

**Registration Form**  
**A Three Day Workshop on**  
**Finite Element Analysis**  
**using ANSYS**

**13<sup>th</sup>-15<sup>th</sup>, February 2020**

**Name: .....**

**Roll No: .....**

**Year/Branch: .....**

**College: .....**

**Address: .....**

**.....**

**Mobile: .....**

**E-Mail: .....**

**Signature of the Participant**

**Place: .....**

**Date: .....**

**Address for communication:**

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**Asst.Professor & Head**

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**Asst. Prof. & Head, Department of ME**  
**JNTUHCEJ**

**Faculty Advisor**

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**Professor of ME, JNTUHCEJ**

**Coordinator**

**Dr. Suresh Arjula**  
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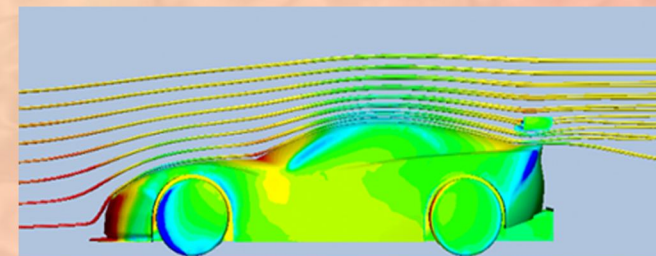


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**on**

**Finite Element Analysis**  
**using ANSYS**

**13<sup>th</sup>-15<sup>th</sup>, February 2020**

**(Sponsored by ISTE)**



**Organized by**

**DEPARTMENT OF MECHANICAL ENGINEERING**  
**JNTUH COLLEGE OF ENGINEERING JAGTIAL**

**Nachupally (Kondagattu) JAGTIAL (Dist)**

**Telangana - 505501**

**Web: www.jntuhcej.ac.in**





## About the College

JNTUH College of Engineering Jagtial (JNTUHCEJ) was established in the year 2007 as a constituent college of Jawaharlal Nehru Technological University, Hyderabad. The college is recognised by UGC under section 2(f) & 12(B) of the UGC Act, 1956 and had accredited by NBA. JNTUHCEJ started functioning with five Under Graduate programs viz., EEE, ME, ECE, CSE & IT. And since 2011, the college is offering five Post Graduate programs viz., EPS in EEE, ED in ME, DSCE in ECE, CSE and IT.

## About the Department

The Department of Mechanical Engineering came into existence from the inception of the college in 2007. The department offers UG programme with intake of 60 and has been adding features in its cap every year with both curricular and non-curricular activities and has been accredited by NBA. The department started its PG program in Engineering Design in the year 2011 with an intake of 18.

The department has state of art laboratories such as Engineering Workshop, Production Technology, Thermal Engineering, Heat & Mass transfer, Metrology, Machine Tools, Metallurgy & Material Science, Instrumentation, Fluid Mechanics & Hydraulic Machinery labs and CAD/CAM labs. The Department is having 14 Teaching, 15 Non-Teaching staff. The faculty of the department with their rich experience in Teaching and Research, authored more than 20 text books in the areas of Mechanical Engineering. Presently, the Faculty is guiding about 20 scholars for Ph.D. in various advanced fields of Mechanical Engineering and already produced 6 PhDs. The department is imparting practical knowledge in Automobile, Refrigeration, Air conditioning and other relevant areas under Re-Engineering and Reverse Engineering centre.

## Scope of the Program

These days, modelling and simulation of any mechanical components has become an inherent part of design for automotive, aerospace and manufacturing industries. The huge competition in the market is exerting tremendous pressure on the industries to launch reasonably priced products in short time making them to rely more on virtual tools (CAD/CAE) to accelerate the design and development of products. The results of FE simulation are so accurate that FE simulations have replaced physical experiments. The objective of this workshop is to introduce Finite Element Method using ANSYS to the students so that they are equipped to solve various problems of engineering. The workshop is meant for students and will be useful to those who work on FEA based numerical simulations using software package ANSYS. Through this workshop participants will have thorough idea of FEM from fundamental concepts to more advanced topics. Specific emphasis will be given to problems of Thermal, Structural Mechanics and Computational Fluid Dynamics (CFD). Workshop will include Lectures and Practice sessions.

### Objectives of the Workshop

- ◆ Define engineering problem, Developing an approach to research problem and selection of suitable FEA domain.
- ◆ Solving engineering situations analytically, drawn from aero/auto domains.
- ◆ Improves creativity, that is required by concept designers.

### Contents

- ◆ Introduction to Engineering Simulation.
- ◆ Overview of Ansys Workbench.
- ◆ Problem solving in Structural Analysis.
- ◆ Problem solving in Explicit Dynamic Analysis.
- ◆ Problem solving in Thermal Analysis.
- ◆ Problem solving in Harmonic Analysis.
- ◆ Overview of Transient Analysis.
- ◆ Introduction to CFD Software & Fluent.

## Resource Persons:

**Jalagam Ravinder Rao**

Founder, MECHENGG, Hyderabad.

**Dr. Ch. Sridhar Reddy**

Professor & Head, Department of ME, JNTUHCEM



### Convener:

**Dr. Kandukuri Vasantha Kumar**

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