>
38	170701120	S.R. Sakthi Sureshman	II/C/ECE	<i>[Signature]</i>
39	160701076	S. LOGESWARAN	III/B/ECE	<i>[Signature]</i>
40	160701083	Marennagari Preetham	III/B/ECE	<i>[Signature]</i>
41	160701086	Mohana Krishna S	III/B/ECE	<i>[Signature]</i>
91	160701135	Sasikumar	III/C/ECE	<i>[Signature]</i>

S.NO	ROLL NO	NAME	YEAR/SECTION	SIGNATURE
42	160701111	S.A. PRAVIN BALAJI	III / 'B'	S.A.P.
43	160701073	B. KISHOR KUMAR	III / B / FCE	B. Kishor
44	160701064	M. JOSHIWA ALBERT	III / B	M. Joshiwa
45	160701060	N. Jayanthi Adithya	III / B	N. Jayanthi Adithya
46	160701106	M. Prathibha	III / B	M. Prathibha
47	160701101	H. PIRANAVAKUMAR	III / B	H. Piranavakumar
48	160701116	Ragha Venkandan	III / B	Ragha Venkandan
49	160701109	Praveen Sankaran VJ	III / B	Praveen Sankaran VJ
50	160701009	Murali kishor P.M.	III B	Murali kishor P.M.
51	160701069	Karunai Velam. M	III B	Karunai Velam. M
52	160701110	N. Praveen kumar	III B	N. Praveen kumar
53	160701097	P. Nizamal kumar	III - B	P. Nizamal kumar
54	160701079	R. Madhumitha	III - B	R. Madhumitha
55	160701078	D. Madhu Mitta	III - B	D. Madhu Mitta
56	160701087	N. MONICA	III - B	N. Monica
57	160701096	J. NANDHINI	III - B	J. Nandhini
58	160701063	C. Jenifer Christina	III - B	C. Jenifer Christina
59	160701151	SUBHASHINI. C	III, FCE - C	S. Subhashini
60	160701131	J. SANGAVI	III - C	J. Sangavi
61	160701133	SARADHA DEVI. V	III - C	S. Saradha Devi. V
62	160701062	T. JAYASHRI	III - B	T. Jayashri
63	160701072	R. KECHAYAPRIYA	III - B	R. Kechayapriya
64	160701071	S. KEERTHI	III - B	S. Keerthi
65	160701094	V. NADHAYA	III - B	V. Nadhaya
66	160701075	P. INVANYA	III - B	P. Invanya
67	160701070	A. KAVIYAPRIYA	III - B	A. Kaviyapriya
68	160701074	KOMALESHWART - R	III - B	K. Komaleshwart - R
69	160701066	KAMATCHI A - B	III - B	K. Kamatchi A - B
70	160701099	NIVEDIKA. D. L	III - B	N. Nivedika. D. L
71	160701141	R. Sharon Paul	III - C	R. Sharon Paul
72	160701145	S. Sridha Bharathi	III - C	S. Sridha Bharathi
73	160701120	R. Ramya	III - C	R. Ramya
74	160701162	S. Sweta shrimidhi	III - C	S. Sweta shrimidhi
75	160701152	P.S. Subiksha	III - C	P.S. Subiksha
76	160701177	M. Yamunaa	III - C	M. Yamunaa
77	160701095	S. Nagashruthi	III - C	S. Nagashruthi
78	160701113	R. PRIYADHARSHINI	III - B	R. Priyadharsini
79	160701035	Meghana. CH	III - B	Meghana. CH
80	160701166	R. VAISHANAVI	III - B	R. Vaishanavi
81	160701122	RIYA MARIAM THOMAS	III / 'C'	Riya Mariam Thomas
82	160701139	SHALINI. V	III - C	S. Shalini. V
83	160701100	RAMYA SREE. P	III - C	R. Ramya Sree. P
84	160701080	V. MADUMITHA	III - B	V. Madumitha
85	160701081	M. MAHALAKSHMI	III - B	M. Mahalakshmi
86	170701012	E. R. AKSHAYA	III - C	E. R. Akshaya
87	160701156	N. K. Suganya	III - C	N. K. Suganya
88	160701173	S. VIJETA	III - C	S. Vijeta
89	160701167	V. VANJILA	III - C	V. Vanjila
90	160701165	K. THADSANA	III - C	K. Thadsana

T. J. S. S. S.

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