IFS ACADEMY

Training For The Future!!

Advanced Diploma in CAD

(Duration: 4 Months)

(With 100% Placement Assistance)

Course Curriculum

- ***Basics of Engineering Drawing and GD&T***

  Dimensioning Management, Projections, Limits, Fits & Tolerances, Drawing Reading, Different Standards, Manufacturing Processes, Machining Operations.

  GD&T: Introduction to ISO & ASME GD&T Standards, Tolerances, Symbols, Features, Datum Reference Frame, Forms, Orientation, Location, Profile and Runout.

1. Autodesk Authorised Training in AutoCAD for Mechanical Engineers

Duration = 40 Hrs.

Getting started, Object Property & Layer Management, Drawing Geometry, Tools for Creating Key Geometry, Tools for Manipulating Geometry, Mechanical Part Generators, Creating Drawing Sheets, Dimensioning and Annotating Drawings, Bill of Materials, Parts Lists and Balloons, File Management.

Case Study & Tool Test: Student has to complete any one live project case study and submit report of the same followed by Tool Test.

2. PTC Authorised Training (In-Finite Solutions ATC) Program in Creo 3.0

Duration = 80 Hrs.

Introduction & Understanding to Creo Parametric Concepts, Using Creo Parametric Interface, Selecting & Editing of Geometry, Features, Models, Creating Sketcher Geometry & Using Sketcher Tools, Using Sketches & Datum Features, Creating Extrudes & Revolves, Creating Holes, Shells, Draft & Patterns, Creating Rounds, Chamfers & Using Layers, Assembling with Constraints, Exploding, Replacing Components, Cross-Sections in Assemblies, Advanced Selection, Creating Sweeps and Blends, Sweeps with Variable Sections, Helical Sweeps & Swept Blends, Relations, Parameters & Family Tables, Groups, Copy, Mirror & UDF's, Measuring, Inspecting Models & Seeking Help, Capturing, Managing Design Intent & Resolving Failures, Introduction to Flexible Modeling, Editing, Transformations & Recognition in Flexible Modeling, Component Interfaces, Flexible Components, Restructuring, Simplified Reps, Creating and Using Assembly Structure and Skeletons, Sheetmetal Design Process & Fundamentals, Creating Primary & Secondary

Sheetmetal Wall Features, Bending, Unbending & Modifying Sheetmetal Models, Introduction, Creating New Drawings & Drawing Views, Adding Model Details &Tolerance Information to Drawings, Adding Notes, Symbols, Tables, Balloons & Layers in Drawings, Surface Modeling Overview, Advanced Datum Features, Basic & Boundary Blend Surfaces, Surface Analysis Tools, Extending, Trimming & Manipulating Surfaces, Creating and Editing Solids using Quilts, Introduction & Understanding Freeform Surface Modeling Concepts, Creating Curves & Developing Surfaces in Freeform Surface Modeling, Introduction to Creo Direct & Creating Sketches in 2-D Mode, Creating Features & Assemblies in Creo Direct, Selecting, Modifying, and Reusing 3-D Geometry in Creo Direct.

Case Study & Tool Test: Student has to complete any one live project case study and submit report of the same followed by Tool Test.

Expert Lectutres / Seminars on use of Creo in Engines, Jigs & Fixtures, Castings and Piping & Cabling.

3. Dassault Systemes Authorised Certified Training Program in CATIA V5

Duration = 80 Hrs.

Introduction to CATIA, Profile Creation, Basic Features, Additional Part Features, Dress-up Features, Reusing Data, Finalizing Design Intent, Assembly Design, Designing in Context, Drafting, Design Complex Parts, Analyze and Annotate Parts, Sharing Information, Assembly Design, Contextual Design, Complex Assembly Design,

Surfacing: Introduction to Surface Design, Creating Wireframe Geometry, Shape Design Common Tools, Creating Surfaces, Performing Operations on the Geometry, Completing the Geometry in Part Design, Modifying the Geometry, Using Tools, Exercise and Workshops.

Sheetmetal: Getting started, Sheetmetal Walls, Bends and Unfolded Mode, Flanges, Sheet Metal Features, Transformations and Duplication, Mapping & Output, Advance Topics in Sheet Metal Design.

Case Study & Tool Test: Student has to complete any one live project case study and submit report of the same followed by Tool Test.

Expert Lectures / Seminars on CATIA Plastics & CATIA Seating System Design.

4. SIEMENS PLM Software Authorised Training Program in NX CAD

Duration = 80 Hrs.

Essentials for NX Designers, NX Synchronous Modeling Fundamentals, NX Sheet Metal, Drafting Essentials, Intermediate NX Design and Assemblies.

Case Study & Tool Test: Student has to complete any one live project case study and submit report of the same followed by Tool Test.

Expert Lectures / Seminars on NX CAD Tool & Die Design and on Engineering Applications.

- ***Soft Skills Training***

Résumé writing, Aptitude Test, Technical Test, Group Discussion Techniques, Interview techniques, Communication & Presentation Skills, Personality Development.

Deliverables:

- Technical sessions from industrial and academic professionals on topics of basics of engineering drawing and GD&T.
- Seminars and guidance from industrial professionals on soft skills training.
- **Autodesk Authorised Training in AutoCAD for Mechanical Engineers:** *Autodesk Authorised Certificate of Completion, Autodesk Certified User (ACU) Certification, AutoCAD Student Version Software (available on Autodesk Website).*
- **PTC Authorised Training (In-Finite Solutions ATC) Program in Creo 3.0:** *Soft copy of study material, Creo Student License for 1 year, PTC Authorised Certificate of Completion, Online access to PTC University website.*
- **Dassault Systemes Authorised Certified Training Program in CATIA V5:** *Soft copy of Training Manual, Dassault Systemes Certificate of Training, Dassault Systemes CATIA Certification Exam and Online access to Companion Learning Space for DS Study Material.*
- **NX CAD for Design Engineers:** *Soft copy of Training Manual, SIEMENS PLM Software Authorised Certificate of Completion.*
- **Exposure to live case studies and projects.**

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