

## ABOUT THE INSTITUTE

Karmaveer Kakasaheb Wagh Institute of Engineering Education & Research, Nashik was established in the year 1984. The institute is approved by All India Council of Technical Education (AICTE), New Delhi and Government of Maharashtra, permanently affiliated to Savitribai Phule Pune University. Electrical, Civil, Mechanical, Production, Computer, Electronics, E&TC, Chemical and MCA Programmes are accredited by NBA. The institute is accredited by National Assessment & Accreditation Council (NAAC) with 'A' Grade. An Autonomous Institute from 2022-23 affiliated to SPPU. The institute has developed state-of-the-art laboratories for conducting the various courses. The institute is the first Academic affiliate Institute at IET (UK) in State of Maharashtra.

## ABOUT THE DEPARTMENT

Department of Mechanical Engineering was established in the year 1995. Department of Mechanical Engineering has been accredited by NBA, AICTE, New Delhi. Department is equipped with the state of art equipment and Laboratories. The Department is active academically with excellent results and is equally active in co-curricular activities including SAE, ISHRAE, MESA and Renewable Energy Clubs. Department participating in various national and International competition like SAE BAJA, Go-kart, Quad-Torc etc. through KK motorsports club.

## ABOUT THE WORKSHOP

In this workshop, you will have the opportunity to learn about two powerful engineering software tools: **ANSYS Fluent and ANSYS Multi Body Dynamics**. ANSYS Fluent is a computational fluid dynamics (CFD) software tool that enables engineers to simulate fluid flow, heat transfer, and other related phenomena. ANSYS Multi Body Dynamics is a simulation software tool that enables engineers to simulate the behavior of multi-body systems and analyze the forces and motions involved.

## MODE OF DELIVERY

- 13<sup>th</sup> – 16<sup>th</sup> March online sessions through Zoom link.
- 17<sup>th</sup> March hands-on sessions at Modeling & Simulation lab, First floor, Department of Mechanical Engineering, KKWIEER, Nashik.



*(An Autonomous Institute affiliated to SPPU)*

## Our Inspiration



**Padmashri Karmaveer  
Kakasaheb Wagh**



**Late Hon. Shri.  
Balasaheb Wagh**

K. K.WAGH EDUCATION SOCIETY'S

**K.K.WAGH INSTITUTE OF ENGINEERING  
EDUCATION AND RESEARCH, NASHIK**  
*(An Autonomous Institute affiliated to SPPU)*

## Patrons

**Hon. Er. S. B. Wagh**

**Chairman, K. K. Wagh Education Society**

## Principal

**Dr. K. N. Nandurkar**

## Convener

**Dr. P. B. Kushare**

## Workshop Coordinators

**Prof. N. V. Patil**

**Prof. R. V. Bhandare**

**Prof. R. D. Rakhde**

## Who Should Attend

- Faculty/Students from Mechanical, Civil, Chemical, Automotive, Mechatronics, Robotics background
- Professionals from Industry

## REGISTRATION

To register for this workshop, please contact us at [nvpatil@kkwagh.edu.in](mailto:nvpatil@kkwagh.edu.in), spaces are limited, so please register early to avoid disappointment.

**Last date of Registration:** 12<sup>th</sup> March 2023

**Only 40 Participants will be selected for the FDP**

## Registration Fees:

There is no registration fee.

No TA/DA will be provided.

## Registration link:

<https://forms.gle/tAvAGEvD3XBr15B66>

## Certificate:

*E-certificate will be provided after successful completion of FDP with 80% attendance and submitting all session's feedback.*

## Eminent Speaker

**Mr. Rohit Sangwan**

Sr. Application Engineer

ARK (ANSYS Academics)

## Objective

1. Learning the basics of CFD, ANSYS Fluent and MBD software, create 3D models of mechanical systems and mesh geometries for CFD simulations.
2. Understanding the different types of fluid flow problems that can be simulated with ANSYS Fluent.
3. Applying appropriate constraints and forces to simulate the mechanical behavior of the system.
4. Analyzing and interpreting simulation results using post-processing tools in ANSYS Fluent and to identify areas of improvement and optimize the design of the system.

## Course Content

The workshop will be divided into two main sections:

- **Section 1: ANSYS Fluent:** basics of ANSYS Fluent, including how to set up and run simulations, and how to post-process the results. Various physics models and turbulence models.
- **Section 2: ANSYS Multi Body Dynamics** ANSYS Multi Body Dynamics, including how to create and simulate multi-body systems. Various types of constraints and forces that can be applied in ANSYS Multi Body Dynamics.
- Hands-on training for CFD and MBD with case studies.

A

## One Week Faculty Development Program (Blended mode)

on

## CFD using ANSYS Fluent and Multibody Dynamics

(13<sup>th</sup> March- 17<sup>th</sup> March, 2023)



**ORGANISED BY**

Mechanical Engineering Department  
In association with  
IET Nashik Local Network

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