

training and exchange of experiences Such as workshops, Orientations, learning communities, peer mentoring and other faculty development programmes. To support policy makers for incorporating training as per requirements

### Eligibility

The faculty members of AICTE approved Institutions, Universities, research scholars; participants form Government, Industry (Bureaucrats/Technicians/Industry experts etc.) and professionals from R&D labs. Number of participants is limited to 200. There is no course fee and preference will be given to new participants. Selection of the participants will be based on the first come first serve basis.

### REGISTRATION DETAILS

Registration has to be done only through <https://atalacademy.aicte-india.org/>  
For more information, kindly visit <https://aralacademy.aicte-india.org/FAQs>

### IMPORTANT DATES

Receipt of applications (Online): 25th January 2022

Information to the selected candidates: 27th January

2022 FDP duration: 31st January – 4th Feb 2022.

Note: The participants are advised to apply online at AICTE ATAL registration portal <https://atalacademy.aicteindia.org/signup> on or before 25th January 2022 for the final registration.

### CHIEF PATRONS

**Shri. T. R. Paarivendhar**, Chancellor, SRMIST

**Shri. Ravi Pachamoothoo**, Pro-Chancellor (Administration), SRMIST

**Shri. P. Sathyanarayanan**, Pro-Chancellor (Academics), SRMIST

**Shri. R. Shivakumar**, Vice President, SRMIST

**Prof. Dr. C. Muthamizhchelvan**, Vice Chancellor, SRMIST

**Prof. Dr. S. Ponnusamy**, Registrar, SRMIST

### ADVISORY COMMITTEE

**Dr. T. V. Gopal**, Dean CET, SRMIST

**Dr. D. Kingsly Jeba Singh**, Chairperson, School of Mechanical Engineering, SRMIST

**Dr. M.Cheralathan**, Professor and Head, Department of Mechanical Engineering

### COORDINATOR

**Dr. T. Rajasekaran**, Professor, Department of Mechanical Engineering, SRMIST

### FOR FURTHER CLARIFICATIONS PLEASE CONTACT

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**Dr. E. Vijayaragavan**

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### TEST AND CERTIFICATE

1. A Test will be conducted at the end of the Program.
2. The certificates shall be issued to those participants who have attended the program with minimum 80% attendance and scored 60% in the Test.



**SRM**  
INSTITUTE OF SCIENCE & TECHNOLOGY  
(Deemed to be University u/s 3 of UGC Act, 1956)

**Six Days**

**Faculty Development Program**

**on**

**IMPACT OF INDUSTRY 4.0 ON  
INDUSTRIES AND ACADEMIA**

**22<sup>nd</sup> - 27<sup>th</sup> January 2024**

*Coordinator*

**Dr. T. Rajasekaran**

*Co-Cordinator*

**Dr. E. Vijayaragavan**

**Sponsored by**



**AICTE Training And Learning (ATAL)  
Academy**

**Organized by**

**DEPARTMENT OF MECHANICAL ENGINEERING  
SRM Institute of Science and Technology,  
Kattankulathur -603203.**

Chengalpattu (DT), Tamil Nadu, India.  
<https://www.srmist.edu.in/department/department-of-mechanical-engineering/>

## About the SRMIST

SRM Institute of Science and Technology (formerly known as 'SRM University') is located in an extensive sylvan campus of 380 acres skirting the National Highways (NH145), in the outskirts of Chennai. SRMIST is one of the top ranking Universities and most premier engineering destinations in India, which was established in 1985 by the Founder Chancellor, Dr. T. R. Paarivendhar. Now it is functioning in campuses located at Kattankulathur, Ramapuram, Vadapalani, Modi Nagar (Ghaziabad), and Tiruchirappalli with over 52000 students and 3200 faculty members, offering wide range of undergraduate, postgraduate and doctoral programs in Engineering, Management, Medicine & Health Sciences, Agriculture, Law and Science & Humanities. The Institution has moved up through international alliances and collaborative initiatives to achieve global excellence. SRMIST also collaborates with various foreign Universities. Now the Institute enjoys an unsurpassed reputation in academic and corporate circles being the preferred manpower source for vision to be recognized as a world - class learning institution. SRMIST has been accorded Category I status by MHRD-UGC of Government of India and also accredited by NAAC with 'A++' Grade in the year 2018.

## ABOUT THE DEPARTMENT

The Department of Mechanical Engineering, established in 1985, is one of the pioneering departments of SRM IST. The present faculty strength is 115, of which around 50% are with

PhD, and the rest are on the verge of completion. More than 1200+ research papers have been published in leading international journals with high impact factor and more than 1000 papers have been presented in international conferences. The department is functionally divided into three broad areas of specialization: (i) Design (ii) Manufacturing and (iii) Thermal. The department also offers Doctoral programs in these three areas of specializations. The National Board of Accreditation has accredited the Mechanical Engineering programme for six years, from the year 2021 to 2027. The B.Tech. – Mechanical Engineering program at the Kattankulathur campus is accredited by the Engineering Accreditation Commission of ABET, <https://www.abet.org>. The department offers Semester Abroad Program for our UG students in which they will be given the opportunity of a lifetime to spend a semester at some of the best universities in the world, such as – Carnegie Mellon, Northeastern University, SUNNY Buffalo, University of Wisconsin, UC Berkeley, George Mason, New Hampshire, Lille Catholic University, University of Western Australia, Western Ontario, Queen's University and many others.

## ABOUT THE PROGRAM

Industry 4.0, which is Fourth industrial revolution, a blend of Internet of Things, Big Data, data analytics, Robotics & Automation, AR, VR, XR technologies, Artificial Intelligence, and Process Digitization. Industry 4.0 plays an important role in industries of manufacturing and engineering in nature, automotive and process industries, as well as the semi conductor industries along with

information and communications industries. It a technology that aims on interconnectivity, automation, machine learning, and real- time monitoring among the machines and processes. The fourth industrial revolution plays an important role in making long-term manufacturing efficiency possible. The industrial sector is required to lean as well as agile processes . Industry 4.0 will help companies create efficient manufacturing processes with increased production, energy, and resource efficiency. The fourth industrial revolution has been characterized by the increasing digitization and interconnection of products, value chains and business models.

## OBJECTIVES OF THE FDP

The main objective of conducting FDP is to fill the gap between industry and academics and to transfer knowledge of Industry 4.0 by imparting quality training (Both theory and hands-on) to participants. The course will be handled by industry and academia experts from reputed organizations.

## AICTE –TEACHING AND LEARNING (ATAL) ACADEMY

The main objectives of the ATAL Academy are To plan and help in imparting quality technical education in the country a To support technical institutions in fostering research, innovation and entrepreneurship through training in various emerging areas. To stress upon empowering technical teachers & technicians using Information & Communication Technology To utilize SWAYAM platform and other resource for the delivery of trainings. To provide a variety of opportunities for

**Department of Mechanical Engineering**

**SRM Institute of Science and Technology, Kattankulathur – 603203**

**ATAL Academy FDP Tentative schedule for six days**

<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>	<b>Day 4</b>	<b>Day 5</b>	<b>Day 6</b>
Inauguration: 9.00 – 9.30 am					
9.30 am – 12.00 noon: Session I <b>Introduction to Industry 4.0</b> <b>Shri. Mathan, Sundaram Fasteners</b>	9.30 am – 12.00 noon: Session III: <b>Importance of industry 4.0 in industries – CV. Gowrishankar, Ashokleyland, Chennai</b>	9.30 am – 12.00 noon: Session V: <b>Cloud computing and cyber security – Dr. Priyaadarshinini, VIT Chennai</b>	9.30 am – 12.00 noon: Session VII <b>Role of Digital twin – Dr. N. Arunachalam, IIT Madras</b>	9.30 am – 12.00 noon: Industrial visit	9.30 am – 12.00 noon: Session X: <b>Beyond Industry 4.0 – Seeram Ramakrishna, Professor, NUS, Singapore</b>
12.00 – 1.00: Article discussion	12.00 – 1.00: Article discussion	12.00 – 1.00: Article discussion	12.00 – 1.00: Article discussion		12.00 – 1.00: Reflection journal
1.00 pm – 2.00 pm: Lunch	1.00 pm – 2.00 pm: Lunch	1.00 pm – 2.00 pm: Lunch	1.00 pm – 2.00 pm: Lunch	1.00 pm – 2.00 pm: Lunch	1.00 pm – 2.00 pm: Lunch
2.00 pm – 4.30 pm: Session II: <b>IoT in Industries</b> <b>Mrs. Lakshmi, Factory Managr, Caterpillar</b>	2.00 pm – 4.30 pm: Session IV: <b>Towards Industry 5.0</b> <b>Dr. Paneerselvam Ramasamy, MSME Technology Centre</b>	2.00 pm – 4.30 pm: Session VI: <b>Digital transformation- Digital machining – Dr.P.Hariharan, Anna University, Chennai</b>	2.00 pm – 4.30 pm: Session VIII: <b>AR/VR Technologies –Head AR/VR Tech, SRMIST</b>	2.00 pm – 4.30 pm: Session IX: <b>Stress management – Head, Yoga centre, SRMIST</b>	2.00 pm – 4.00 pm: MCQ, Feedback, Interaction
4.30 pm – 5.30 pm Hands on	4.30 pm – 5.30 pm Hands on	4.30 pm – 5.30 pm Hands on	4.30 pm – 5.30 pm Hands on	4.30 pm – 5.30 pm Hands on	4.00 pm – 5.00 pm Valedictory