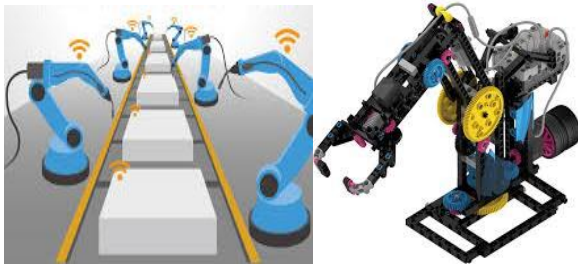




*AICTE Training and learning (ATAL) Sponsored
Five Day online workshop on*

Mechatronics & MEMS

5th – 9th July 2021



Organized by

**AICTE Training and Learning (ATAL) Academy
&
Department of Mechanical Engineering
National Institute of Technology
WARANGAL – 506 004
Telangana State, INDIA**



About the Program

The area of robotics have been expanding in a wide range of applications in the fields of industrial, bio-medical, space and underwater exploration. The design and control of the robots that are involved in these applications are quite challenging. A new era of industry 4.0 has increased the adoption of robotics, automation and artificial intelligence in the industries. Researchers and scientists are actively engaged in the advanced fields of robotics to address these challenges.

This workshop aims to bring a clear understanding of robot kinematics, dynamics and control aspects pertaining to industrial applications. It comprises essential theory and hands on session in robot simulation and making of real-time working models of robots.

Course Content:

- Mechatronics and automation
- Sensors and Actuators
- Control systems
- Mobile Robots Path planning, vision system and navigation
- Modelling and simulation of Mechatronics systems
- Industry 4.0
- MEMS Fabrication Techniques and Hand on MEMS Simulation Software
- Advanced Topics in unmanned systems, defense, medical etc.
- Hands on session of Modeling and simulation using MATLAB tool boxes and Building of Real-time robots using AURDINO Microcontrollers and PLC.

Resource Persons

Expert lectures will be delivered by

Dr. AsokanThondiyath (Prof. and Head of Dept. Engineering design)*Indian Institute of Technology Madras*

Dr. R. Prasanth Kumar (Prof. and Head of Dept. Mechanical and aerospace engineering)*Indian Institute of Technology Hyderabad*

Dr. Hari Kumar Voruganti (Assoc. Prof. Department of mechanical engineering)*National Institute of Technology Warangal.*

Dr. V Vasu (Assoc. Prof. Department of mechanical engineering)*National Institute of Technology Warangal.*

Mr. Sudheer Jay *Robotix Learning India Pvt. Ltd, Hyderabad, Telangana*

Coordinators

Dr. V Vasu

Dr. ShivaRaman

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About NIT Warangal:

National Institute of Technology Warangal, formerly known as Regional Engineering College was established in 1959. Over the years it has developed into a premier institute of higher learning and is ranked among the top technical education institutions in India. There are 13 Departments offering eight undergraduate and 32 postgraduate programmes besides doctoral programmes. About 5000 students across the country and about 500 international students study in the campus. It is a fully residential campus sprawling over 250 acres with excellent infrastructure, state of the art library, seminar halls, guest houses and laboratories.



About the Department:

The department of Mechanical Engineering offers an UG program, seven PG programs and a Ph.D program as well. There are 47 qualified and experienced faculty in the department. The department has liaison with reputed industries and R&D organizations like NFTDC, ARCI, BHEL, DMRL, DRDL, CMTI, etc. Presently the department is handling several R&D projects and consultancy works. The department has also been recognized as a QIP centre for M. Tech and Ph.D programs.

About Warangal

Warangal is the second largest city of the new state of Telangana. It is situated at a distance of 140 km from the state capital Hyderabad (Nearest Airport). It is wellconnected by Rail (Kazipet Junction is two km away and Warangal Station is 12 km away) and by Road (NH 202). Warangal is renowned for its rich historical and cultural heritage. It was the seat of erstwhile 5th Kakatiya dynasty. It is a place of tourist attraction with a number of historical monuments like Thousand Pillars Temple, Warangal Fort, Bhadrakali Temple, Ramappa Temple and Laknavaram Lake.

Registration is open to:

This program is open to the Faculty of mechanical engineering and allied disciplines/ Professionals involved in training of mechanical engineers /Post-Graduate students and Research scholars aspiring for an academic career.

For Registration Link :

<https://www.aicte-india.org/atal>

Confirmation of Participation:

On receipt of the online registration form along with proof of payment of registration fee, participants will be sent confirmation of their participation through Email. Participants need **NOT** send the hard-copy of the registration form.

As the program is conducted in an interactive mode with hands-on sessions, the number of participants is limited to **40. Candidates are advised to register early to avoid disappointment.** Participants may bring along their laptops for homework practice.

Contact details

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