



IFS ACADEMY

Training For The Future!!

IFS Academy Certified Career Program in CAD/CAE

(Duration: 6 Months) (With 100% Placement Assistance)

Course Curriculum

➤ **Basics of Engineering Design & Materials**

Free body diagrams and equilibrium; trusses and frames; virtual work; Stress and strain, stress-strain relationship and elastic constants, plane stress and plane strain, shear force and bending moment diagrams; bending and shear stresses; deflection of beams; torsion; Free and forced vibrations; Design for static and dynamic loading; failure theories; fatigue strength and the S-N diagram; Properties of engineering materials, yield criteria.

➤ **Basics of Engineering Drawing**

Projections, Limits, Fits & Tolerances, Drawing Reading, Different Standards, Manufacturing Processes, Machining Operations, GD&T.

Note: Please select any two courses from Sr. No. i to iii. Sr. No. iv to vi are compulsory courses.

- i. **PTC Authorised Training Center (In-Finite Solutions ATC) Program**
Creo (Creo 2.0) for Design Engineers (80 Hrs.)
- ii. **Dassault Systemes Authorised Certified Education Program**
CATIA V5 Mechanical Designer (80 Hrs.)
- iii. **SIEMENS PLM Software Authorised Training Program**
NX CAD for Design Engineers (80 Hrs.)
- iv. ***Finite Element Modeling using Hypermesh (70 Hrs.)***
- v. ***Finite Element Analysis using ANSYS Mechanical APDL (70 Hrs.)***
- vi. ***Finite Element Analysis using ANSYS Workbench (60 Hrs.)***



(In-Finite Solutions ATC) 1

Soft Skills Training

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

Note: For in depth contents of the above programs, please refer our individual Modular and Authorised course curriculums.

Deliverables:

- Technical sessions from industrial and academic professionals on topics of basics of engineering design and materials; basics of engineering drawing.
- Seminars and guidance from industrial professionals on soft skills training.
- **Creo for Design Engineers:** Soft copy of study material, Creo Student License for 1 year, PTC Authorised Certificate of Completion, Online access to PTC University website. **Live Project / Case Study. Student has to prepare a report of the project completed.**
- **CATIA V5 Mechanical Designer:** Soft copy of Training Manual, Dassault Systemes Certificate of Training, and Online access to Companion Learning Space for DS Study Material. **Live Project / Case Study. Student has to prepare a report of the project completed.**
- **NX CAD for Design Engineers:** Soft copy of Training Manual, SIEMENS PLM Software Authorised Certificate of Completion. **Live Project / Case Study. Student has to prepare a report of the project completed.**
- **Finite Element Modeling using Hypermesh:** Soft copy of study material, IFS Academy Certificate of Completion. **Live Project / Case Study. Student has to prepare a report of the project completed.**
- **Finite Element Analysis using ANSYS Mechanical APDL & Workbench:** Soft copy of study material, IFS Academy Certificate of Completion. **Live Project / Case Study. Student has to prepare a report of the project completed.**

IFS Academy, Pune

T:+91-20-6400 7296, M: +91-98228 49628, +91-99224 40102, E: training@ifsacademy.org,

Visit Us At: www.ifsacademy.org

