

# **SRI VENKATESWARA COLLEGE OF ENGINEERING**

*(An Autonomous Institution, Affiliated to Anna University, Chennai)*

Pennalur, Sriperumbudur Taluk – 602117.

Department of Mechanical Engineering



**THREE DAY WORKSHOP Report**

on

**NATIONAL WORKSHOP ON INDUSTRY 4.0**

Venue	: FUNCTION HALL
Date	: 29.08.2019 to 31.08.2019
Time	: 09:00am to 12:15pm & 01:00pm to 03:15pm

  
Coordinator



  
Hod

Dr. S. RAMESH BABU, M.E., Ph.D  
Professor & Head  
Department of Mechanical Engineering  
Sri Venkateswara College of Engineering  
Pennalur, Sriperumbudur (TK) - 602117  
Tamilnadu, INDIA

**Registration Form****Programme Schedule**

Name:

Designation:

Name of the College/Company:

Address:

Phone Number:

Email id:

Place:

Date:

Signature

	<b>FN</b>	<b>AN</b>
<b>Day 1 (29.08.2019)</b>	Inauguration	<b><u>Session 3</u></b> Smart factories
	<b><u>Session 1</u></b> Overview of Industry 4.0 through Siemens' Equipment	<b><u>Session 4</u></b> Overview of AI, ML, Big data and Cloud computing
	<b><u>Session 2</u></b> Industry 4.0 Architecture	
<b>Day 2 (30.08.2019)</b>	<b><u>Session 5</u></b> Engineering Analytics	<b><u>Session 7</u></b> IoT Lab/ AI & Cloud computing Lab
	<b><u>Session 6</u></b> IoT Lab/ AI & Cloud computing Lab	
<b>Day 3 (31.08.2019)</b>	<b><u>Session 8</u></b> Smart Manufacturing in Industry 4.0	Valedictory & Closing Ceremony
	<b><u>Session 9</u></b> Design for Additive Manufacturing	
	<b><u>Session 10</u></b> Digitization process in Saint Gobain	

**SRI VENKATESWARA COLLEGE OF ENGINEERING**  
**Internal Quality Assurance Cell (IQAC) and Department of Mechanical Engineering**  
**Three day National Workshop on Industry 4.0**

<b>Programme Schedule</b>		
<b>Day 1(29/08/19)</b>		
<b>Forenoon</b>	<b>Resource Person</b>	<b>Time</b>
Inauguration and address on Digitization	Chief Guest- Dr.S.Kalirajan, Head-Special Initiatives (Nuclear), L & T Construction Ltd.	9 A.M-10 A.M
Session 1 - Presentation on Overview of Industry 4.0 about Siemens Mechatronics - I 4.0 Kit.	Mr.Praveen Pai - Sr.Manager and Mr. Vigneshwaran - Engineer, Customer Services, Siemens India Ltd.	10 A.M - 11 A.M
<b>Tea Break</b>		11 A.M- 11.15 A.M
Session 2 - Industry 4.0 Architecture	Technical Consultant - I 4.0, TVS Training Centre, Chennai	11.15 A.M-12.15 P.M
<b>Lunch Break</b>		12.15 P.M - 1 P.M
<b>Afternoon</b>		<b>Time</b>
Session 3 - Smart factories	Technical Consultant - I 4.0, TVS Training Centre, Chennai	1 P.M - 2 P.M
<b>Tea Break</b>		2 P.M- 2.15 P.M
Session 4- Overview of Cloud computing, Artificial Intelligence, Machine learning, Bigdata and IoT	Dr.R.Anitha, HOD, Dept. of Computer Science and Engg.	2.15 P.M - 3.15 P.M
Closing for the day		3.15 P.M
<b>Day 2 (30/08/19)</b>		
<b>Forenoon</b>	<b>Resource Person</b>	<b>Time</b>
Session 5 - Case Studies on Engineering Analytics	Mr.R.Arjun, Gyandata, IITM-RP, Chennai	9 A.M-10 A.M
<b>Tea Break</b>		10 A.M - 10.15 A.M
Session 6 - IoT Lab/ AI & Cloud Lab	Dept. of IT / Dept. of CSE, SVCE	10.15 A.M- 12.30 P.M
<b>Lunch Break</b>		12:30 P.M- 1:30 PM
<b>Afternoon</b>		<b>Time</b>
Session-7 AI & Cloud Lab / IoT Lab	Dept. of CSE / Dept. of IT , SVCE	1.30 P.M-4.00 PM
Closing for the day		4.00 P.M
<b>Day 3 (31.08.19)</b>		
<b>Forenoon</b>	<b>Resource Person</b>	<b>Time</b>
Session 8 - Smart Manufacturing in Industry 4.0	Dr.K.Senthilkumaran, Asst.Prof. / IIITDM	9.15 A.M - 10:15 A.M
<b>Tea Break</b>		10:15 A.M- 10:30 A.M
Session 9 - Design for Additive manufacturing	Dr.K.Senthilkumaran, Asst.Prof. / IIITDM	10:30 A.M - 11:30 A.M
Session 10-Digitization process in Saint Gobain	Mr.Murali Chadrahasan, Head-INDEC 4.0, Saint Gobain, IITM-Research Park, Chennai	11.30 A.M-12.30 P.M
<b>Lunch Break</b>		12.30 P.M- 1.30 P.M
Valedictory & Closing ceremony		1:30 P.M - 2 P.M
Closing the workshop		2.00 P.M

**Department of Mechanical Engineering**  
**SRI VENKATESWARA COLLEGE OF ENGINEERING**  
**National level workshop on Industry 4.0 organized by IAQC & Dept of Mechanical SVCE,**  
**from 29.08.19 to 31.08.19**

**Coordinators:**

Dr C Gopinath, Prof/MEC, SVCE,  
Mr K Ramprasad, AP/MEC, SVCE &  
Mr M Nishal, AP/MEC, SVCE.

**Resource Person Details:**

1. **Dr.S.Kalirajan, L&T -ECC, Chief Guest**
2. **Mr.PraveenPai, Sr.Manager and Mr. Vigneshwaran – Engineer- Customer Services, Siemens India Ltd**
3. **Mr.R.Arjun, Gyandata**
4. **Dr.K.Senthilkumaran, Asst Prof / IIITDM**
5. **Mr.MuraliChadrahasan, Head-INDEC 4.0, Saint Gobain**

**Participation Details:**

No of internal students from SVCE - 85  
No of external students - 5  
No of faculty from SVCE - 15  
No of faculty from other colleges - Nil  
Total No of participants for workshop - **105**

**One page Write up about the program:**

Industry 4.0 is an integrated approach to manufacturing that is centered in and around a computer system. The transition has become more popular with the rise in the quantity and quality of computer systems in manufacturing plants. It allows real-time inventory monitoring which allows companies to master their whole production line and intervene when it is necessary to adapt the product to the changing market.

The increasing digitization of industrial processes also across organizations sometimes labelled industry 4.0 or smart manufacturing, however, requires a more holistic and connected perspective. This workshop tends to address the basic question everyone is trying to answer is “Why do we need to evolve or adapt to Industry 4.0”. This workshop addresses the need for Industry 4.0 by Industrial Experts from **SIEMENS, SAINT GOBAIN, L&T – ECC and TVS Training Centre**. Industries are also looking to incorporate Additive manufacturing within the

system to increase production for complex parts with reduced time; Professor from IITDM gives a profound insight about Additive manufacturing. This workshop allow us to have the idea about the Architecture, framework and platform with basic coding involved in Industry 4.0, both theory and Practical Knowledge could be earned.

**Star Performer Faculty Details:**

Dr.S.Muniraj. Assistant Professor,SVCE, Mob: 9994042052

**Star Performer Student Details:**

V.Raaghul, III year -Mechanical, Mob:7395953445

**ATTENDANCE SCANNED COPY:**

Sheet1

S.NO	NAME	BRANCH	YEAR	SECTION	SIGNATURE
1	Lokeshwaran A	MECH	3	A	A. Lokesh
2	Bharani G	MECH	3	A	G. Bharani
3	Karthick Raja V	MECH	3	A	K. Raja
4	Adarsh krishnaa V	MECH	3	A	V. Adarsh
5	Justin Rejimone	MECH	3	A	Justin
6	Che Ram Chandru S	MECH	3	A	C. Ram Chandru
7	Balaji R	MECH	3	A	R. Balaji
8	Arun B	MECH	3	A	B. Arun
9	Ashwin Anil	MECH	3	A	A. Ashwin
10	Arun Eashwar RK	MECH	3	A	R. Arun
11	Arun Balaji A	MECH	3	A	A. Arun
12	Nishantan B	MECH	3	A	B. Nishantan
13	Aniketh	MECH	3	A	A. Aniketh
14	Dhanush B	MECH	3	A	B. Dhanush
15	Giridaran T.C	MECH	3	A	T. Giridaran
16	Balachandar P	MECH	3	A	P. Balachandar
17	Abhishek Raja R	MECH	3	A	R. Abhishek
18	Hari kumar P	MECH	3	A	P. Hari Kumar
19	Naveen S	MECH	3	A	S. Naveen
20	Gokul R	MECH	3	A	R. Gokul
21	Gagan Agarwal	MECH	3	A	A. Gagan
22	Ashwath R	MECH	3	A	R. Ashwath
23	Akshay Mohan	MECH	3	A	M. Akshay
24	Akash D	MECH	3	A	D. Akash
25	Dhruv S	MECH	3	A	S. Dhruv
26	Naveen Kumar M	MECH	3	A	M. Naveen
27	Arun Nachiappan AR	MECH	3	A	A. Nachiappan
28	Nithish Kumar R	MECH	3	B	R. Nithish
29	Rohan Adhikari P	MECH	3	B	P. Rohan
30	Raaghul V	MECH	3	B	V. Raaghul

SVCT \* 91 P. Pradeepan  
 SVCT \* 92 A. Augustin Emmanuel  
 93. R. Sathiyadane  
 93. M. Girind

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 Mech 3  
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A. Augustin



# THREE DAY NATIONAL WORKSHOP ON INDUSTRY 4.0

29-31 AUGUST 2019

INDUSTRY 4.0



Organised by

**Internal Quality Assurance Cell (IQAC) & Department of Mechanical Engineering**

Sri Venkateswara College of Engineering

(Autonomous - Affiliated to Anna University, Chennai)  
Pennalur, Sriperumbudur Taluk - 602 117

Date

August 29-31, 2019

Venue

Function Hall,  
Sri Venkateswara College of Engineering

Contact

Dr. S. Gopinath  
Professor/Mechanical,  
IQAC Coordinator,  
Mr. M. Nishal  
Mr. K. RamPrasad  
Mr. R. Ganesan  
Assistant Professors  
Department of  
Mechanical Engineering

Email id: [sgopi@svce.ac.in](mailto:sgopi@svce.ac.in)  
044- 27152000 (Ext: 408) /  
9445115107

Registration fee for Scholars,  
SVCE Faculty & Students - Rs 500

Other College Faculty - Rs 750

Industrial Person - Rs 1000

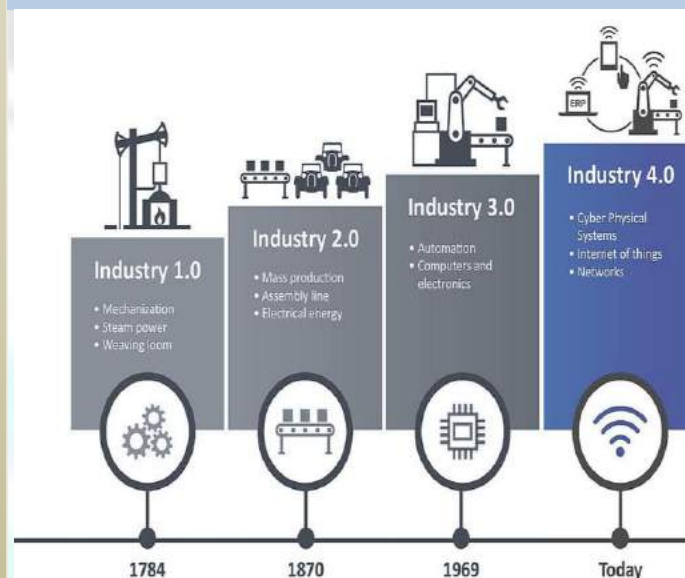
SVCE is a unit of Sri Venkateswara Educational and Health Trust (SVEHT). The trust was founded on 1 August 1984 at the behest and benign blessings of His Holiness Pujashree Kanchi Kamakoti Peedathipathi Sri Jeyendra Saraswathi Swamigal. Dr.A.C.Muthaih a renowned engineer, industrialist and philanthropist, is the Chairman of the Governing Council of the college.

**Internal Quality Assurance cell in SVCE** is to facilitate a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

**The Department of Mechanical Engineering** is one of the three major departments established right from the beginning of the College. The department has well experienced faculty and staff members of proven ability and administrative skills with well-equipped state-of-the-art laboratories.

**Industry 4.0** is an integrated approach to manufacturing that is centered in and around computer system. The transition has become more popular with the rise in the quantity and quality of computer systems in manufacturing plants. It allows real-time inventory monitoring which allows companies to master their whole production line and intervene when it is necessary to adapt the product to the changing market.

The increasing digitization of industrial processes also across organizations sometimes labelled industry 4.0 or smart manufacturing, however, requires a more holistic and connected perspective. This workshop tends to address the basic question everyone is trying to answer is "Why do we need to evolve or adapt to Industry 4.0". This workshop addresses the need for Industry 4.0 by Industrial Experts from **L&T CONSTRUCTION, SIEMENS, SAINT GOBAIN, TVS TRAINING CENTRE and GYANDATA**. Industries are also looking to incorporate additive manufacturing within the system to increase production for complex parts with reduced time; Professor from **IITDM** gives a profound insight about additive manufacturing. This workshop allow us to have the idea about the architecture, framework and platform with basic coding involved in Industry 4.0, both theory and practical knowledge could be earned.



## CONTENT COVERED

Importance of digitization,  
Overview of Industry 4.0.

Insight on Smart Factories.

Overview of cloud computing, AI, Machine Learning, Bigdata and IoT.

Engineering Analytics.

IoT, AI & Cloud Computing Practices (Hands on).

Additive Manufacturing.