Manufacturing Technology Training
An IMTMA initiative

FEA / FEM Using ANSYS - A Practical Approach
Date : 16 to 18 April, 2025
Venue : IMTMA Technology Centre, Pune

INTRODUCTION

Manufacturing Industries are facing many challenges on product optimization during its design from their customers demand on reliability, performance, faster time to market and lowering cost yielding to erosion in profit margins. Enhancing product value in terms of functionality has never been more critical. Finite Element Method has become the mainstay of engineering design and development to accelerate new product development.

Keeping this in view, **IMTMA** is organizing a line training program on **"Product Optimization through Finite Element Method"** for working professionals aspiring to work as FEM experts in the manufacturing industry. This program is intended to build competitive skills in FEM with more practical workshops on CAE tools and make them FEM experts.

FOCUS AREAS

- Introduction to FEA
- Basic solid modeling
- Advanced solid modeling
- Finite element method (FEM) – I
- Finite element method (FEM) – II
- Static structural analysis
- Advanced structural analysis (dynamic and nonlinear)
- Advanced structural analysis
- Thermal analysis
- Generating the report of analysis

KEY TAKE AWAYS

- Intensive knowledge in -
  - Basics of FEA/FEM
  - Hands-on knowledge of popular CAE tools
  - Full knowledge in Analysis and Optimization
- Capability to handle part analysis independently
- Complete readiness on FEA
- Confidence to take up FEA projects within the organization

PARTICIPATION FEE

Rs. 13750/-
+18% GST
IMTMA Members/ Micro Companies/ Individuals/ Educational Institutions / Students/ IMTMA Non Members/ Others

USD 550/-
Overseas Participants

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

Fresh Mechanical engineers, Fresh recruits from industry, Working design engineers, M Tech Graduates.

FACULTY

This programme will be conducted by **Mr. Mangesh Ketkar (Master of Engineering - Machine Design)**

Mr. Mangesh Ketkar is a Post Graduate Mechanical Engineer, having Strong academic and professional background in Machine Design, analysis and Project Management. Fluency in CAD/CAM and CAE. Very well versed in different manufacturing processes including machining, sheet metal fabrication, welding fabrication, castings and heat treatment, structural design, electro mechanical, hydraulic and pneumatic systems.

More than 38 years rich experience in design of CNC machine tools, Special Purpose Machines, High Speed Packaging Machines and Industrial Automation. Worked in different capacities with reputed organizations – Forbes, Bajaj Auto, Greaves, Premier – Machine Tools, TAL Limited, ACG-Worldwide. Have designed more than 100 CNC SPMs , launched @ 15 new products in market and a Recipient of FIE foundation award during IMTEX 2011 for the development of 5 axis CNC machine and 3 axis gear shaving machines.

Worked as a faculty for 5 years with Govt. Engineering College, Aurangabad for their part time M.E. course. I taught the subjects - Advanced Machine Stress Analysis, FEA, Tribology, Dynamics of Machinery and Product Design.

For Registration Contact

Santosh Singh
Programme Coordinator
9021442692
santosh@imtma.in
Back End Operations
9742626488
enquiry@imtmablr.com

Contact Address

INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION
12/5, D-1 Block, MIDC, Chinchwad,
Pune-411019
Board Line : +91 7066030531 / 532

imtmatrainning.67038796@hdfcbank

REGISTRATION : Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.
Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.