



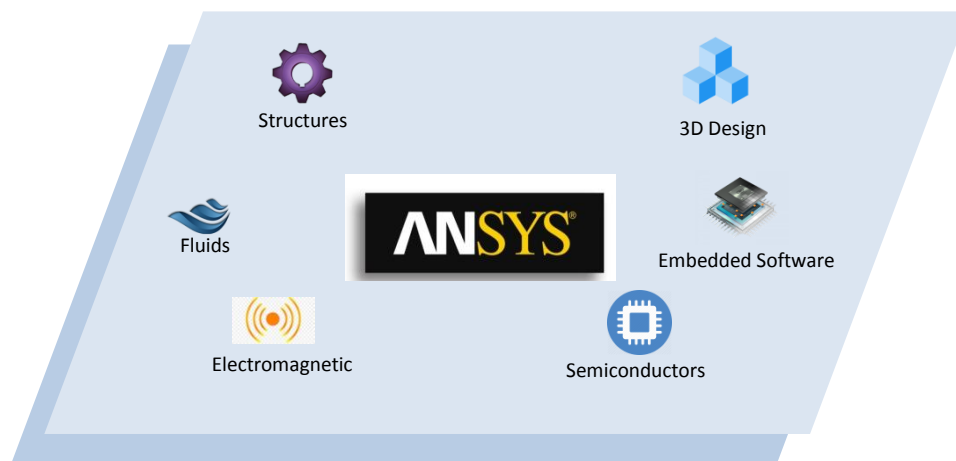
# Teaching Learning Centre

(Under Pandit Madan Mohan Malaviya National Mission on Teachers & Teaching Scheme, Dept. of Higher of Education, MHRD, GoI)



## 5 Day Hands – on Training on *ANSYS - Workbench Environment*

October 03 to 07, 2018



In association with



Coimbatore Institute of Technology

(Government Aided Autonomous Institution)

(Approved by AICTE, New Delhi & Affiliated to Anna University)

# Coimbatore Institute of Technology

Coimbatore Institute of Technology (CIT), Coimbatore, is a Government Aided Autonomous Institution established in the year 1956. The Institute offers Under Graduate, Post Graduate and Ph.D research programmes in Engineering. The Institute is approved by AICTE, New Delhi, Affiliated to Anna University, Chennai and Accredited by National Board of Accreditation (NBA), New Delhi. The institute has a reputation with service of competent, well qualified faculty and dynamic management to set highest standards in engineering research and development. The institute has collaboration with leading frontier universities and industries in India and abroad for the promotion of innovative research and development. National Institutional Ranking Framework (NIRF), MHRD, Govt. of India., has ranked CIT with 1<sup>st</sup> place in Tamil Nadu for Graduate Outcome and 61<sup>st</sup> Place in NIRF 2018.

## Teaching Learning Centre

Coimbatore Institute of Technology has been approved as Teaching Learning Centre (TLC) under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), Department of Higher Education, Ministry of Human Resource Development (MHRD) in December, 2017. MHRD has sanctioned grant to establish Teaching Learning Centre in Coimbatore Institute of Technology for Raising the Quality of Teaching through training, retraining, refresher and orientation programmes in the disciplines of Academic, Research and Management (ARM). CIT – TLC is established to improve the quality of teachers of technical education institutions in the regions of Tamil Nadu (West), Kerala, Karnataka, Andhra Pradesh and Puducherry.

## Innovent Engineering Solutions Pvt Ltd

The INNOVENT is an authorized distributor for Ansys and CivilFEM suite of products for academia in SAARC countries and also consults in many advanced areas of aero and auto domain. Our august customers who receive our engineering services (consultation and capability development) are research labs, PSUs, and service industries outsourced by top OEMS. INNOVENT is headquartered in Bangalore. It has international connectivity with NAFEMs and national connectivity with NASSCOM. INNOVENT jointly with NAFEMS India chapter has conceived and successfully certified many engineers in the field of CAE.

## Course Objective

The ANSYS Workbench Environment is an intuitive up-front finite element analysis tool that is used in conjunction with CAD systems and/or DesignModeler. ANSYS Workbench is a software environment for performing structural, thermal, and electromagnetic analyses. The class focuses on geometry creation and optimization, attaching existing geometry, setting up the finite element model, solving, and reviewing results. This hands-on training will describe how to use the code as well as basic finite element simulation concepts and results interpretation.

### TOPICS

- Workbench GUI
- Design Modeler
- Overview of FEA
- Engineering Data
- Meshing
- Parametric Modeling
- Advanced Loads and Boundary Conditions
- Assemblies
- Multiple Load Steps
- Coordinate Systems
- Postprocessing
- Intro to Thermal Analysis
- Multistep
- Dynamic Analysis
- Modal Analysis
- Harmonic analysis
- Thermo Structural Analysis

## Course Highlights

- Successful completion of the course will provide participants with the ability to prepare and optimize their geometry for analysis and to use Simulation to perform static structural finite element analyses, as well as provide a brief introduction to thermal, modal, Contact, Harmonic, Dynamic, Multistep analyses.
- Participants will learn when it is appropriate to simplify, or disfeature CAD geometry, and how best to accomplish it.
- Participants will learn how to create parametric models in which geometric dimensions can be readily changed.
- Participants will learn how to use the ANSYS Workbench GUI, how to interface with CAD geometry, how to mesh the geometry, how to apply loads and boundary conditions, how to solve the analysis, and how to post-process the results.
- Participants will learn the basics of finite element theory and gain insight on how to create and analyse models that produce accurate results

## Registration Details

- No Registration / Participation fee will be collected
- Interested participants are requested to register through the following Google Form link on or before September 27, 2018.

<https://goo.gl/forms/4lTIQ2U9jRITu9Pd2>

- Participants are requested to upload the Permission Letter duly signed by Head of the Institution / Director in the Google Registration Form

## General Instructions

- Acceptance of the registration is subject to the seat availability
- Acceptance of the registration will be reported on or before September 28, 2018
- Accommodation will be arranged on prior request

## Organizing Committee

### Chief Patron

Dr.S.R.K.Prasad  
Correspondent, CIT Institutions, Coimbatore

### Patrons

Mr.S.Rajiv Rangasami  
Director, CIT Institutions, Coimbatore

Dr.R.Prabhakar  
Secretary, CIT Institutions, Coimbatore  
Chairperson, CIT – TLC, Coimbatore

### President

Dr.V.Selladurai  
Principal, CIT, Coimbatore  
Co-Chairperson, CIT – TLC, Coimbatore

### Convener

Dr.V.Manikandan  
Project Coordinator, CIT – TLC,  
Coimbatore

### Coordinator

Dr.N.Saranya - Project Officer, CIT – TLC, Coimbatore.

## Venue

Coimbatore Institute of Technology  
Avinashi Road, Civil Aerodrome Post, Peelamedu,  
Tamilnadu, India – 641 014

## Contact Details

Dr.N.Saranya  
Project Officer,  
Teaching Learning Centre,  
Coimbatore Institute of Technology,  
Coimbatore.  
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**Permission Letter**  
**Five Day Hands - on Training on**  
**ANSYS - Workbench Environment**  
**October 03 to 07, 2018**

**\*\* This Nomination Form should be uploaded in Google Registration Form**

**\*\*Certificate will be awarded to the participants who attend all the modules**

Mr/Ms/Dr \_\_\_\_\_ of the Department

\_\_\_\_\_ has been permitted to attend **Five Day Hands – on Training on ANSYS – Workbench Environment** at Teaching Learning Centre of Coimbatore Institute of Technology, Coimbatore from **October 03 to 07, 2018.**

Name of the College :

Place :

Date :

Signature of Head of the Department

Signature of Head of the Institution / Director