

## ABOUT THE PROGRAMME

The goal of this program is to empower educators with vital knowledge about Digital Transformation in Manufacturing processes across all areas of production to create an integrated approach. Throughout the program, they will delve into various aspects of modern manufacturing Technologies. These insights will keep educators up-to-date with Industry 4.0 and 5.0 which is a new concept that focuses on collaboration between humans and machines. The program also covers hands on training in 3D printing, Laser cutting and engraving, PCB making, CNC wood router machines.

## About the FDP

Participants will engage in hands-on activities, article discussions, and interactive sessions of Digital transformation in manufacturing. Additionally, the program facilitates networking opportunities, allowing educators to collaborate with experts and industry professionals. The goal is to create sustainable products and services.

## ORGANIZING COMMITTEE

### CHIEF PATRON

**Shri.M.Dhanasekaran**  
Chairman and Managing  
Director, SMVE Trust

### PATRON

**Dr.K.Naranasamy**  
Secretary, SMVE Trust  
**Shri. D. Rajarajan**  
Treasurer, SMVE Trust  
**Shri. S. Velayudham**  
Joint Secretary, SMVE Trust

### CONVENER

**Dr.V.S.K.Venkatachalapathy**  
Director cum Principal, SMVEC

### COORDINATOR

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**CO - COORDINATOR**

### Dr.L.Martin

**Associate Professor, Mechanical ,**  
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## Resource Persons

Eminent faculty from, IIT, NIT's and other renowned institutions, experts from industries will deliver lectures.



**AICTE Training and Learning Academy  
(ATAL) Sponsored)**

**Two Weeks  
Faculty Development Program (FDP)  
on**

**Digital Transformation in  
Manufacturing- Industry 4.0 and 5.0**

**09- 21 Dec 2024**



**Organized by**

**SMVEC AICTE IDEA LAB  
SRI MANAKULA VINAYAGAR  
ENGINEERING COLLEGE  
Madagadipet, Puducherry - 605107**

## COURSE CONTENT

### Proposed Topics:

- Additive manufacturing
- Augmented reality
- Autonomous robots
- Big Data and analytics
- Cloud connectivity
- Cybersecurity
- Horizontal and vertical system integration
- The Internet of Things (IoT)
- Simulation and digital twins

## ABOUT ATAL ACADEMY

The objective of ATAL scheme is “To plan and help in imparting quality technical education in the country and to support technical institutions in fostering research, innovation and entrepreneurship through training in various emerging areas”

## HOW TO APPLY?

The applicants should register at AICTE-ATAL web Portal at the earliest.

Website:<https://atalacademy.aicte-ndia.org/>  
No Registration Fee

**Last date to register in AICTE ATAL portal : 02.12.2024**  
**Date of Faculty Development Programme : 09.12.2024**

## ABOUT THE COLLEGE

Sri Manakula Vinayagar Engineering College, affiliated to Pondicherry University was established in the year 1999 with a vision to offer quality and affordable Education to the weaker sections of the society and to widen Technical Education in the society. The institute has been accredited by National Assessment and Accreditation Council (NAAC) in 2 cycles with “A” grade. The institution has grown into autonomous status and admitting students in the same curriculum with effect from 2020-2021 academic year. It offers 13 Undergraduate Programs (UG) including CSBS course supported by TCS, 1 B.Arch 8 postgraduate programs including MBA and MCA and 11 Research programs (Ph.D) and 14 programs in School of Arts & Science, 14 programs in School of Allied Health Sciences and 4 Diploma programs & Certification course in Medical Sciences in its journey of 25 years of academic excellence. To optimize leading edge technology and streamlining students’ knowledge across wide range of areas, the institute has signed MOU with Train Lab Academy and established 17 Center of Excellence to provide 90+ International Certification courses from IBM, Google, etc., With the motto of promoting skill based entrepreneurs by providing unprecedented assistance to explore students’ untapped creativity, it has initiated MSME sponsored TBI Cell to nurture the innovative ideas into products, thereby applying for patents. Moreover, the institute received 1.5 crore fund from AICTE to establish IDEA Lab through which training is provided to students for enriching creative thinking, problem solving skills and collaborative work. It provides all the facilities under one roof for conversion of ideas into prototype.

## ABOUT IDEA LAB

AICTE-IDEA Labs are being established in engineering colleges across India to help students develop their creative and problem-solving skills. These labs will provide students with the facilities and resources they need to turn their ideas into prototypes.

IDEA Labs will have a wide range of equipment and tools, such as 3D printers, laser cutters, and electronics kits. Students will be able to use these resources to design and build their own projects.

In addition to providing technical skills, IDEA Labs will also help students develop 21st century skills such as critical thinking, collaboration, and communication. Students will be encouraged to work together on projects and to present their work to others.

The ultimate goal of IDEA Labs is to transform engineering education and to help students become more creative and innovative.

## TARGETED PARTICIPANTS

Faculty members, research scholars, PG students, industrial persons working in Engineering domain