Creating creativity
is our identity.

Assuring Bright Careers...!

ABC
TRAININGS

Avinash Bhaskar Chate

Entrepreneur | Motivational Speaker
|Career Consultant | Corporate Trainer | Author

Founder-CEO

ABC Group, is the brainchild of Mr. Avinash Bhaskar Chate, the visionary and the true soul of organization.

He has achieved rapid recognition as a sound entrepreneur straddling Education, Motivation Speaker and Business consultant while growing investments in Education sectors. His passion to innovate in everything he associates himself be it Education, Training & Consulting... In the year 2014 he founded the ABC Group, and with sheer hard work, dedication and unique business acumen he has taken the group to great heights. It is this very urge of helping people and doing something good for the society that inspired him to take the initiative of changing people's lives in the form of Developing Education By Opening Versatile Training Centers & giving Motivational & Career guidance seminars across nation". No wonder people connect with him and his mission of 'Sharing' is now being actively propagated and practiced by millions. It is his diligent focus, the great support of his family and the faith of his team that keeps him going..

Avinash Bhaskar Chate is author of best seller book "THE WINNING EDGE-The Champions Mindset" English and its Marathi Edition. He is a trusted advisor & Consultant for over 1000+ corporates & Educational Institutions like RBI, Sport Authority of India (SAE), TATA Group, Keshardeep Pressings, Rajuri Steel, Ferrero, BHABHA, JSW Steel and a pathfinder to various entrepreneurs, Students and other top-notch business entities. He has been instrumental in providing Leadership, Motivational and Skill Based coaching to over 10000+ Professionals in the country. He has been conferred with the "Young National Motivational Speaker Award". Avinash Bhaskar Chate through his Public Speaking is helping people to make IMPACT in life and to be more successful.

www.avinashchate.com

Our Courses

Authorised Training Provider
Government Approved
www.abctrainings.in

ए.बी.सी. कैड सेंटर
Assuring Bright Careers...!

● Mechanical Courses

- ● AutoCAD Mechanical
- ● Geometric Dimensioning & Tolerances
- ● SOLIDWORKS
- ● SOLIDWORKS Motion
- ● Creo Parametric
- ● Creo Simulate
- ● Catia
- ● Catia Kinematics
- ● NX CAD
- ● NX CAM
- ● NX Nastran
- ● Hypermesh
- ● Ansys Workbench
- ● Ansys Fluent

● Civil/Architechture Courses

- ● **AutoCAD Civil / Architecture**
- ● Microstation
- ● Revit Architecture
- ● Sketch Up
- ● 3DS Max for Engg. / Architecture
- ● V-Ray (Advance Rendering)
- ● 5D BIM Navisworks
- ● Building Estimation & Costing with Simulation
- ● Staad.Pro
- ● Etabs
- ● Lumion
- ● AutoCAD Civil 3D
- ● MX Road
- ● Computer Aided Land Survey using AutoCAD Civil 3D

● Mechanical / Civil / Electrical

- ● **Revit MEP**
- ● Microsoft Project (PPM)

Our Courses

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Government Approved
www.abctrainings.in

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Assuring Bright Careers...!

● Electrical / Electronics

- **Auto**CAD for Electrical / Electronics
- ETAP
- MATLAB Electrical
- MATLAB Electronics
- PLC & SCADA
- OrCAD-Capture
- OrCAD Pspice
- OrCAD PCB Editor
- Embedded Linux
- Microcontroller
- Advance Microcontroller

● IT / Computer

- C
- C++
- JAVA
- Advance JAVA
- Python
- Django
- Full Stack Development
- Network Engineering - Routing & Switching (CCNA)
- Network Security
- Cloud Computing
- Ethical Hacking
- Cyber Security Analyst
- Data Science
- Data Science using Python / R
- Artificial Intelligence (AI)
- Internet Of Things (IOT)
- Machine Learning
- ABC TRAININGS University ..(online course modules)

● The Future

- About The Future
- Program for Corporate
- Program for Institute

Our Placed Students

Balaji Kandgule
Design Engineer
Vaibhav Industry

Nikhil Gaikawad
Design Engineer
Laxmi Steel Industry

Tushar Sapkal
Design Engineer concept Asia
Pharma Machines & Technology

Krishna Kesle
Accountant
E-Commerce Company

Abhishek Sabne
Trainee Engineer
L & T Technology Services

Pratik Yadav
Software Engineer
Wipro

Saloni Koyalwar
ASE Trainee
TCS

Vikrant Labde
Finance Associate
STL Technology Pvt. Ltd.

Tejas Kotur
CAD Engineer-MAN Energy
Solutions Pvt. Ltd.

Nilesh Chitode
Jr. Design Engineer
Neuton Auto Pvt. Ltd.

Adinath Doiphode
Design Engineer
Adtech Engineering

Rutvik D.
Design Engineer- E Agrocare
Machinery & Equipment

Pranoti Yadav
software Engineer
Wipro

Akshata Chitkote
Design Engineer
Aditya Green Energy Pvt. Ltd

Ranjeet Padol
CEO
Raviraj & Associates

Utteshwar Anjan
Design Engineer
Genesys Laser Pvt. Ltd.

Rupesh Misalkar
Design Engineer
Elemechtron Engineering

Anuja kasale
Site Engineer - Bharati &
Gitte Construction Company

Nihal Deshmukh
CAD Design Engineer
IAS & Associate

Varad Thakare
Design Engineer
Avneesh Engineering

Our Placed Students

Anurag Bhikule
Jr. Design Engineer -Envision
Integreted Services Pvt. Ltd.

Adil Shaikh
MEP Modeller intern
Spaze Vision Pune

Rushikesh Sangle
Technical Illustrator
Expert Global Solution

Piyush Arora
Site Engineer
SK Gosavi Pvt. Ltd.

Sanket Dugam
Product Development Manager
Sanjeev Auto Pvt. Ltd.

Vaishali Rathod
Jr.CAD Engineer
Balaji Group Of Construction

Adnan
Design Engineer
Raj Technology Waluj

Sagar Lone
Design Engineer
Pawan Precision Pvt. Ltd.

Dhiraj Chame
Graduate Trainee
TCS

Pravin Kharat
Lab Assistance - Swami Samarth
Jr. College of Science Jambhora

Aarti Bansod
Electronic Design Engineer
PVG Technology Pune

Milind Wani
Design Engineer-White
Bear Refrigeration India Pvt. Ltd.

Sundar Kaspate
CAD Engineer
IAS & Associates

Rushikesh Pawar
Design Engineer
Ishanvi Tech

Abhijeet Salve
Design Engineer -Shree
Ganesh Press Coat Pvt. Ltd.

Jayesh Patil
Design Engineer
P J Valves Pvt. Ltd.

Shubham Dhage
Design Engineer
Avneesh Engineering

Priya Jadhav
Software Developer
Spotware Software Banglore

Khan Shahebaz
Design Engineer
Automatic Systems

Aoun Baig
Design Engineer- Shree
Ganesh Press & Coat Pvt.Ltd.

# AutoCAD for Civil / Architecture

Duration
80 Hours

Softcopy
Courseware Issued

- Drafting basic geometry
- Layer management
- Hatching and gradient technics
- Isometric drawings
- Dimensioning
- Parametric drawing
- Blocks and attributes
- Modifying drawings in AutoCAD
- External reference (Xref) concepts
- Object linking and embedding
- (OLE) concepts
- Layout management
- Plot and publish
- 3D modeling concepts in AutoCAD
- Introduction to AutoCAD Architecture
- Advanced drafting using
- AutoCAD Architecture
- AEC objects
- Tutorials and projects
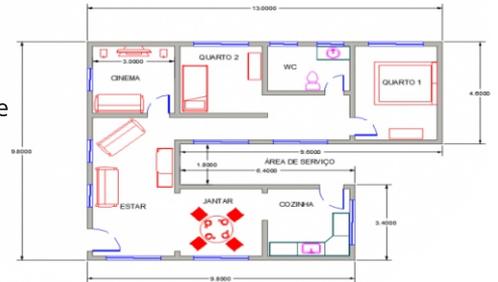
Microstation

Duration
40 Hours

Softcopy
Courseware Issued

- Introduction
- Understating the interface
- MicroStation workflow
- Working with views
- Creating and modifying elements
- Annotation tools
- Dimensioning
- Working with levels
- Working with references
- Printing methods

Revit Architecture

Duration

120 Hours

Softcopy

Courseware Issued

AUTODESK® REVIT®

- Introduction to BIM & Revit Architecture
- Place and modify Walls & Complex Walls
- Add and modify Wall Profiles
- Place Doors, Windows & Components
- Dimensions and Constraints
- Create Floors and Ceilings
- Curtain Walls & Stairs
- Conceptual Models
- Annotation & Schedules
- Sheets and Title Blocks
- Views, Camera, Walk-through,
- Render & Solar Study
- In-Place Families
- Family Creation
- Site Design
- Link Projects & Collaboration
- Design Phase
- Realistic Presentations
- Import & Export

SketchUp

Duration

40 Hours

Softcopy

Courseware Issued

SketchUp

- Templates
- Inference: Concept, Inference Locking
- Pushing and Pulling Shapes into 3D
- Building models as a Block
- Building models using Components
- Building models from DWG
- Building models using Match Photo
- Modeling with accuracy tools
- Modeling with static & dynamic comp.
- Component attributes
- Presenting your model
- Camera, section, scenes, layers, materials
- SketchUp layout

Max for Engg. / Arch.

Duration
80 Hours

Softcopy
Courseware Issued

- Introduction to 3ds Max
- Modeling using basic primitives
- Transforming objects
- Customizing working units
- Arranging objects using utility tools
- Modeling using parametric modifiers
- Editing Poly Models - using
- Caddy Interface
- Spline modeling
- Landscaping and modeling using Compound Objects
- Construct using Architectural objects
- Views - Lights and Cameras
- Textures - Basic & Advance

- Particle Systems & Forces
- Importing other formats
- Basics of Animation
- Walk-through
- Advanced Rendering

Advance Rendering With V-Ray

Duration
32 Hours

Softcopy
Courseware Issued

- Introduction to Vray
- Vray Rendering Engines
- Vray Image Sampling
- Vray Lights - Common Settings
- GI for exterior and Interior Scenes
- Vray physical Camera
- Vray Materials
- Vray Aerial Perpective
- Vray Displacement Mode
- Vray Render Elements

5D BIM using Navisworks

Duration
40 Hours

Softcopy
Courseware Issued

- Introduction About
- Autodesk Navisworks Manage
- Review the Model
- Object Attributes
- Create and use set of Objects
- Manipulate Object Attributes
- Transform Objects
- Measure tools
- Links
- Navigate the scene
- Clash Detection
- Timeliner Costs
- Animator
- Use Animator for Soft Clashing
- Scripter
- Quantification Tool
- Perform Model Takeoff

- Update and Analyze data
- Adding Materials to a Model
- Material Mapping
- Lighting
- Sun and Sky Lights
- Photorealistic Rendering

AUTODESK® NAVISWORKS®

Also available-BIM using Revit

Building Estimation and Costing with Simulation

Duration
40 Hours

Softcopy
Courseware Issued

- About Autodesk Navisworks
- Manage
- User interface
- Review Tools
- Control Model Appearance
- TIME-LINER
- animator
- Introduction to Autodesk
- Quantity Takeoff
- Manual Takeoff Tools
- Automatic Takeoff Tools
- Validate Takeoff Data
- Report Generation: Reports Dialog
- Export & Publish to DWF

Staad.Pro

Duration
80 Hours

Softcopy
Courseware Issued

- Model Generation and Editing
- Assigning loads
- Automatic load generations
    - Slab, Wind and Moving loads
- Concrete Design
    - Column and Beam design
- Seismology
    - Seismic Analysis and Design
    - Dynamic Analysis
        - Response Spectrum
        - Time History Analysis
- FEM / FEA
    - Water Tank Design
    - Slab Design
    - Staircase Design
    - Shear wall Design
    - Bridge Deck design

- Steel Design
    - Steel Frame Structure Design
    - Overhead Transmission
    - Line Towers Design
    - Steel Structure design with
    - Pushover Analysis
- Foundation Designs
    - Isolate, Combined, Strip,
    - Mat and Pile Cap
- Report Generation and Plotting
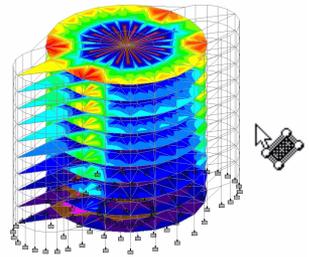
Lumion

Duration
40 Hours

Softcopy
Courseware Issued

- 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

Etabs

Duration
80 Hours

Softcopy
Courseware Issued

- Introduction
- Plane Frame Modelling
- Space Frame Modelling
- Load Pattern and Definition
- Analysis and Analysis Reports
- Concrete Frame Design and Detailing
- Shear wall design
- Steel frame design
- Steel connection design
- Steel joist design
- Flat slab design
- Waffle slab design
- Seismic analysis
- Detailing

- Steel Design and Detailing
- Composite Beam Design
- Introduction to Dynamic Analysis
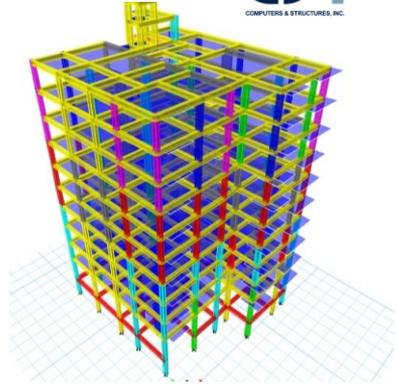
Auto CAD Civil 3D

Duration
80 Hours

Softcopy
Courseware Issued

- Computer Aided Land Survey
  - Working with point data
  - Surface creation
  - Surface analysis
  - Parcels
- Transportation Design
  - Design Criteria
  - Alignment Creation
  - Corridor Creation
  - Intersection Design
  - Roundabout Design
  - Custom Assembly Creation
- Report Generation
  - Earthwork Calculation
  - Quantity Takeoff

- Pipe Layout
  - Design Rules
  - BOM
- Plotting

MX Road

- View controls
- Survey inputs and validation
- String names and Drawing styles
- Point Selection Methods
- Surface checker
- String creation and editing
  - Surface analysis
- Earthwork calculation
- Alignment creation
  - Horizontal
  - Vertical
  - Best fit
- Carriageway design
- Junction design
- Shoulder design
- Pavement design
- Dynamic reports

- Road redesign
- Overlay design
- Section views
- Final drawings

Computer Aided Land Survey using AutoCAD Civil 3D

- Introduction to Land Survey and AutoCAD Civil 3D
- Surface creation based on the survey data from
  - Theodolite
  - Total Station
  - LiDAR
  - Google Earth
  - DEM files
- Surface Styles
- Surface Analysis

- Earthwork Calculation
  - Cut and Fill Volume
  - Grading
  - Profile View Generation
- Site Layout

Revit MEP

Duration
80 Hours

Softcopy
Courseware Issued

AUTODESK
REVIT MEP

- Introduction
  - MEP Design
  - Revit MEP
- Work sharing
- Family Creation
  - Solid Modeling
  - Equipment
  - Light Fixture
  - Devices
- HVAC Design
  - Heating and Cooling Load Analysis
  - Logical Systems
  - Mechanical System and Duct Work
  - Mechanical Piping System
  - Inspect System
  - Electrical Design
    - Lighting Analysis
    - Power & Communication
  - Design
- Plumbing Design
- Fire Protection System, Schedules
- Documentation
- Sheet Setting, Printing
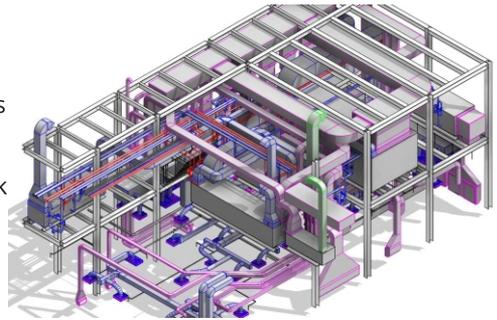
Microsoft Project

Duration
64 Hours

Softcopy
Courseware Issued

Project

- PPM Concepts
- Calendar
- Task / Relationships
- Work Breakdown Structure
- Constraints and Recurring Task
- Define and Assign Resource
- Resource Analysis and Leveling
- Baseline
- Update Project Progress
- Tracking
- Earned Value Analysis
- Customization and Formatting
- Generate Reports

AutoCAD for Mechanical Engineers

Duration
80 Hours

Softcopy
Courseware Issued

- Introduction to engineering drawings and AutoCAD
- Drafting Basic geometry shapes in AutoCAD
- Modifying drawings in AutoCAD
- Layer management
- Hatching and gradient technics
- Isometric drawings
- Dimensioning and Tolerancing
- Parametric drawing
- Blocks and attributes
- External reference (Xref) concepts
- Object linking and embedding Cole) concepts
- Plot and publish
- 3D modeling
- Advanced drafting using
- AutoCAD Mechanical
- Mechanical features drawing
- Drafting assemblies
- Tutorials and projects

GD & T

Duration
16 Hours

Softcopy
Courseware Issued

- Dimensions and drawings
- Tolerance dimensioning
- Ways of expressing tolerance
- IT grades
- Introduction to "ASME Y14.5M-1994"
- GD & T rules
- Maximum Material Condition of a feature of size
- Least Material Condition of a feature of size
- Concept of virtual condition
- Concept of bonus tolerance
- Planar datums
- Modifiers and symbols
- Tolerance types
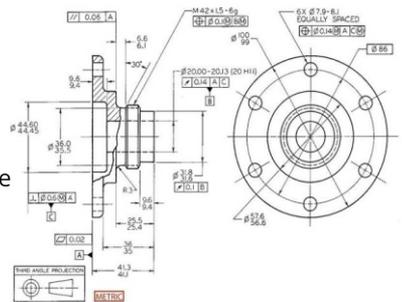
SOLIDWORKS

Duration
80 Hours

Softcopy
Courseware Issued

- Sketcher basics
- 3D sketching
- Part modeling
- Creating reference geometries
- Editing features
- Advanced modeling tools
- Configuration
- Design table/library features
- Import/export of files
- Surface modeling
- Bottom-up assembly design
- Top-down assembly design
- Exploding assemblies
- Simulation/ Detailing
- BOM, balloon tools
- Sheet metal design
- Weldment design

SOLIDWORKS Motion

Duration
40 Hours

Softcopy
Courseware Issued

- Types of Motion Studies
- Particle dynamics
- SolidWorks Motion Capabilities
- SolidWorks Motion Entities
- Animation and Basic Motion
- Motion Simulation
- Using SolidWorks Motion for
- solving Particle Dynamics problems
- Using SolidWorks Motion for Solving
- Multi body Dynamics with examples
- Results Plots and Verification

Creo Parametric

Duration
80 Hours

Softcopy
Courseware Issued

- Creo/Parametric concepts
- Creating sketcher geometry
- Creating extrudes, revolves,
- and ribs
- Selecting and editing
- Creating datum features
- Creating sweeps and blends
- Creating holes and shells
- Creating rounds, chamfers and drafts
- Variable section sweeps,helical
- sweeps and swept blends
- Layers, family tables & UDF
- Assembling with constraints
- Exploding assemblies
- Creating surface features
- Creating drawing views
- Creating drawing details
- Using advanced assembly constraints
- Creating and using component interfaces

- Creating and using flexible components
- Using assembly features and shrinkwrap
- Replacing components in an assembly
- Understanding simplified Reps
- Creating cross-sections display styles,
- and combined views
- Creating skeletons
- Sheet metal design

Creo Simulate

Duration
40 Hours

Softcopy
Courseware Issued

- Theoretical Fundamentals
- Preparing a CAD Model
- Pre-processing
- Meshing
- Structural Static Analysis
- Model Analysis
- Buckling Analysis
- Symmetry
- Thermal
- Assembly Analysis
- Dynamic analysis
- Optimization Study
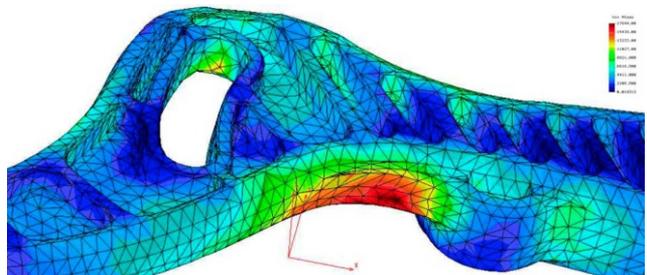
CATIA

Duration
80 Hours

Softcopy
Courseware Issued

- CATIA user interface
- Creating and editing sketches
- Creating sketch based features
- Creating transformation features
- Creating dress up features
- Creating advanced replication tools
- Assembly design
- Editing parts in assembly
- Creating surface features
- Generative sheet metal design
- Drawing view generation
- Bill of materials, balloons
- Finalizing the drawing and printing
- Dress up on 2D Views
- Real time rendering

CATIA Kinematics

Duration
40 Hours

Softcopy
Courseware Issued

- Kinematics Overview
- Graphic User Interface of CATIA Kinematics
- Basic mechanism process
- Creating joints
- Motion Transfer joints
- Rotating joints
- Complex joints
- Converting Constraints into joints
- Generating Mechanisms
- Simulating Mechanisms
- Evaluating Mechanisms
- Swept Volume

NX CAD

Duration
80 Hours

Softcopy
Courseware Issued

SIEMENS

- User interface
- Sketcher essentials
- Constraining sketches
- Datums
- Creating part features
- Editing parts
- Creating fundamental curves
- Editing curves
- Editing freeform features
- Basic assembly concepts
- Creating assemblies
- Positioning assembly components
- Assembly revisions and component replacements
- Assembly sequencing
- Assemblies - clearance and analysis

- Deformable components
- Part families
- Introduction to drafting
- Drawings and views
- Creating dimensions, notes and labels
- Plotting drawings
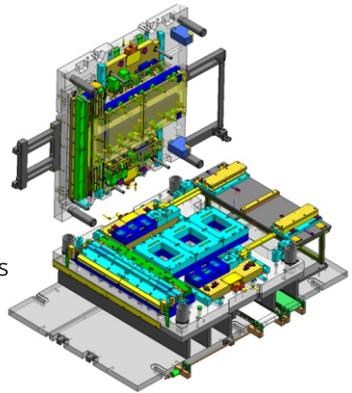
NX CAM

Duration
40 Hours

Softcopy
Courseware Issued

- The operation navigator
- Manufacturing operations and post processing
- Wizards and shop documentation
- Planar milling -'introduction and profiling
- Engrave text
- Face milling
- Cavity milling
- Z-.level milling
- Thread milling
- Area milling.
- Radial cutting
- Surface area cutting
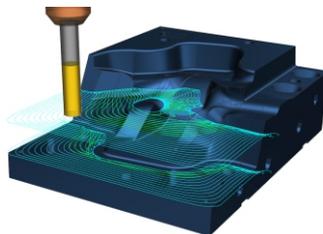
- Engraving
- Contour profiling
- Common parameters
- Rough and finish turning
- Centerline drilling
- Groove and thread operations
- Multiple spindles and IPW

NX NASTRAN
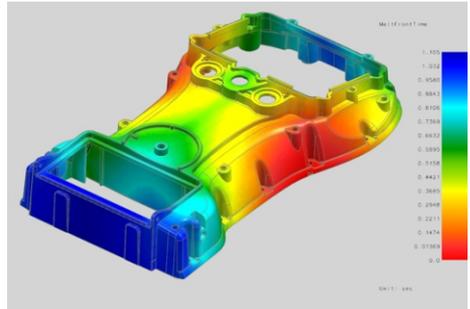
Duration
80 Hours

Softcopy
Courseware Issued

SIEMENS

- Finite element analysis
- NX Nastran overview
- Geometry abstraction
- Geometry idealization
- Specifying materials
- Meshing the geometry
- Model checking process
- Defining boundary conditions
- Solving the FE model
- Post-processing the solution
- Generating reports
- Import and export of model data
- Applying contact and gluing conditions
- Linear static analysis
- Modal analysis

- Buckling analysis
- Response analysis
- Thermal analysis
- Nonlinear static analysis
- Assembly FEM
- Optimization study

Hypermesh

Altair HyperWorks

Duration
40 Hours

Softcopy
Courseware Issued

- Introduction to FEM
- Brief on Meshing
- Basic interaction with HyperMesh
- Preparing geometry for meshing
- Shell meshing
- Tetra meshing
- Mesh quality check
- Shrinkwrap mesh
- Assemblies: welding and swapping parts
- Analysis Setup
- HyperMesh Solver Interfaces
- Post process setup
- Review, Test and Project Discussion
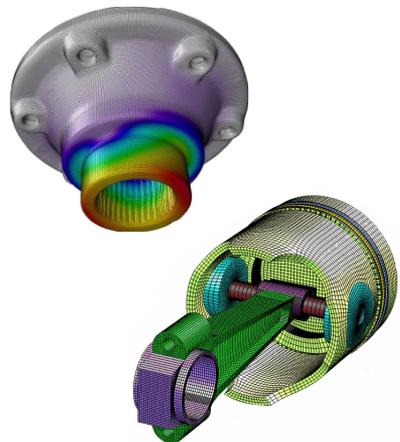
Ansys Workbench

Duration
80 Hours

Softcopy
Courseware Issued

- Introduction to CAE
- General Procedure involved
- FEA
- GUI of ANSYS Workbench
- Working on a Project
- CAD modeling using ANSYS
- Workbench
- Defining and Assigning
- Materials
- Generating the mesh
- Optimizing the model to
- refine mesh
- Working with different
- boundary conditions
- Surface and Line Models
- Static Structural analysis

- Model analysis
- Buckling analysis
- Thermal analysis
- Coupled Field (Thermal Stress)
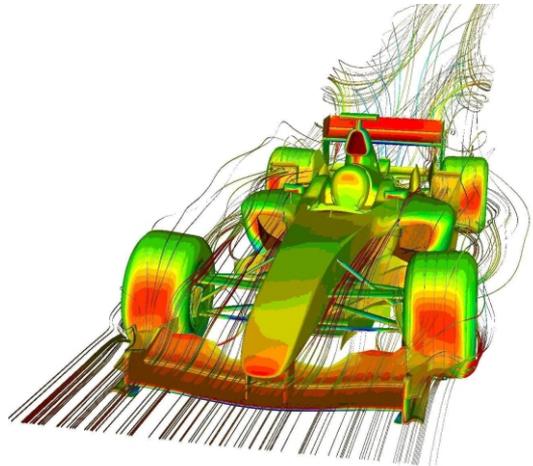- Post Processing
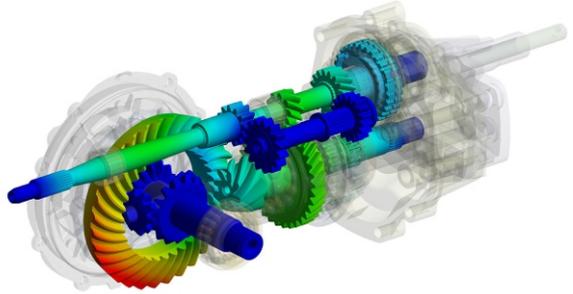
Ansys Fluent

Duration
40 Hours

Softcopy
Courseware Issued

- Basics of CFD
- CFD simulation setup
- CFD meshing
- Flow mixing
- Heat Transfer
- Transonic Flow - Airfoil
- Multiple Species
- Turbulence Modeling
- Radiation and convection
- Plane frame design
- Geo technical module
- Siphoning

AutoCAD Electrical

Duration
80 Hours

Softcopy
Courseware Issued

- Basics of AutoCAD
- Getting comfortable with the AutoCAD Environment
- Creating an AutoCAD Electrical project
- Electrical schematic diagram
- Symbol Builder and Circuit Builder
- Component Tools
- Wire/ Wire Number Tools
- Generating PLC layout modules
- Point to Point wiring tools
- Panel Layout
- Report Generation
- Ladder Tools
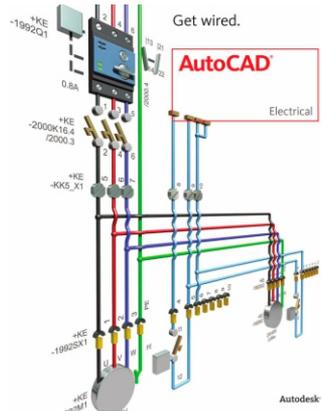
ETAP

Duration
64 Hours

Softcopy
Courseware Issued

- Introduction to Electrical System design
- Basics of Electrical Power System
- Substation Design
- Single Line diagram
- Working with ETAP software
- Various modules in ETAP
- Load Flow Analysis
- Short Circuit Analysis
- Motor Acceleration
- Transformer Sizing
- Cable
- Electrical Protection and Relays
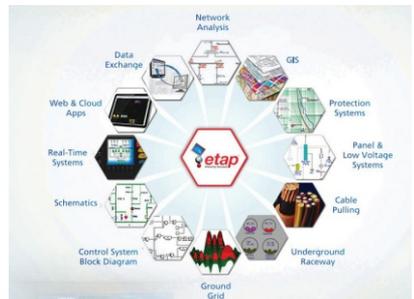
Matlab Electrical
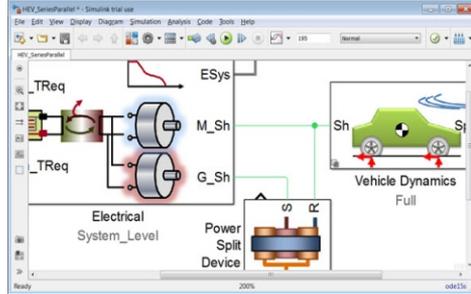
Duration
64 Hours

Softcopy
Courseware Issued

- MATLAB built-in functions
- 2D and 3D plots
- Simulink modelling
- Model Based Designing
- Masks and Subsystems,
- Lookup table editor and breakpoints
- Stateflow modelling
- Hierarchical state machines
- Parallel state machines
- Events in state machines
- Functions in state machines
- Truth tables and State transition tables
- Control systems stability analysis
- Controller implementation – P, PI, PID

- Frequency response estimation
- Simscape modelling
- Selecting solver methods
- Connecting physical signals and simulink signals

Matlab Electronics

MATLAB

Duration
80 Hours

Softcopy
Courseware Issued

- Introduction to MATLAB environment
- Simulink modelling
- Model Based Designing
- Stateflow modelling
- Computer Vision / Digital Image Processing– Script and Simulink
- Algorithms such as object detection/ recognition/ segmentation/ tracking/ classification
- Digital Signal Processing – Script and Simulink
- Developing applications usingGUI environment
- Fuzzy Logic Toolbox
- Neural Networks Toolbox
- Interfacing Arduino with MATLAB - Script and Simulink
- Interfacing Raspberry Pi with MATLAB - Script and Simulink
- Verilog Code Generation usingHDL coder in MATLAB and Xilinx ISE with FPGA
- Interfacing MATLAB withEmbedded Systems
- MATLAB and the Internet of Things (IoT)
- Interfacing Android Sensors with MATLAB
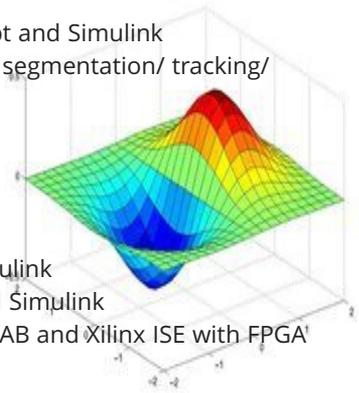
PLC and SCADA

Duration
64 Hours

Softcopy
Courseware Issued

- Architecture of PLC
- Industrial Control & Power Circuit
- Working with Field Devices
- PLC Programming using Ladder Logic
- Interfacing I/O Devices with
- PC - PLC Communication
- Timer, Counter, Jump, Subroutine & Multi-Interlocking
- Advanced Math function, Comparator, Converter
- Shift & Rotate function
- PID
- Integer and Floating function
- Industrial PLC Panel board wiring
- Industrial Automation Project
- Architecture of SCADA
- Different communication system
- SCADA Window Creation
- Object Configuration/Animation
- Scripting
- Alarm & Recipe management
- PLC & SCADA Interfacing
- Remote Monitor & Control Process
- Trends
- Data logging, OPC & ODBC
- Industrial SCADA project
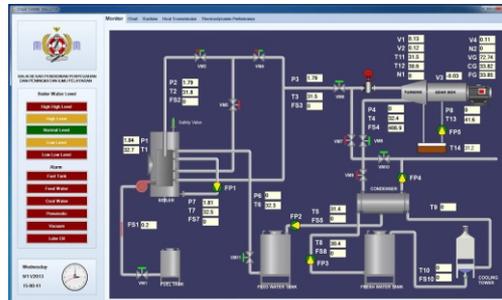
BRANDS IN PLC & SCADA

PLC & SCADA (Honeywell & Intouch)
PLC & SCADA (Allen Bradley & Intouch)
PLC & SCADA (Omron)
PLC & SCADA (Siemens)
PLC & SCADA (ABB & Intouch)
**PLC & SCADA (Delta & Intouch)**

OrCAD-Capture

Duration
20 Hours

Softcopy
Courseware Issued

- Schematic Development
- Property Editor
- Part Editor
- Net Alias
- Multiple Schematic Page Project
  (off page connector)
- Multiple Schematic Folder Project
  (Simple & Complex Hierarchy)
- Component Information System
  (CIS)
- Annotation
- Bill of material report generation
- Cross Reference parts report
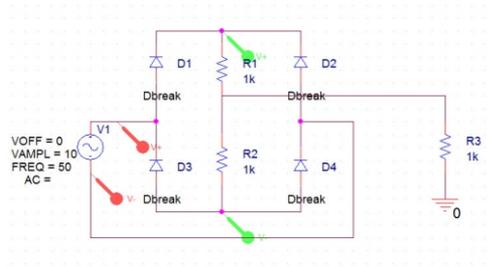
OrCAD-PSpice

Duration
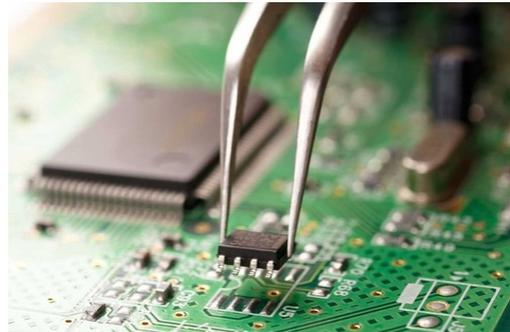20 Hours

Softcopy
Courseware Issued

- Design Rule Check (DRC)
- PSpice Netlist creation
- Stimulus Editor
- Bias point Analysis
- Transient Analysis
- DC sweep Analysis
- AC sweep Analysis
- Parametric Analysis
- Temperature sweep analysis
- Monte Carlo/Worst case Analysis
- Macros

OrCAD-PCB Editor

Duration
48 Hours

Softcopy
Courseware Issued

- Schematic Modification for PCB Design
- Design Rule Check
- Pad Designer
- Package Symbol & Package symbol wizard
- Netlist creation
- Component and board placement
- Mechanical symbol placement
- Manual and Automatic routing
- Constraint Manager and Xsection
- Blind, Buried and through-hole VIA
- Copper shaping
- Artwork/Gerber file creation
- Plot Generation
- PCB Fabrication Process
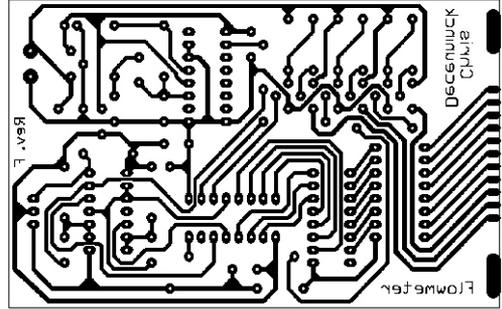
# Embedded Linux

Duration
64 Hours

Softcopy
Courseware Issued

- Overview for Embedded Linux
- Architecture of Linux and its kernel
- File systems in Linux
- Linux shell scripting
- Memory management
- Linux system Programming
- Inter Process Communication techniques
- Process Synchronisation with semaphore and Mutex
- Importance of signals, interrupts & exceptions
- System calls and socket programming
- Kernel Module programming
- Implementation of Character device driver
- Board bring up with Raspberry pi
- Introduction to Internet of Things(IoT)
- Examples on IoT
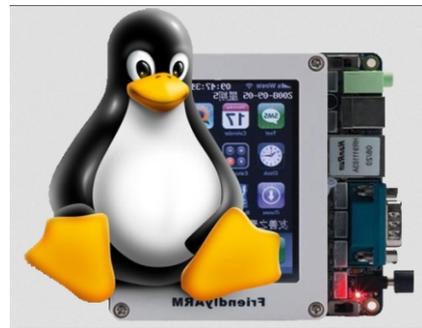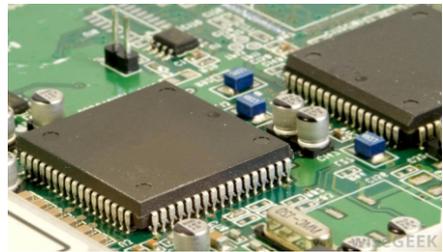
Microcontroller

Duration
64 Hours

Softcopy
Courseware Issued

- Embedded systems and it's applications
- 8051 Microcontroller-Hardware Architecture & Embedded C programming
- Timers, Interrupts and serial communication in 8051
- Interfacing 8051 with LCD, Keypad, ADC
- PIC 16F877A Microcontroller-Hardware Architecture & GPIOs
- Timers, Interrupts and serial communication in PIC 16F877A
- Interfacing PIC 16F877A with LCD, Keypad, ADC,UART communication
- ARM 7TDMI-S Architecture & ARM Operating modes

- Introduction to LPC21xx and GPIO registers
- Timers and Phase Locked loop(PLL) configuration
- Vectored Interrupt Controller(VIC) and serial Communication
- Interfacing LPC21xx with LCD,Keypad,ADC,UART
- Interfacing Wireless protocols-GSM,GPS,Bluetooth,RFID,Zigbee with LPC21xx
- Hands-on development boards

Advance Microcontroller

Duration
64 Hours

Softcopy
Courseware Issued

- Serial Communication protocols – I2C,SPI,CAN
- AVR ATmega16 Microcontroller – Hardware Architecture & Memories
- Timers, Interrupts and serial communication in ATmega16 microcontroller
- Interfacing ATmega16 microcontroller with LCD, Motors, Keypad, ADC, wireless protocol
- PIC18F4550 Microcontroller – Hardware Architecture & GPIOs
- Timers, Interrupts and serial communication in PIC18F4550
- Interfacing PIC18F4550 with LCD, Keypad, ADC,UART communication

- ARM 7TDMI-S Architecture & ARM Operating modes
- Introduction to LPC21xx and GPIO registers
- Timers and Phase Locked loop(PLL) configuration
- Vectored Interrupt Controller(VIC) and serial Communication
- Interfacing LPC21xx with LCD,Keypad,ADC,UART
- Interfacing Wireless protocols-GSM,GPS,Bluetooth,RFID,Zigbee with LPC21xx
- Hands-on development boards
- PWM generation in PIC18F4550

C

Duration
24 Hours

Softcopy
Courseware Issued

- C basics
- Computing basics
- Data type conversion
- Functions
- Files and Streams
- Memory Organization
- Preprocessors
- Gcc compiler and Make files

C++

Duration
40 Hours

Softcopy
Courseware Issued

- Basic procedural programming,
- Arrays and Strings
- File manipulation and multi-file programing
- Compound Datatypes
- OOP concepts
- Errors & Exceptions, debugging and optimization
- Command line compilation using gnu complier
- Creating Libraries
- Creating and using make file

JAVA

Duration
64 Hours

Softcopy
Courseware Issued

- Introduction to Java
- Java Fundamentals
- OOPs Concepts
- Major functions used in Various Classes
- Working with Inheritance and Polymorphism
- Java Packages and Collections
- Event Handling, Multi-Threading
- Client-Server concepts
- File Handling, Database Management
- Distributed Applications with RMI
- Case Study

Advance JAVA

Duration
56 Hours

Softcopy
Courseware Issued

- SQL and JDBC
- HTML(Hypertext Markup Language)
- XML(Extensible Markup Language)
- Servlets
- JSP(JavaServer Pages)
- JavaScript
- EJB(Enterprise JavaBeans)

Python

Duration
40 Hours

Softcopy
Courseware Issued

- Introduction to Python : Environment setup, Basic I/O
- Conditional branching control statements: If-Else
- Conditional looping control statements: while, do-while, for.
- Functions-Function arguments-Default, Keyword, Arbitrary
- Functions-Recursion, Lambda function
- Data structures - List, Tuple, Stack, Queue
- Data structures - Dictionary, Set
- Modules and Packages
- Files-Different types of files, File operation
- Errors and Exception handling - Errors, Assertion, Try, Except, Finally, User defined exception
- Object oriented programming-class, object, inheritance, and polymorphism
- Reference Types-Iterator, Generator, Closure, Decorators
- Thread-Multithreading
- Graphical User Interface-textbox, listbox, option button, menu, canvas
- Database connectivity using MySQL
- Networking-Client and Server Program
- Standard library functions

Django

Duration
56 Hours

Softcopy
Courseware Issued

- Front End - HTML, CSS, Bootstrap
- Django Installation in a Development and Production Environment
- Develop secure web sites with Django
- Integration with Relational Databases
- Django URLs
- Django Views
- Django Templates and Models
- Django Forms
- Django Admin and Abstract model for authentication
- CRUD Operations
- Classy Views, Sending Email Services
- Deployment of Websites using Heroku

Full Stack Development - MEAN Stack Training

Duration
120 Hours

Softcopy
Courseware Issued

FRONT-END
- HTML5
- CSS3
- Javascript
- Bootstrap
- jQuery
- JSON
- Angular

BACK-END
- Node.js
- Express.js
- MongoDB
- MVC
- Body parser
- Services & Dependency injection
- Routing
- RESTful API
- Mail validation

- Automation & Deployment
- Crud Operations Using Http Service
- Implement Single page application(SPA)
- GitHub
- Heroku
- Projects on MEAN Stack

Network Engineering - Routing & Switching (CCNA)

Duration
56 Hours

Softcopy
Courseware Issued

- Network Fundamentals
- IPv4 & Ipv6
- Switching Technologies
- Routing Technologies - EIGRP, OSPF, RIP
- WAN Technologies
- Infrastructure Services - DHCP, HSRP, NAT & NTP
- Infrastructure Security - ACL, Port Security, Telnet & SSH
- Infrastructure Management - SNMP, Syslog, Backup & restore

Network Security

Duration
40 Hours

Softcopy
Courseware Issued

- Fundamentals of Network Security & types of Security Threats
- Securing Management Plane - AAA using ACS Server, RBAC
- Firewall Technologies - Zone based firewall
- Adaptive Security Appliance(ASA)
- IPsec Site-to-site VPN and Remote Access VPN-Clientless and AnyConnect VPN
- Layer 2 attacks - Port Security, VLAN Security and Mitigation Procedures
- Intrusion Prevention System Deployment
- Email-based and Web based threats

Cloud Computing

Duration
40 Hours

Softcopy
Courseware Issued

- Introduction to Cloud
- Amazon EC2 and EBS
- Amazon S3, RRS
- Auto Scaling and load distribution in AWS
- Route53
- AWS VPC, IAM
- AWS Services and resources life cycle
- AWS Architecture and Design
- Cloud Migration and Implementation

Ethical Hacking

Duration

68 Hours

Softcopy

Courseware Issued

- Introduction to Ethical Hacking
- Footprinting and Reconnaissance
- Scanning Networks
- Enumeration
- Vulnerability Analysis
- System Hacking
- Malware Threats
- Sniffing
- Social Engineering
- Denial-of-Service
- Session Hijacking
- Hacking Web Servers
- Hacking Web Applications
- SQL Injection
- Hacking Wireless Networks
- Hacking Mobile Platforms
- IoT Hacking
- Evading IDS, Firewalls & Honeypot
- Cloud Computing
- Cryptography

Cyber Security Analyst (CySA+)

Duration

48 Hours

Softcopy

Courseware Issued

- Risk Evaluation
- Reconnaissance Techniques
- Analyzing Attacks on Computing and Network Environments
- Post-Attack Techniques
- Responding to Cybersecurity Incidents
- Managing Vulnerabilities in the Organization
- Collecting Cybersecurity Intelligence
- Log Data analysis
- Performing Active Asset and Network Analysis
- Investigating Cybersecurity Incidents

Data Science

Duration
60 Hours

Softcopy
Courseware Issued

- Data Analytics & its Methodology
- Fundamental of statistics
- Data Visualization
- Data Distribution & Correlation
- Test of significance – Hypothesis testing, t-Test, ANOVA
- Data Mining – Unsupervised & Supervised
- Regression Analysis - Linear & Logistic
- Cluster Analysis – Hierarchical & k-Means
- Time series Analysis
- Text Mining

Data Science using Python/R

Duration
56 Hours

Softcopy
Courseware Issued

- Introduction to Data Science
- Overview on Python programming
- Exploratory Data Analysis (EDA)
- Data Visualization
- Data Distribution & Correlation
- Regression Analysis
- Clustering – Hierarchical & K-means
- Classification – KNN, Naïve Bayes
- Decision Tree, Random Forest
- Text Mining, WordCloud
- Dimension Reduction, Association Rules
- Forecasting / Time Series

Artificial Intelligence (AI)

Duration
56 Hours

Softcopy
Courseware Issued

- Artificial Intelligence
- Statistics Essentials
- Pre-Program Preparation
- Python
- Machine learning
- OPEN-CV
- Natural Language Processing
- Deep Learning
- TensorFlow

Internet of Things (IOT)

Duration
48 Hours

Softcopy
Courseware Issued

- Introduction to IoT - Concepts and Technologies
- Internet of Things Architecture
- Device Design - Sensors and Embedded Development Boards
- Boards - Arduino, Raspberry Pi, ESP8266
- Communication with Bluetooth and WiFi modules
- IoT Communication Protocols - Wired, Wireless, Application, Transport Layer
- Cloud Architecture - Services and Importance in IoT
- Integration of IoT devices with cloud
- Data, Storage and Security
- Interfacing peripherals & Programming GPIOs
- Programming using Arduino and Python

Machine Learning

Duration
96 Hours

Softcopy
Courseware Issued

- Introduction to Machine Learning
- Programming with R
- R based projects development
- Programming with python
- Python based projects development
- Statistics Essentials
- Knowledge extraction using Statistics Essentials
- Pre program preparation
- Supervised Learning
- Classification Algorithms
- Regression Algorithms
- Unsupervised Learning
- Deep learning (Neural Networks)
- Data Analysis
- Text mining and NLP
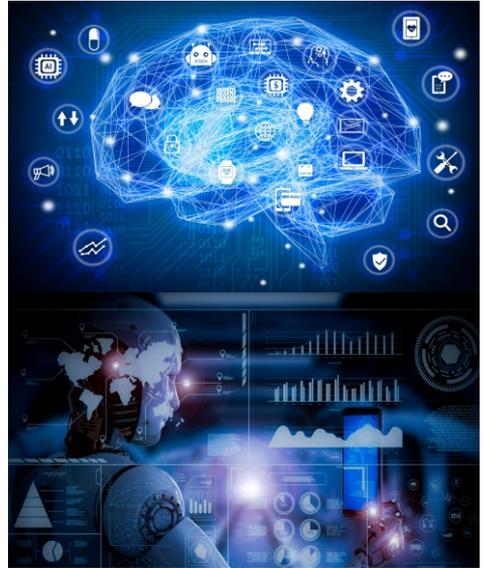
Test Automation with Selenium

Duration
36 Hours

Softcopy
Courseware Issued

- Introduction to Python
- Installing Python bindings for Selenium
- Getting Started Simple Usage Selenium to write the First test
- Walk-through of the example
- Using Selenium with remote WebDriver
- Navigation Interacting with the page
- Filling in forms
- Moving between windows and frames

- Popup dialogs
- Navigation history and location
- Cookies
- Waits Explicit Waits, Implicit Waits
- WebDriver API
- Exceptions, Action Chains, Alerts
- Special Keys, Locate elements By, Desired Capabilities
- Touch Actions
- Firefox Chrome & Remote WebDriver
- Selenium Based Mini Project Using Python

1) Usmanpura, Chhtrapati Sambhajinagar
ABC CAD Centre,   ABC Trainings, S.S.C Board to Peer bazar Road In front of Jama Musjid, near Post office, New Usmanpura, Chhtrapati Sambhajinagar, Maharashtra 431005.
Mo: 8390850044

2) Usmanpura, Chhtrapati Sambhajinagar
ABC Trainings, 2nd Floor, Dr Sodhi's Hospital, behind Gurudwara, opposite Ganga Medico Lane, New Usmanpura, Chhatrapati Sambhajinagar, Maharashtra 431005
Mo: 8698271300

3) CIDCO, Chhtrapati Sambhajinagar
ABC CAD Centre,   ABC Trainings, Ground Floor, Kalpana Plaza,   In front of Eiffel Tower, N-1, Cidco, Chhtrapati Sambhajinagar, Maharashtra 431001.
Mo: 8698270008

4) Pune
ABC CAD Centre,   2nd Floor, A-202, Dream Max Society, Sr no 281, Porwal Road Dhanori Naka, Lohegaon, Pune, Maharashtra 411047
Mo: 8698270004

5) Latur
ABC CAD Centre, Barshi Road , Besides Ajinkya Honda showroom and Opposite to Hanuman Temple, Latur, Maharashtra 413512.
Mo: 8698270088

6) Jalgaon
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