ABOUT THE PROGRAMME

The goal of this program is to empower educators with vital knowledge about Digital Manufacturing Technologies' significance in 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 digital manufacturing and enable them to effectively teach the importance of smart manufacturing. The program also covers hands on training in 3D printing, Laser cutting and engraving, PCB making, CNC wood router machines.

OUTCOME OF THE PROGRAMME

Participants will engage in hands-on activities, article discussions, and interactive sessions of Digital Manufacturing technology concepts. Additionally, the program facilitates networking opportunities, allowing educators to collaborate with experts and industry professionals in the Digital Manufacturing domain.

ORGANIZING COMMITTEE

CHIEF PATRON
Shri.M.Dhanasekaran
Chairman and Managing Director
SMVE Trust

PATRON
Shri.S.V.Sugumaran M.L.A.,
Vice Chairman, SMVE Trust
Dr.K.Narayanasamy
Secretary, SMVE Trust

CONVENER
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Director cum Principal, SMVEC

COORDINATOR
Dr.K. Velmurugan
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CO - COORDINATOR
Dr.L.Martin
Associate Professor, Mechanical , +91 9715636697

Resource Persons

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

AICTE Training and Learning Academy (ATAL) Sponsored)

One Week
Faculty Development Program (FDP)
on

Digital Manufacturing technology

11– 16 Dec 2023

Organized by

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

COURSE CONTENT

Proposed Topics:

- 3D Scanner
- 3D Reverse Engineering Software
- Low Volume Production 3D Printer
- 3D Metrology Software
- Autodesk Fusion 360
- Inks-cape design
- Laser Cutting and Engraving
- ArtCAM Software
- CNC Wood Router
- Autodesk Eagle software
- PCB Making
- Product Development using IoT - Arduino

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 : 04.12.2023 Date of Faculty Development Programme : 11.12.2023

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 &a 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

Day 1	Day 2	Day 3	Day 4	Day 5	Day 6
9:00 – 9:30 **Inauguration**					
9:30 – 12:00 **Session 1** **Expert Talk: IDEA lab management and activities** Dr. K. Velmurugan, Coordinator, IDEA LAB Dr.P.Raja, Co-ordinator, IDEA LAB	9:30 – 12:00 Session 3 Fusion 360 - Modelling Concept and Workflow **Anil Kumar** **Associate Professor,** **Department of Mechanical Engineering, Bhilai Institute of Technology, Durg, Chhattisgarh-India**	9:30 – 12:00 Session 6 Parallel tracks on Demonstration of Session on Laser Cutting and Engraving, 3D Printing, Machining PCB Design, Wood Router **Tech Gurus, IDEA LAB**	9:30 – 12:00 Session 9 Parallel tracks on Demonstration of Session on Laser Cutting and Engraving, 3D Printing, Machining PCB Design, Wood Router **Tech Gurus, IDEA LAB**	9:30 – 12:00 Session 12 Parallel four tracks on, Inkscape design, Autodesk Fusion 360, Autodesk Eagle ArtCAM Design **Tech Gurus,** **IDEA LAB**	9:30 – 12:00 Session 15 Field Visits - II Team A, Team B, Team C, Team D, **Team Meetings (Briefing about their Domains by Expert & Team Coordinators)**
12:00 – 1:00 **Team Meetings (Briefing about their Domains by Expert & Team Coordinators)**	12:00 – 1:00 Session 4 Electronics configuration and programming, PCB making introduction **Dr.E.GNANAMANOHARAN** **Assistant Professor, Dept. of ECE, Faculty of Engg & Tech Annamalai University -Tamil Nadu 608 002**	12:00 – 1:00 Session 7 Ideation Workshop **Dr. Muraliraja R** **Associate Professor and Associate Director (International Affairs)** **Vels Institute of Science Technology and Advanced Studies, Chennai, India**	12:00 – 1:00 Session 10 Prototyping in CNC WOOD ROUTER **Dr. Muraliraja R** **Associate Professor and Associate Director (International Affairs)** **Vels Institute of Science Technology and Advanced Studies, Chennai, India**	12:00 – 1:00 Session 13 Parallel tracks on Demonstration of Session on Laser Cutting and Engraving, 3D Printing, Machining PCB Design, Wood Router **Tech Gurus, IDEA LAB**	12:00 – 1:00 Session 16 Testing and validation of Projects, Reflective journal **Teams**
1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch	1:00 – 2:00 Lunch
2:00 – 4:30 **Session 2** **CAD Design (Fusion 360)** **Anil Kumar** **Associate Professor,** **Department of Mechanical Engineering, Bhilai Institute of Technology, Durg, Chhattisgarh-India**	2:00 – 4:30 Session 5 Parallel four tracks on, Inkscape design, Autodesk Fusion 360, Autodesk Eagle ArtCAM Design **Tech Gurus, IDEA LAB**	2:00 – 4:30 Session 8 Parallel four tracks on, Inkscape design, Autodesk Fusion 360, Autodesk Eagle ArtCAM Design **Tech Gurus, IDEA LAB**	2:00 – 4:30 Session 11 Field Visits - I Team A, Team B, Team C, Team D, **Team Meetings (Briefing about their Domains by Expert & Team Coordinators)**	2:00 – 4:30 Session 14 Prototyping in IDEA LAB **Tech Gurus**	2:00 – 03.30 Feedback Recording **Teams**
4:30 – 5:30 Open House Discussions	4:30 – 5:30 Open House Discussions	4:30 – 5:30 Open House Discussions	4:30 – 5:30 Open House Discussions	4:30 – 5:30 Open House Discussions	03.30 – 04.30 Valedictory Session