

engineering career Growing









STRENGTHEN your engineering base with job-ready **TECH SKILLS**





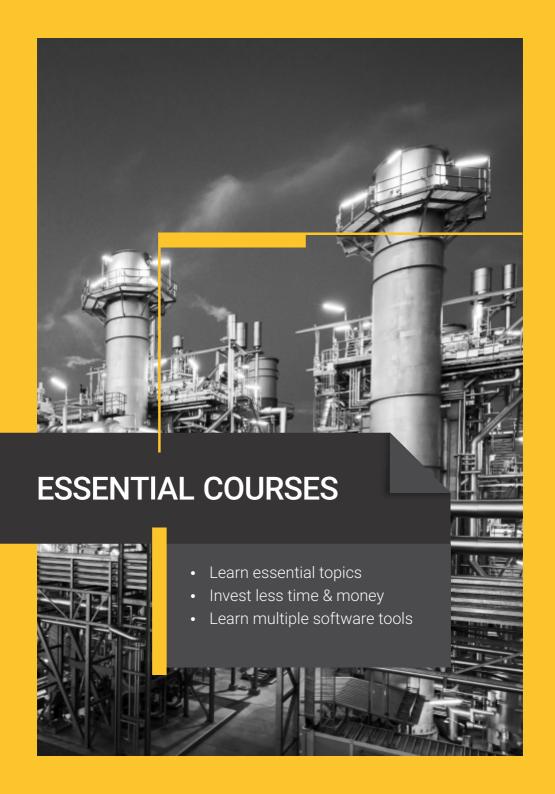
CADD Centre uses legal software from the above software developers.



Super specialization is the need of an hour.

Niche skills are increasingly in demand and engineers who empower themselves with in-demand tech skills can go a long way in their career.

CADD Centre offers you a range of technical skill course for different streams of engineering. Each course is constantly updated to meet current industry trends and requirements. Our goal is to ensure that you find a job that you enjoy and get going in your career!



GD&T Essential



Duration 16 Hours



- GD & T Rules
- ASME Y14.5M-1994
- Size Tolerance
- Form Tolerance
- Orientation Tolerance
- Profile Tolerance
- Location Tolerance
- Runout
- Datum
- Modifiers







AutoCAD Essential

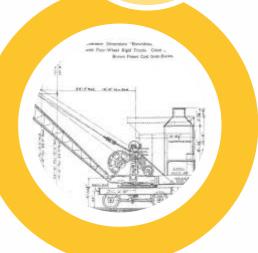




- Drafting Best Practices
- File Management
- Drawing entities
- Editing Entities
- Object Properties
- Annotation
- Views & Dimensioning
- Symbols & BOM
- Plotting
- Printing Drawing







Creo Essential





Courseware Issued Creo Essential e-Book

- Getting started Creo UI
- Sketches for features
- Part Modeling features
- Feature redefining
- Datum Features
- Family Table & Parameters
- Advanced Assembly
- Surface Modeling
- Drawing Views
- Sheet metal design







NX CAD Essential





- NX GUI Explore
- Sketches & Constraints
- Part Features
- Instance geometries
- Datum Creation
- Feature Redesigning
- Assembly design
- Surface Modeling
- Drawing & Detailing
- Sheet metal Design







SolidWorks Essential





Courseware Issued SolidWorks Essential e-Book

- Getting Started with SolidWorks
- Sketch Entities
- Part Modeling Tools
- Editing & Features
- Engineering Features
- Assembly Design
- Drafting& BOM
- Sheet metal design







CATIA Essential





- GUI & Shortcuts
- Sketcher workbench
- Sketch based features
- Dress-up features
- Part workbench
- Assembly constraints
- Wire frame
- Surface modeling
- Sheetmetal design
- Standard Drafting Practices







Ansys Workbench Essential



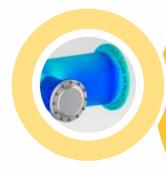
Duration 40 Hours



Courseware Issued Ansys Workbench Essential e-Book

- FEA Concepts
- Design models
- Ansys Solver GUI
- FEA Meshing
- Materials & Boundary Conditions
- 1D, 2D & 3D Analysis
- Static Structural Analysis
- Fatigue Study
- Modal Analysis
- Plot and Postprocess







Mastercam Essential



Duration 40 Hours



Courseware Issued Mastercam Essential e-Book

- Creating geometries & Projects
- Mill 2D Hole Marking
- Mill 2D Basic Operation
- Mill 2D Advanced operation
- Mill 2D Creating Dynamic Mill
- Mill 3D Roughing
- Mill 3D Finishing
- Hybrid Finishing
- Rastor Finishing







Ansys Fluent Essential



Duration 40 Hours



Courseware Issued Ansys Fluent Essential e-Book

- CFD solving workflow
- Flow Mix and Heat Transfer
- Transonic Flow
- Multiple Species Flow
- Turbulence Model
- Periodic Heat Flow
- Radiation and convection
- Turbulent Flow in Heat Exchanger
- Siphoning







Autodesk Inventor Essential



Duration 40 Hours



Courseware Issued Inventor Essential e-Book

- Inventor Work Environment
- Creating 2D Entities
- Advanced Sketching
- Modifying Sketch
- Part Modeling
- Part Features
- Solid Editing
- Assemblies Design
- Sheet Metal Design
- Detailing







CATIA Kinematics Essential





- Multiple Joints
- Generating Mechanisms
- Simulating Mechanism
- Sensors
- Trace
- Swept Volume
- Interpreting Analysis Results
- Interference Analysis
- Exporting Interference Results Analysis







Creo Simulate Essential



Duration 40 Hours



Courseware Issued Creo Simulate Essential e-Book

- Preparing FEA Model
- Pre-process
- Meshing Techniques
- Structural Static Analysis
- Modal Analysis
- Fatigue Analysis
- Buckling Analysis
- Thermal Analysis
- Assembly Analysis
- Pre-stress analysis







Fusion 360 Essential



Duration 40 Hours



Courseware Issued Fusion 360 Essential e-Book

- Conceptual Design
- 3D Part Design Sketcher
- Detailed Component Design
- Assemblies & Free-form Modeling
- Modal Analysis
- Product Documentation & Design Visualization
- Simulation Static Stress & Modal
- Simulation Buckling, Thermal Stress
- Design Optimization
- CAM and CNC Manufacturing







HyperMesh Essential



Duration 40 Hours



Courseware Issued HyperMesh Essential e-Book

- FEA Meshing
- 1D, 2D & 3D Mesh
- Q1 Mesh
- Shrink wrap mesh
- Tetra Mesh
- Hexa mesh
- Assembly FEM
- Solver Interfacing
- Post-process
- Reports



NX Nastran Essential

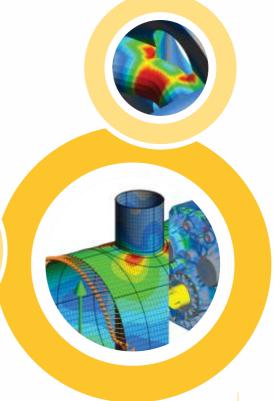


Duration 40 Hours



Courseware Issued NX Nastran Essential e-Book

- FEA Concepts
- Model Cleanup
- Geometry Idealization
- Material for FEA
- Meshing in Nastran
- Element and Mesh Attributes
- Linear Static Analysis
- Modal Analysis
- Buckling Analysis



NX CAM Essential





- CAM Configuration
- Face Milling Operation
- Planar Milling Operation
- Contour Milling Operation
- Thread Milling Operation
- Z-level Milling Operation
- Variable Contour Operation
- Multi blade milling operation
- Drilling Operation
- Turning Operation







SolidWorks Motion Essential



Duration 40 Hours



Courseware Issued SolidWorks Motion Essential e-Book

- Basic Motion
- Kinematic simulation
- Animation
- Multibody dynamics
- Mechanism Verification
- Case Study



Non-Destructive Testing Essential





Courseware Issued Non Destructive Testing (NDT) Essential Reference Guide

- NDT Types
- Radiographic Testing
- Magnetic Particle Testing
- Ultrasonic Testing
- Liquid Penetrant Testing
- Visual Testing
- Welding Inspection



Python for Mechanical Engineers



Duration 40 Hours



Courseware Issued
Python Essential
e-Book

- Python Programming Basics
- Decision Making
- Modules & Functions
- List, Tuple, Dictionary
- Strings
- Scientific Calculations
- Matplotlib
- Numpy & Pandas
- Python for Free CAD
- Python for Abacus

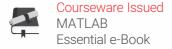






MATLAB for Mechanical Engineers





- MATLAB Built in functions
- Programming & MatLab Scripts
- SimuLink Modeling
- DC Motor Performance Evaluation
- Multibody Model Anatomy
- Modeling Bodies
- Simulation & Analysis
- Gear Mechanism
- Lead Screw Joint Block Modeling
- Simscape Multibody Library







Drafting Standards Essential - Mechanical



Duration 40 Hours



Courseware Issued Drafting Standards Essential e-Book - Mechanical

- Fundamentals of HVAC
- Refrigeration Cycle
- HVAC load calculation
- O general load calculation
- Duct Designing
- Kitchen hood ventilation
- Car parking ventilation
- Chillers/DX system
- District cooling
- Drafting using AutoCAD







Piping and Welding (QA/QC)



Duration 40 Hours



Courseware Issued
Piping & Welding Essential
Reference Guide

- 2D Sketches
- Reference Plane
- Features
- Assemblies
- Advanced Assembly
- Sheet Metal Design
- Surface Modeling
- Detailing
- Freeform Modeling





3D Printing Essential



Duration 16 Hours



Courseware Issued 3D Printing Essential Reference Guide

- Introduction of 3D Printing
- FDM technology in detail
- Preparation of print ready file-Plasto 200
- STL principles
- Object Placement & Analysis
- Slicer Settings
- Print Settings
- Manual Controls
- Material Properties







Design Visualization Essential





Courseware Issued Design Visualization Essential e-Book

- Geometric Primitives
- Transforming Objects
- Modifiers
- Slate Material Editor
- Photometric Lights
- Particle Systems
- Space warps
- **Environment Effects**
- Daylight Rendering
- Animation Creation







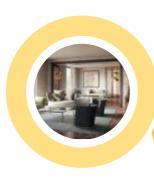
V-Ray Essential





- V-ray Rendering Engines
- V-ray Image Sampling Techniques
- V-ray Lights
- Global Illumination for Exterior Scenes
- Global Illumination for Interior Scenes
- V-ray Physical Camera
- V-Ray Materials
- V-ray Aerial Perspective
- V-Ray Objects
- V-ray Render Elements







SketchUp Essential



Duration 40 Hours



Courseware Issued SketchUp Essential e-Book

- Inference Techniques
- Modeling Entities
- Push/Pull Modification
- Object Editing
- Measurement & Annotation
- Match photo modeling
- Components: General & Dynamic
- Modeling from DWG
- Model visualization
- Model documentation







Revit Architecture Essential



Duration 40 Hours



Courseware Issued Revit Architecture Essential e-Book

- Project workflow
- Levels & Grids
- Walls Modeling
- Object Modifying
- Revit Components
- Floors & Roofs
- Curtain wall, Stairs & Ramps
- Dimensions & Constraints
- Annotations & Documentation
- Schedules & Revit Family







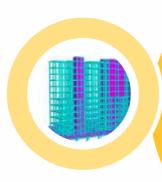
STAAD.Pro Essential





- STAAD Editor
- Modeling of Structures
- Objects and Model Editing
- Model Specification
- Loads & load combination
- Structural Analysis
- Wind load analysis
- RC Structure Design
- Steel Structure Design
- Foundation Design







Construction Management using MSP

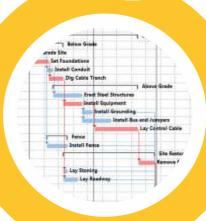




- Project management framework-
- Project Initiation & Planning
- Project Execution
- Monitoring and Controlling Process
- MSP road Map
- Task and its relationship
- Work Breakdown Structure
- Resource Analysis & leveling
- Earned Value Analysis
- Multiple Projects & Reports







Max for Engineers/Architects Essential



Duration 40 Hours



Courseware Issued Max for Engineers / Architects Essential e-Book

- Standard Shapes
- Compound Objects
- AEC Extended Modeling
- Modifiers
- Interior & Exterior Objects
- Materials
- Lights & Cameras
- Rendering
- Animation
- File Management







ETABS Essential





- Modeling of Building Structure
- Object Editing Tools
- Property Specification
- Loads & load combination
- Analysis of Building System
- Concrete Frame Design
- Shear Wall Design
- Steel Frame Design
- Steel Connection & Joist Design
- Detailing & Documentation





MSP with PPM Concepts Essential





- Project management framework-
- Project Initiation & Planning
- Project Execution
- Monitoring and Controlling Process
- MSP road Map
- Task and its relationship
- Work Breakdown Structure
- Resource Analysis & leveling
- Earned Value Analysis
- Multiple Projects & Reports





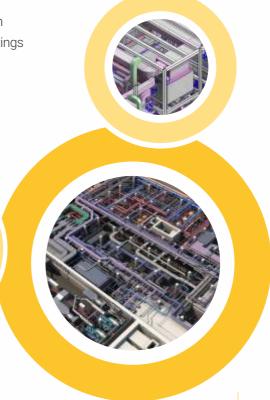


REVIT MEP Essential





- Worksharing
- Family Creation
- HVAC Load Analysis
- Setting Up Air Systems
- Duct Work
- Mechanical Piping System
- Lighting Analysis
- Power Distribution System
- Plumbing Fixtures & Fittings
- Drafting and Detailing





Building Estimation and Costing with Simulation





- Reviewing the model
- Exploring your model
- Simulation Time-liner
- Animate Objects
- Rendering
- Estimation
- Manual Takeoff Tools
- Validation & Reports



ProSteel Essential



Duration 40 Hours



Courseware Issued ProSteel Essential Reference Guide

- Shapes
- Plates & Element Modification
- Base plate Modeling
- Drill & Bolting
- Static & Dynamic Bracing
- Purlins & Connections
- Structural Elements
- Custom Shape Creation
- Detailing







Ansys Civil Essential



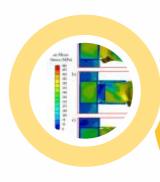
Duration 40 Hours

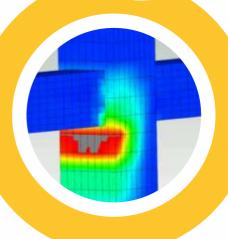


Courseware Issued Ansys Civil Essential Reference Guide

- Modeling in ANSYS
- Loads & Load Combination
- Concrete Design
- Slab Design
- Pre-stress Concrete Design
- Bridge Design
- Retaining Wall Design
- Foundation Design
- Seismic Design
- Steel Design







AECOsim Essential



Duration 40 Hours



Courseware Issued AECOsim Essential Reference Guide

- Placing 2D Elements
- Manipulating 2D Elements
- Modeling Elements
- Placing Contents
- Placing Lighting Fixture
- Stairs & Rails Creation
- Placing Elevators
- Roof Creation
- Architecture Master Model







AutoCAD Civil 3D Essential



Duration 40 Hours



Courseware Issued Computer Aided Land Survey Essential Reference Guide

- Survey Fundamental
- Working with Point Data
- Survey & LiDAR Survey
- Surface Analysis & Grading
- Alignment Creation
- Corridor Creation
- Junction Design
- Earthwork calculation
- Quantity Takeoff







MicroStation Essential



Duration 40 Hours



Courseware Issued MicroStation Essential Reference Guide

- MicroStation manager
- Creating Elements
- Manipulate Tools
- Modify Element
- Group & Region
- Cells & Levels
- Hatch & Pattern
- Isometric Drawing
- Annotation & Dimensioning
- Drafting Outputs







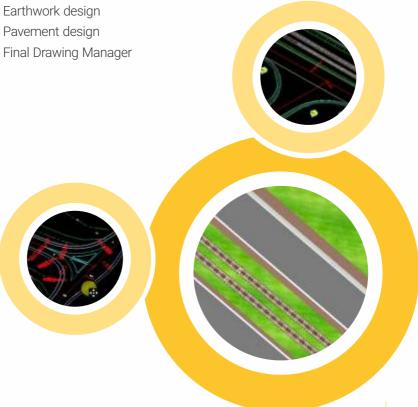
MX Road Essential





- Survey inputs and validation
- Model Analysis
- Surface Analysis
- Farthwork calculation
- Alignment creation
- Junction design



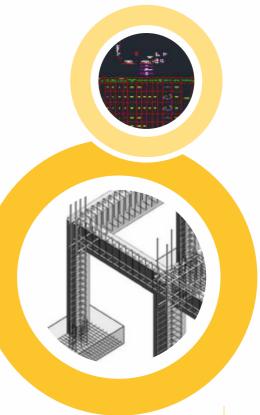


RCC Detailing Essential





- Element Creation
- Beam & Column Detailing
- Floor Slab Detailing
- Foundation Detailing
- Staircase detailing
- Retaining Wall Detailing
- Drawing Preparation
- Bar Bending Schedule





Lumion Essential

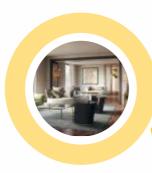




Courseware Issued Lumion Essential e-Book

- Handling 3D Models
- Creating & Tweaking Lumion Materials
- Realistic Exterior Scene Creation
- Lumion's Library & Controlling 3D models
- Lumion Interior & Exterior Lighting
- Instant Urban Context with OpenStreetMap
- Creating Realistic Visualizations
- Non-photorealistic Visualizations
- Animation Techniques with effects
- Creating Walk-through Visualizations







Revit Structure Essential





- Structural Column
- Structural Beam
- Structural Walls & Floors
- Steel Structures
- Structural Foundation
- Structural Slabs & Openings
- Structural Analysis
- Construction Documents
- Schedule
- Revit Family







AutoCAD Electrical Essential





- AutoCAD Electrical GUI
- Creating Library Symbol
- Component Tools
- Component Attribute Tools
- Wire Numbers
- PLC
- Conversion Tool
- Panel & Terminals
- Audit & Reports







BIM for Architects Essential





- Introduction to BIM
- BIM Execution Plan
- Conceptual Modeling
- 3D Modeling
- Analysis
- Collaboration
- Model Checking
- Quantification using Revit







Drafting Standards - Civil





- Dimensioning and its standards
- Architectural plan drafting
- Elevation drafting
- Section drafting
- Special drawings
- Structural drawings requirements
- RC Structural Drawings
- Steel Structural Drawings







Drafting Standards - Electrical

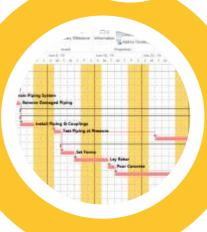


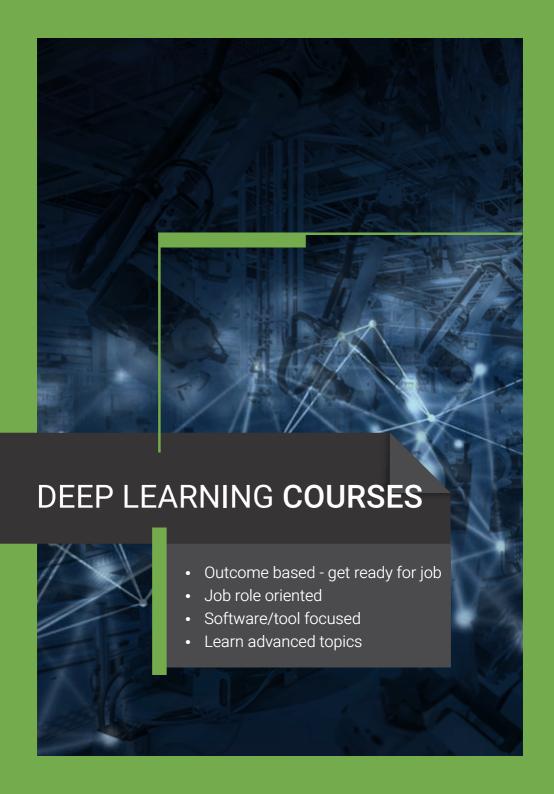


- IEC Standards
- Electrical sub-station drawings
- Electrical Plan Residential & Commercial
- Electronic diagrams
- Integrated circuit schematics
- PCB Layout
- Abbreviations IS
- IEC role in the IoT









Proficient in AutoCAD for Mechanical Engineers

AutoCAD for Mechanical Engineers



Duration 80 Hours



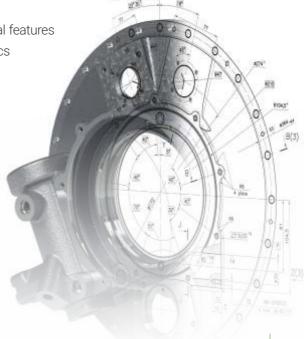
Courseware Issued AutoCAD for Mechanical Engineers e-Book

- Drafting Entities
- Advanced drafting and modifications
- Layer management
- Views & Annotation
- Parametric drawings
- Blocks & Attributes
- X-ref and OLF

Layout and Plot

AutoCAD mechanical features

AutoCAD 3D Technics



Proficient in AutoCAD for Civil Engineers and Architects

AutoCAD for Architects and Civil Engineers

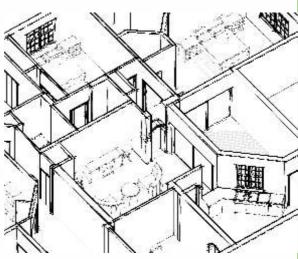


Duration 80 Hours



Courseware Issued
AutoCAD for Architects and
Civil Engineers e-Book

- Drafting Entities
- Layer management
- Views & Annotation
- Parametric drawings
- Blocks & Attributes
- X-ref and OLE
- Layout and Plot
- AutoCAD Architecture features
- AutoCAD 3D Technics
- Advanced drafting and modifications



Proficient in AutoCAD for Electrical & Electronics Engineers

AutoCAD for Electrical and Electronics Engineers

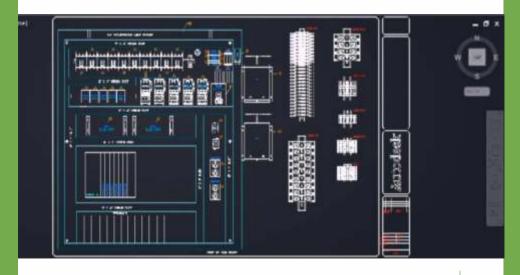


Duration 80 Hours



Courseware Issued
AutoCAD for Electrical and
Electronics Engineers e-Book

- Drafting basic geometry
- Advanced drafting & Modifying
- Blocks & Attributes
- External Ref & OLE
- Layout, plot & publish
- Symbol & Circuit Builder
- Schematic component tools
- Programmable logic controller
- Wires & Wire numbers tools
- Connectors & Panels



Proficient in Creo

Creo



Duration 80 Hours



Courseware Issued Creo Reference Guide

- Sketch tools
- Part Modeling Features
- Part Editing Features
- Datum Features
- Assembly Modeling
- Advanced Assembly
- Surface Modeling
- Sheet metal design
- Drawing Views
- Dimensions & Annotation



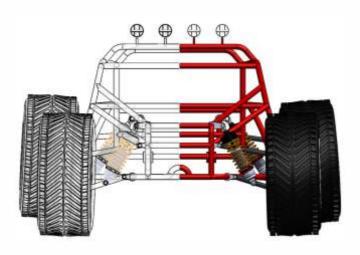
Proficient in SolidWorks

SolidWorks





- Sketch Creation Tools
- Sketch Editing Tools
- Part modeling features
- Part Editing Features
- Assembly Modeling
- Surface Modeling
- Sheet metal design
- Weldment Design
- Drawing Views & Annotations
- Model Visualization



Proficient in NX

NX CAD

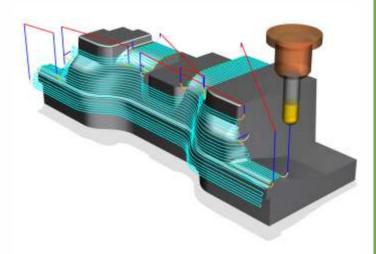


Duration 80 Hours



Courseware Issued
NX CAD Reference Guide

- Sketch Creation & Editing Tools
- Part Modeling Features
- Part Editing Features
- Assembly Modeling
- Advanced Assembly
- Surface Modeling
- Sheet metal design
- Drawing Views
- Dimensions & Annotations
- Rendering



Proficient in CATIA

CATIA





- Sketch Creation Tools
- Sketch Editing Tools
- Part Modeling Features
- Advanced part Modeling Features
- Assembly Modeling
- Sheet Metal Design
- Surface Modeling
- Drawing Views
- Dimensions & Annotations
- Drafting Settings & Rendering



Proficient in Nastran

NX Nastran

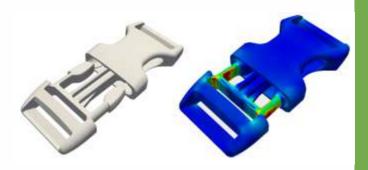


Duration 80 Hours



Courseware Issued
NX Nastran Reference Guide

- Geometry Preparation
- Advanced Idealization
- Materials & Boundary Conditions
- Meshing
- Static Structural Analysis
- Contact analysis
- Assembly FEM
- Response Simulation
- Modal & Buckling analysis
- Thermal & Optimization



Proficient in CAE

Ansys Workbench

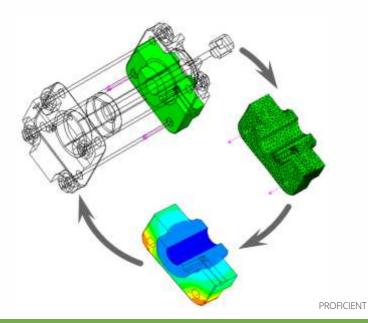


Duration 80 Hours



Courseware Issued Ansys Workbench Reference Guide

- Creating 3D Models
- Creating FEA Models
- FEA meshing Technique
- Loads & Boundary Condition
- Materials
- Simple Static Structural Analysis
- Modal & Buckling Analysis
- Fatigue & Thermal Analysis
- Design Parameters



Proficient in Inventor

Autodesk Inventor

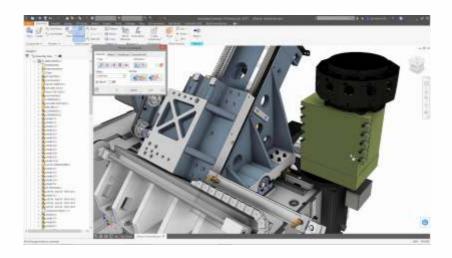


Duration 80 Hours



Courseware Issued
Inventor Reference Guide

- 2D Sketches
- Reference Plane
- Features
- Assemblies
- Advanced Assembly
- Sheet Metal Design
- Surface Modeling
- Detailing
- Freeform Modeling



Proficient in QA/QC

Module 1

NDT (QA/QC)



Duration 96 Hours



Courseware Issued

Non Destructive Testing (NDT) Reference Guide

- Radiographic Testing
- Magnetic Particle Testing
- Ultrasonic Testing
- Liquid Penetrant Testing

- Visual Testing
- General Safety
- Welding Inspection

Module 2

Piping & Welding



Duration 24 Hours



Courseware Issued Piping & Welding Reference Guide

- 2D Sketches
- Reference Plane
- Features
- Assemblies
- Advanced Assembly
- Sheet Metal Design
- Surface Modeling
- Detailing
- Freeform Modeling



Proficient in Revit Architecture

Revit Architecture



Duration 80 Hours



Courseware Issued Revit Architecture Reference Guide

- Levels and Grids
- Walls & Complex Walls
- Joineries & Furniture
- Create Floors & Roofs
- Curtain Walls & Stairs
- Conceptual Energy Analysis
- Documentation & Schedules
- Visualization
- Site Design & Family Creation
- Link Projects & Collaboration



Proficient in STAAD.Pro

STAAD.Pro





- Modeling of Structures
- Assigning Properties
- Loads & Load combinations
- Bridge Deck Design
- Static Linear Analysis
- Response Spectrum & Time History Analysis
- P-Delta & Buckling Analysis
- RC Beam, Column Design
- Design of Steel Structures
- Foundation Design



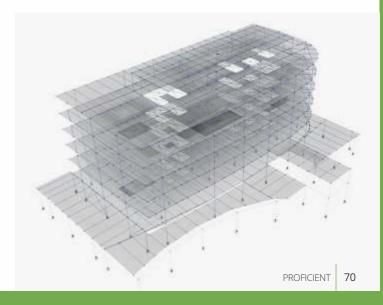
Proficient in ETABS

ETABS





- Modeling of Building Systems
- Property Specification
- Loads & Load Combinations
- RC Structure Design
- Steel Structure Design
- Static Linear Analysis
- Response Spectrum Analysis
- Push-over Analysis
- Time-History Analysis
- Detailing & Documentation



Proficient in Revit MEP

Revit MEP



Duration 80 Hours



Courseware Issued
Revit MEP Reference Guide

- Work sharing
- Family Creation
- Symbols & Annotations
- Mechanical Design
- Mechanical System & Duct Work
- Mechanical Piping System
- Electrical Design
- Fire Alarm Model
- Plumbing Design
- Drafting & Detailing



Proficient in 3ds Max

3ds Max



Duration 80 Hours



Courseware Issued
Max for Engineers / Architects
Reference Guide

- Shapes & Geometries
- Particle Systems & Space Warps
- Modifiers
- Interior Modeling
- Exterior Modeling
- Mechanical Product Modeling
- Working with Materials
- Lights & Camera
- Advanced Rendering
- Animation & Walkthrough



Proficient in AECOsim

AECOsim Building Designer

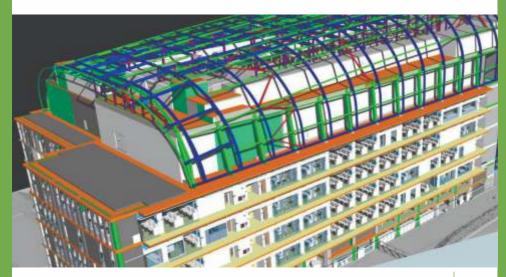


Duration 80 Hours



Courseware Issued
AECOsim Building Designer
Reference Guide

- Modeling & Manipulating 2D Elements
- Conceptual Mass Modeling
- Modeling Elements
- Placing Contents
- Stairs & Railings
- Roof Creation
- Creating an Architecture Model
- Rendering
- Integrated Structural Modeling
- Creating UCF and PCF



Proficient in MX Road

MX Road



Duration 80 Hours



Courseware Issued
MX Road Reference Guide

- Survey inputs and validation
- Model & Surface analysis
- Earthwork calculation
- Alignment creation
- Carriageway & Junction design
- Shoulder & Earthwork design
- Pavement design
- Road re-design & rehabilitation
- Testing a Design
- Dynamic reports



Proficient in AutoCAD Civil 3D

AutoCAD Civil 3D



Duration 80 Hours



Courseware Issued
AutoCAD Civil 3D Reference Guide

- Concept of Computer Aided Land Survey
- Working with Point Data
- Survey & LiDAR Survey
- Surface Analysis & Grading
- Alignment Creation
- Corridor Creation
- Intersection Design
- Roundabout Design
- Quantity Takeoff
- Pipe Layout



Proficient in Primavera for Construction Management

Module 1

PPM Concepts



Duration 24 Hours



Courseware Issued
PPM Concepts Reference Guide

- Project Management Framework
- Organization Structure
- Project Initiation
- Project Planning

- Project Execution
- Monitoring & Controlling
- Closing Process Group

Module 2

Primavera for Construction Management



Duration 40 Hours



Courseware Issued Primavera Reference Guide

- Work Breakdown Structure
- Activities & Relationships
- Scheduling
- Constraints & Codes
- Roles & Resources
- Resource Analysis & Levelling
- Updating Project Progress
- Tracking Project Progress
- Issues & Thresholds
- UDF & Reports



Your advantage



Flexible batch timings



Instructors certified by Internal Training Academy (ITA)



Tie up with International organizations



Equips with industry specific CAD skills



World class up - to - date curriculum



Globally valid Certification

Choose a level and course that best suits your needs. And get job-ready!

Note: The training for select courses will be conducted only at the client's site (Educational Institution / Corporate). The client must ensure the lab is equipped with the required software and hardware specifications for CADD Centre to conduct the associated course training. For further details please visit your nearest centre.

Courses/products are updated as on July 2021. For the current availability contact our nearest centre or visit www.caddcentre.com





- CADD Centre Training Services, 1st Floor, K.R.Ahamed Sha office complex, No. 25, Dr. Radhakrishnan Salai, Mylapore, Chennai - 600 004, Tamil Nadu, India.













