



**ww.CAE iNFOTECH Pvt. Ltd.**

## **INTRODUCTION**

### **Who are we?**

At the dawn of 20th century, considering customer satisfaction as the key, there emerged a CAD/CAM/CAE company which could provide solution and impart training on pioneer design software like Pro-E, ANSYS and AutoCAD. We are an ISO 9001-2000 certified Company.

### **Vision Statement**

To be a proactive leader in providing industrial oriented training to the students and professionals.

To provide one-stop solution services based on CAD/CAM/CAE to the Aeronautic, Automotive, Mechanical and Production industries.

To enhance the application oriented research programs through interaction with industries.

### **Our Quality Policy**

ww.CAE iNFOTECH PVT LTD, undertake CAD/CAM/CAE projects & training and also trade Computer Hardwares and Softwares to fulfill the requirements of customers to achieve the total customer satisfaction.

We enhance the customer's satisfaction through continual improvement in all our processes and through involvement of all employees.

### **Our Director's Message**

Engineers are challenged to race against time to deliver new products.

In order to meet and match the challenge, Conventional tools are to be Augmented with specialized intuitive and interactive intelligence.

Two ways of acquiring are either

- By experience (Long Term Process) 'or'
- By using the innovative tools (Smarter way)

## **PROJECTS**

### About Our Project Division

We are proud to say that, we have successfully completed numerous projects for various applications catering to top notch companies. Our customer's repeat orders are our proof of strength and reliable service.

- Our Project teams expertise span across
- Concepts to product designs
- Mould designs
- Die casting designs
- Casting modeling
- Digitisation
- Top down designs
- Tool designs
- 2D & 3D modelings
- Moulding modelings
- FEA Solutions

## **TRAINING**

### About our Training Division

We have trained more than 350 Engineers and 130 corporate people.

In order to expand the training services, we have signed a MOU with ANNA UNIVERSITY and we have been training students and professionals in their premises.

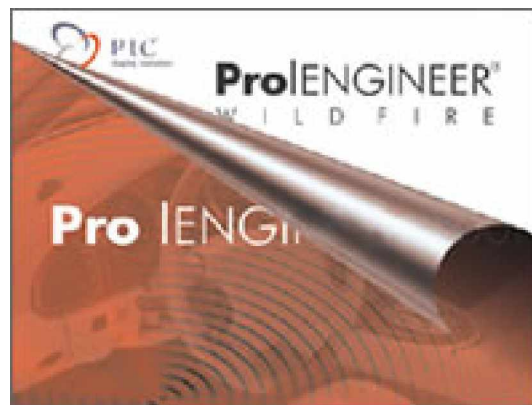
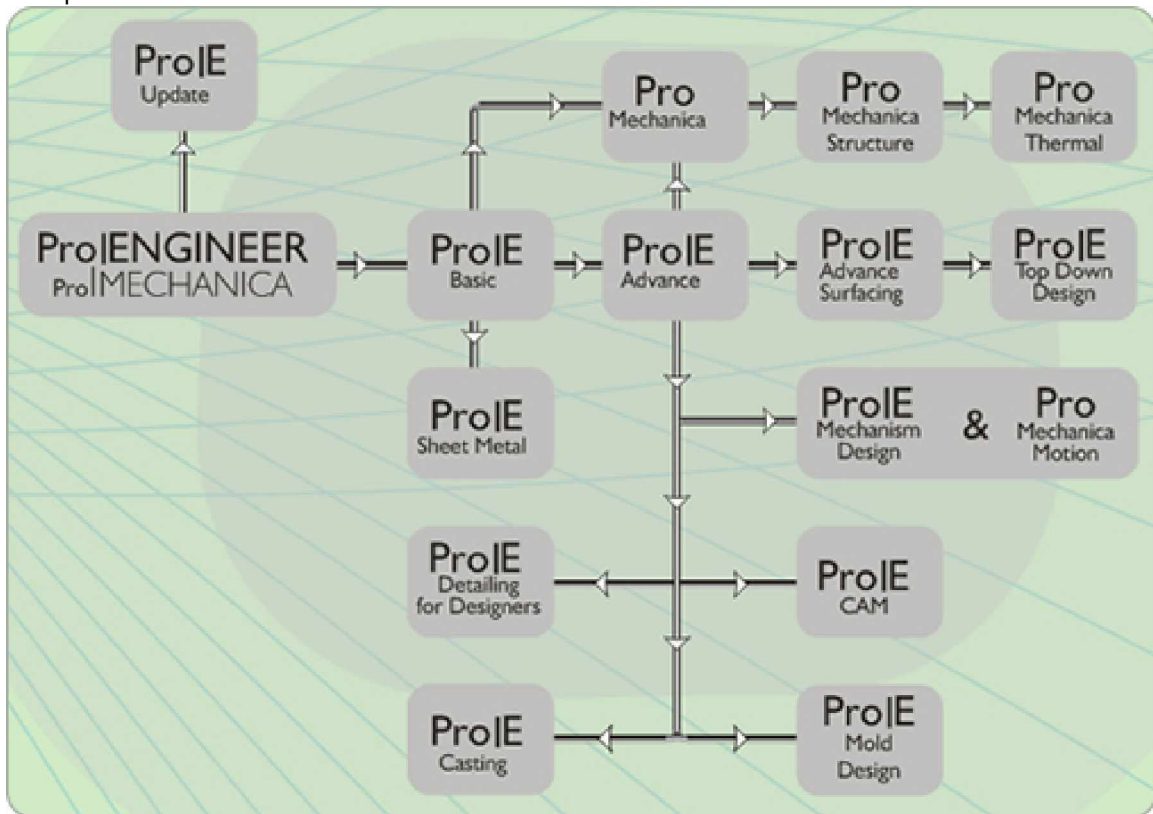
Our Engineers are placed in most of the fortune 500 companies and providing their talents across the length and breadth of the globe.

Now we are the first Authorized Training partner for ANSYS Incorporation in Chennai. Upon completion of Training, certificates will be awarded directly by ANSYS Incorporation and it's valid through out the world.

We offer the following programmes at our Training Centre

- Pro/E
- ANSYS
- Auto CAD

## Pro | E



**Pro | E Update (16 hrs.)**

- New modeling philosophy
- Use of flexible work flows
- New user Interface
- Modifying / Creating Features

**Pro | E Basic (80 hrs.)**

**Pro | E Sketcher**

- Geometry Creation
- Sketcher Constraints
- Geometries Manipulating

**Pro | E Feature**

- Datum features
- Sketched features
- Direct features
- Relations
- Parent Child relation

**Pro | E Assembly**

- Introduction to Assembly
- Assembly constraints
- Assembly datum planes
- Creating exploded State

**Pro | E Detailing**

- Creating Views
- Adding Dimensions
- BOM & Ballooning

**Pro | E Advanced Concepts (60 hrs.)**

- Introduction on advanced concepts
- Variable section sweep
- Swept blend
- Helical sweep
- Advanced patterning, Advanced Rounds
- Family tables
- Trail files and Map keys
- Draft creation
- Basic concept of Surface modeling & creation
- Project work

**Pro | E Surf (60 hrs.)**

- Datum point creation
- Datum curve creation
- Surface manipulation
- Merging of surfaces
- Extrude, Revolve
- Sweep, Blend, Flat
- Offset
- Variable Section sweeps
- Swept Blend
- Surface by boundaries
- Surface to section
- Surface to Surface
- Tangent to Surface
- Blend from file
- Free form

**Pro | E ISDX (30 hrs.)**

- Overview
- Getting started
- Initial Geometry
- Developing Complex Geometry
- Continuous Surfaces
- Integrating Style features
- Using Reference Data
- Creating Scoops and Recesses
- Complex Modeling Situations
- Projects

**Pro | E Motion Analysis (60 hrs.)**

- Model
- Ground points
- Connections
- Loads
- Drivers
- Measures
- Design Variables
- Initial Conditions
- Creating analysis Assembly analysis
- Velocity analysis
- Static analysis
- Running motion solver
- Reviewing result for motion

**Pro | E Detailing (80 hrs.)**

- Views Creating Views
- Assembly and Multiple model views
- Modifying views
- Controlling display
- Controlling sections
- Drawing file setup and configuration
- Dimensions Showing (Auto)
- Creation (Reference and User defined)
- Notes
- Tolerances Linear
- Geometric
- Setting up drawing standards
- Drawing tables
- Family tables
- Project work and plotting

**Pro | E Casting (60 hrs.)**

- Design model
- Cast model
- Define pull direction
- Draft check
- Define silhouette to define parting surface
- Shrinkage
- Sand core creation
- Create die block into cast model
- Creation of runner, gate, sprue
- Split die opening sequence
- Check interference, wall thickness & shape of cast
- Add/create features

**Pro | E Mold (60 hrs.)**

- Introduction
- Part design
- Work piece creation
- Shrinkage
- Analyze for draft and thickness
- Parting surface creation
- Mold volume creation
- Splitting by parting surface & volume
- Extracting Mold volumes
- Molding
- Mold opening
- Adding Mold base

- Design of sprue, Runner and gates
- Creation of Ejector pins

**Pro | E Top Down Design & (BMX) (60 hrs.)**

- Skeleton
- Layout
- Modeling
- Assembly

**Behavioral Modeler Extension**

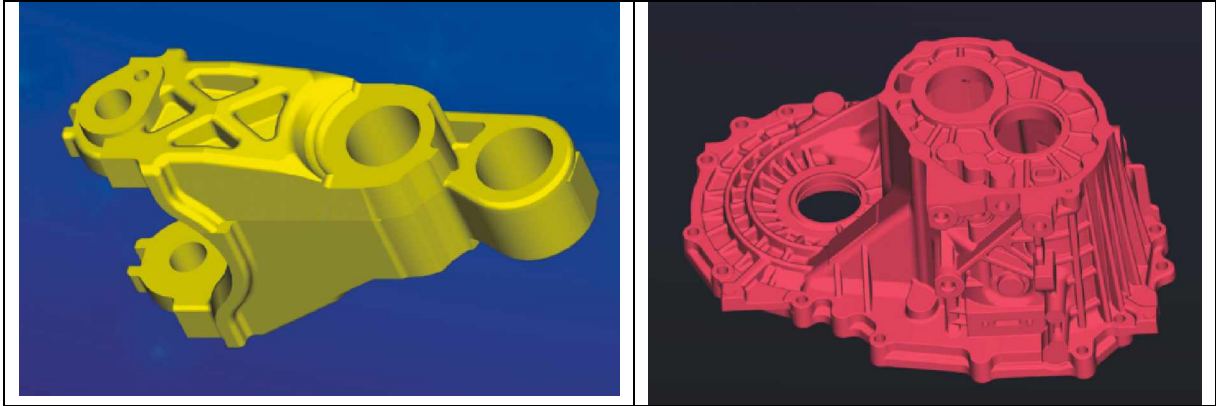
- Sensitivity Analysis
- Feasible study
- Optimization

**Pro | E Sheet Metal (60 hrs.)**

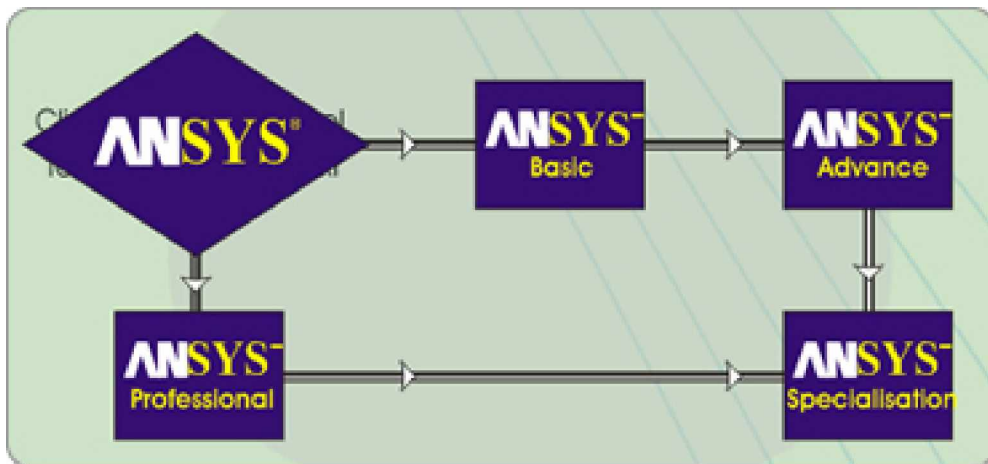
- Introduction to Sheet metal Design
- Primary wall
- Secondary and Unattached Walls
- Unbend, Bend Back, and Cuts
- Notches and Punches
- Sheet metal Forms
- Bend Features
- Unbending Sheet metal Geometry
- Converting Solid Parts
- Sheet metal Drawings with Flat States and Bend Order Tables
- Additional Features
- Setting up for Design
- Interrogating the Sheet metal Part

**Pro | E Thermal Analysis (60 hrs.)**

- Model
- Properties
- Constraints Heat loads
- Convection Conditions
- Prescribed temperature
- Radiation
- Thermal Analysis Steady State
- Transient
- Running thermal solver
- Reviewing results



## ANSYS



## BASIC

- Concept of FEA and FEM
- File Management Techniques
  - Memory required for modeling
  - Total memory required
- Adding material properties
- Modeling in ANSYS
- Bottom up modeling
- Top down Modeling
- 2D drawing
- Boolean operation
  - Add, subtract, overlap, intersect, and move
  - Scale extrude
- Creation of 3D models
- Importing geometry from other CAD software

- Meshing
  - Pre, Map, Sweep, Mesh control, smart sizing, mesh refinement
- Elements
  - Types of elements
- Lower & Higher order P-type elements
- Element option
- Plane stress, plain strain, Axis symmetric
- Plane stress with thickness
- Axis Symmetric harmonic
- Different types of Analysis
- Static Modal, Spectrum, Harmonic and Buckling
- Thermal Steady and transient
- Couple field
- Introduction to assembly analysis
  - Creating component and assembly
- Contact Analysis
  - Point to point
  - Point to surface
  - Surface to ground
- Different type of contact elements
  - Contact wizard
- Sub structuring
- Sub modeling
  - Detailed analysis of local area
- Transient Dynamic analysis
  - Lower step
  - Ramp loading and step loading
  - Time step size
  - APDL
  - Creating macros
  - Optimization
  - Function editor
- Element Birth and Death rate
- Adaptive messing

## **AUTOCAD**

### **Module 1 : 2D Creation (30 hrs.)**

- Basic shapes
- Editing Features
- Hatching
- Layers, Text
- Dimensioning

### **Module 2 : Concepts (30 hrs.)**

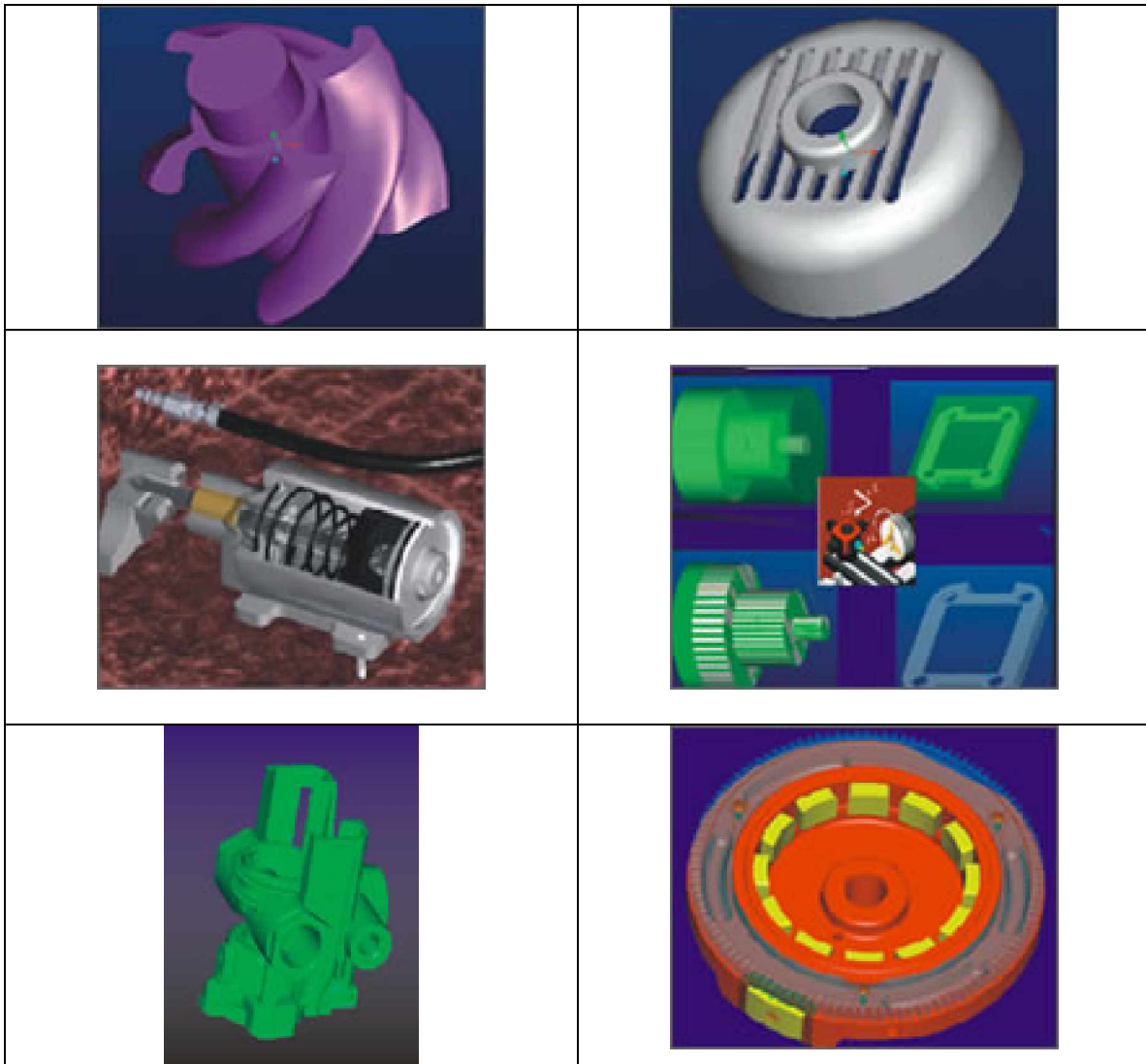
- Plotting

- Detailing
- Embedding
- Database Link
- BOM creation and extraction
- Internet concept

### Module 3 : 3D Creation (30 hrs.)

- Basic of 3D
- Understanding views
- Surface modeling
- Solid modeling
- Editing solid modeling
- Rendering

THE MOST CHALLENGING SOLUTIONS OFFERED



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**Our Location map**

