

Organizing Committee

Coordinator:

Dr.O Srikanth,
Professor & HOD,
Department of Mechanical Engineering
Dhanekula institute of Engineering and
Technology, Vijayawada

Registration:

- The faculty members of the AICTE Approved institutions, PG & Research scholars from Government, Industry can participate in this FDP.
- Participants can enroll for this programme by signup at ATAL website:
<https://atalacademy.aicte-india.org/signup>
- Then Login, and go to 'Workshops Tab', to fill the details for FDP registration
- ATAL ID of the FDP is **1584087111**
- Sponsored by ATAL-AICTE, India
- Selected candidates will be intimated by e-mail or whatsapp.
- Certificates shall be issued by AICTE Training and Learning (ATAL) academy to those participants who have attended the program with minimum **80% attendance** and scored minimum **60% marks** in the test conducted at the end of the online FDP.

For further communication:

Dr. O Srikanth,
Professor & HOD,
Department of Mechanical Engineering
Dhanekula institute of Engineering and
Technology, Vijayawada, 521139.
Email: diet.mehod@gmail.com
Phone: 8985359139, 9700104604

CHIEF PATRONS

1. **Sri. Dhanekula Ravindranath Tagore**,
Agriculturist & Industrialist,
Chairman, DVSCT.
2. **Sri. Dhanekula Bhavani Prasad**,
Secretary & Correspondent, DVSCT.
3. **Sri. D.R.K. Ravi prasad**,
Director, DIET, Vijayawada,
(Retd. Sr. Dy. General Manager,
BEL, Machilipatnam).
4. **Dr. T Hanuman Chowdhary**
Director, Centre for Telecommunications
Management & Studies, Hyderabad.
5. **Sri. D Sai Prasad**,
Entrepreneur, MD,
Satyakala Agro Oil Products
6. **Sri. D Nagendra Prasad**,
Entrepreneur MD, Hotel D V Manor.
7. **Smt. Karuna Arava**
Asst. Prof., UCE, JNTUK, Kakinada.
8. **Sri. M Seshagiri Rao**
Principal,
Government Polytechnic, Vijayawada.
9. **Sri. M Sundareshan**
Regional Officer & Assistant Director.
AICTE, SCRO
10. **Dr. Ravi Kadiyala**,
Principal, DIET, Vijayawada

Advisory committee Members:

1. **Dr. G. Vinay Kumar**
HOD, CE Department
2. **Dr. I. Sai Ram**
HOD, EEE Department
3. **Dr. G.L. Madhumati**
HOD, ECE Department
4. **Dr. S. Suresh**
HOD, CSE Department
5. **Dr. K. Sowmya**
HOD, IT Department
6. **Dr. B. V. S. N. Hari Prasad**
HOD, BS&H Department



*ATAL-AICTE Sponsored
Faculty Development Programme
On*

**“ROBOTICS IN AUTOMATION
APPLICATIONS”**

4th to 8th January 2021



**Organized by
Department of Mechanical Engineering
Dhanekula Institute of Engineering and
Technology**

(Accredited by NBA of AICTE, New Delhi & affiliated to
JNTU Kakinada)

Ganguru,
Vijayawada
Krishna District, A.P (India)

www.diet.ac.in
email: diet.mehod@gmail.com

Dhanekula Institute of Engineering and Technology:

Dhanekula Institute of Engineering and Technology is established in 2009 by Sri Dhanekula Ravindranath Tagore, Chairman of Dhanekula group industrial organizations and Agriculturalist. The college was located at Ganguru, Vijayawada, Krishna District of Andhra Pradesh.

The college offers B.Tech. programme in six branches of Engineering, viz., Civil, EEE, ME, ECE, CSE & IT., and M.Tech programme in Computer Science, Environmental Engineering, VLSI system design and Automobile Engineering. All the eligible Under Graduate engineering programmes have been accredited by National Board of Accreditation (NBA) of AICTE, New Delhi and by NAAC. The college is also accredited by MHRD for Innovation cell and TBI by MSME, Government of India and also certified by ISO 9001:2015.

About the Department:

The department of Mechanical Engineering is established in the year 2009, Strives to impart outcome based engineering education. It offers under graduate program with an intake of 120. Department has 26 well qualified and committed faculty of various research activities in Mechanical field. Department organizes various curricular, co-curricular and extracurricular activities through its association MADE (Mechanical Association of Dhanekula Engineers). The well-equipped facilities includes Basic Engineering work shop, IC Engines Lab, CAD/CAM Lab, CAE Lab, Heat Transfer Lab, Production Technology Lab, Machine tools lab, Metallurgy Lab, Mechatronics lab, Metrology & Instrumentation Lab, Simulation lab and also have R&AC lab as extra facility to provide additional learning. It also provides support to the students in executing quality projects through

APSSDC Sponsored Skill Development Dessault Systems Lab, Design & Fabrication Lab with necessary software and hardware and R&D lab for research work.

Introduction to FDP:

A robot is an autonomous machine capable of sensing its environment, carrying out computations to make decisions, and performing actions in the real world. The field of Robotics has now gained immense popularity in respect of dealing with problems in different disciplines all over the world.

This FDP is designed to provide knowledge on the basics and recent developments in Robotics, applications and its allied research fields. This program is also aimed to provide hands-on experience on development and testing of mobile robots in real time environment. Since next generation industries need engineers with interdisciplinary attitude and experience to meet the future demands, also to explore the potential areas and the significance in the fields of robotics and automation.

Objectives of the FDP:

- To provide knowledge on basics, kinematics and dynamics of robotics.
- To provide in-depth knowledge on the forward and inverse kinematic models of usual serial and parallel manipulators.
- To create an understanding on the concepts of various bio-inspired robots.
- To impart knowledge on concepts of static and dynamic walking of humanoid robots.
- To discuss development of various path and motion planning algorithms using soft computing techniques.
- Hands on experience on software interfacing with robotic hardware in simulation and control.

Program Content and Resource Persons:

- **Fundamentals of Robotics and its Applications.**

Dr. V Vasu, Professor,
Department of ME,
NIT, Warangal.

- **Robotics and Configurable Systems Product Development Cycle**

Dr. P. Chandrasekar,
Technical Director-Project
Development,
Technique Design Group,
Secundrabad.

- **Mechanisms of Robotics**

Dr. Santhakumar Mohan
IIT Palakkad

- **Hardware interfacing with MATLAB & Simulink (Arduino Interfacing)**

Dr. Janardhan Vistapalli
SRM University,
Amaravathi.

- **Biologically Inspired Robots**

Dr. M. Ravi Kumar,
NIT, Bhopal,

Who can take part: Faculty, Research Scholars, Post graduates and Industry person, All branches (MECHANICAL, ECE, CSE, IT & EEE)

IMPORTANT DATES:

- ◆ **Last date for Registration: 01/01/2021**
- ◆ **Intimation to Participants: 02/01/2021**