



**MTE Society's
WALCHAND COLLEGE OF ENGINEERING, SANGLI
Mechanical Engineering Department**

Announces

**Short Term Certificate Course
in
*FEA and CFD using ANSYS 12***

Engineers and scientists studying practical problems are faced with task of developing and evaluating mathematical and computational models to understand the phenomena and ultimately design and manufacture systems. The Finite Element Analysis (FEA) and Computational Fluid Dynamics (CFD) are widely used analysis, design and simulation technique in industries and research organizations. The trend of utilizing FEA as an engineering tool is growing rapidly. It is essential for engineering students to have a basic knowledge of theory and applications of the FEA and CFD technique. The course is designed with following objectives:

Objectives:

- Fundamentals of CAD modeling.
- Expert lectures will be conducted to introduce the fundamental of FEM and CFD.
- Hands on training will be arranged to get a fundamental understanding of finite element analysis (FEA) and computational fluid dynamics (CFD) using advanced commercial software package ANSYS 12.
- Methodology for the analysis will be developed.
- Students will learn the basics of ANSYS (FEA and CFD) capabilities, terminology and the Graphical User Interface (GUI).
- Students will learn how to perform a complete ANSYS analysis step-by-step.
- Learn about building or importing solid models & meshing, apply boundary conditions, solving & reviewing results.
- Students will be trained through mini project.

Course Contents:

CAD :	<ul style="list-style-type: none">• Introduction to CAD.• Sketcher.• Part modeling.
FEA	<ul style="list-style-type: none">• Static Analysis.• Thermal Analysis.• Modal Analysis.• Transient dynamic Analysis.• Non-linear analysis.• Mini- project.
CFD	<ul style="list-style-type: none">• Modeling the computational domain,• Creating the meshes,• Steady State Analysis• Unsteady State Analysis• Vortex Dynamics• Turbulence Modeling• CFD Applications• Mini- project

Salient Features:

Duration:	14 th to 26 th June 2010.
Student eligibility:	B.E./B.Tech. (Mechanical, Production & Automobile). Final year appearing for (2010-11) students can also apply
Faculty Involved:	Faculty of Walchand college, experts from industry and research Institute.
Course Fee	Total course fee will be Rs. 15,000/-
Batch size	25 seats
Selection process	Merit list will be prepared and accordingly selected students will be informed individually through e-mail.
Contact Details	Prof. B. S. Gawali -9370521389 Prof. M. M. Khot - 9850959142

Important Note: Interested students may download the application form from above website and send the filled form along with DD of Rs. 200/- as processing fee in the name of Director, Walchand college of Engineering, Sangli payable at Sangli, on or before **11th June 2010** on following address.

“ Application for Certificate Course in FEA and CFD”

Head,

Mechanical Engineering Department

Walchand College of Engineering,

Vishrambag, Sangli – 416415.



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using ANSYS 12**

Application Form

NAME: _____

ADDRESS: _____

City with Pin Code: _____

Ph. No. (with STD code) _____, Mobile No. _____

Email ID: _____

Engineering Branch: (Mechanical/Production/Automobile): _____

INSTITUTE: _____

Passport Size
Photograph

Details of DD/Cheque (In favour of 'Director, WCE', Payable at Sangli) Attached:

No. _____, Date: _____, Bank: _____

Branch: _____

Signature of applicant