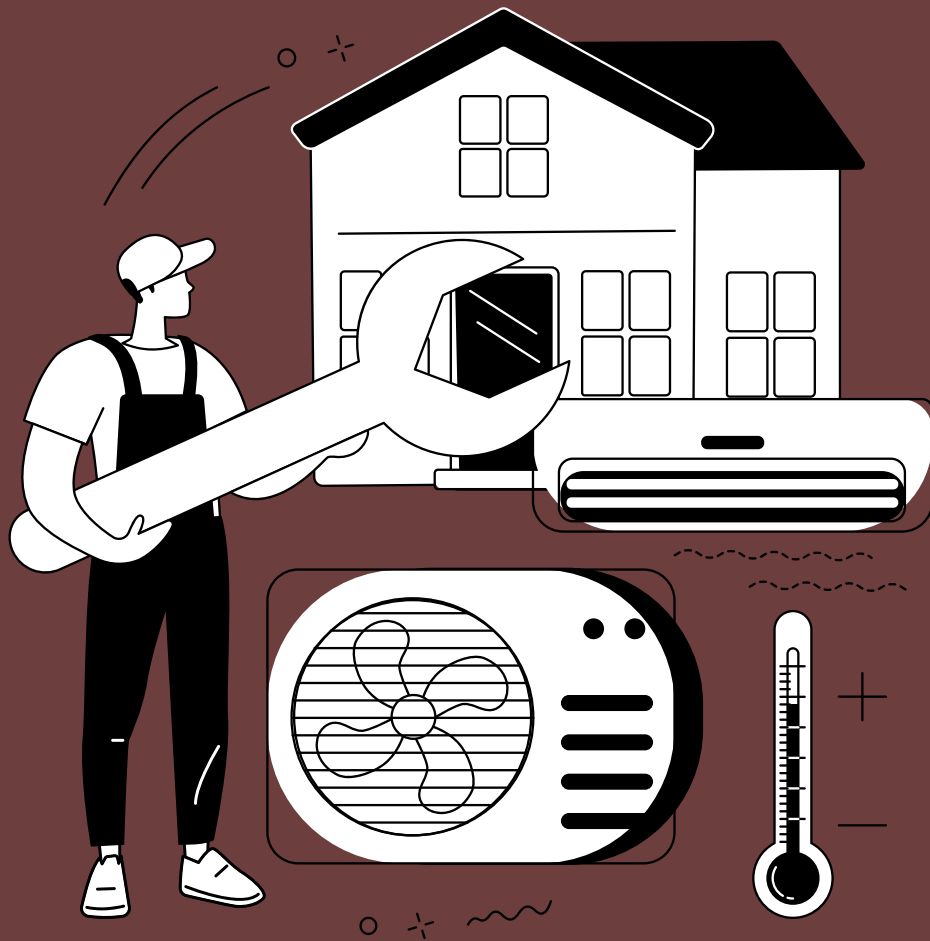


ECAD, MEP & HVAC



6 Months Program

3 Months E-Learning
3 Months Internship

What is ECAD

The full form of ECAD is Electronic Computer-Aided Design. It's used on Academic & Science ,Electronics in Worldwide, Electronic design automation (EDA or ECAD) is a category of software tools for designing electronic systems such as printed circuit boards and integrated circuits.

What is MEP

MEP engineering is the science and art of planning, designing and managing the MEP systems of a building. An MEP design company specializes in those skills. Also known as mechanical, electrical, and plumbing engineering consulting firms, they are important across all stages of the construction process. They assist with decision making, cost estimation, construction administration, documentation, building management, and building maintenance.

What is HVAC

HVAC stands for Heating, Ventilation, and Air Conditioning. HVAC refers to the different systems used for moving air between indoor and outdoor areas, along with heating and cooling both residential and commercial buildings. They are the systems that keep you warm and cozy in the winter and feeling cool and fresh in the summer. They also are the systems that filter and clean indoor air to keep you healthy and maintain humidity levels at optimal comfort levels.

Tutor Details



Karhtikeyan

Mr. Karhtikeyan is a renowned practitioner in the field with cumulative experience of 5 years. Keeping to Avodha's the constant effort of creating an ecosystem where students can only be taught by professionals, He fits perfectly into the profile. Covering a vast range of factors within the subject, he has made every effort to transition the knowledge he has received during his professional experience. The education is particularly useful for those looking for a more hands-on approach to learning, filled with practical learning and rigorous assignment submissions to the curriculum are sure to be challenging and a real opportunity for learning

Course Structure

- 3 months E-Learning
- 3 months Internship
- Live Session for Doubt Clearance (Monday to Friday 10 AM to 7 PM)
- 100% Placement Assistance

Certification



AVODHA Course Completion Certificate



Autodesk Certification
(Paid)

Fees Structure

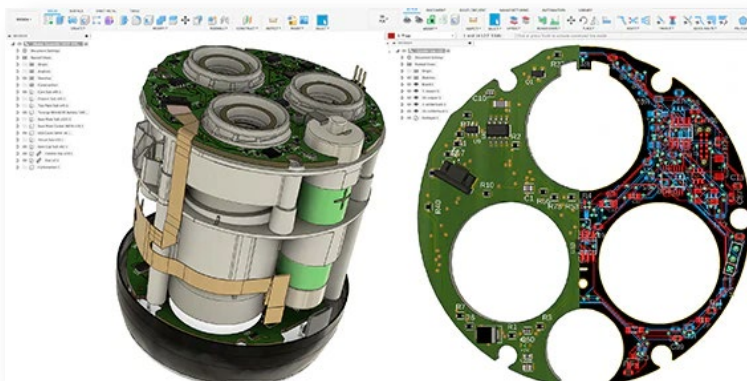
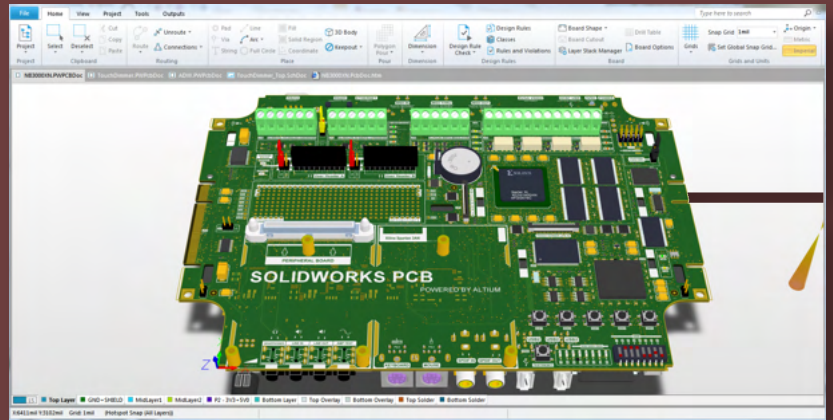
- Admission Fee : 3,800
- Total Fee : 13,800

Avodha provides Job-oriented courses in an affordable price. The total price of our course is ₹13,800/- ; but to avail the course, he/she has to pay only ₹3,800/- as an admission fee & rest of the amount ₹10,000/- has to be paid only after getting the job related to the course he/she joined at Avodha, ie., The first installment ₹5,000/- has to pay on the first day of his/her employment in a job wherein they are placed through Avodha. And the second payment of ₹5,000/- needs to be done once the student completes 30 days of employment in the Job they have been placed via Avodha.

COURSE CURRICULUM

BASICS

- Difference between Auto Cad & Auto cad Electrical
- E CAD Templates and GUI Setup
- Project Manager
- To Add New Projects and Drawings
- Template Edit and Logo Creation
- Ladder System
- X & Y Grid Setup and X Zone Setup
- Wire and Cable System
- Practice Class
- MULTIPLE BUS SYSTEM
- Source and Destination Arrow
- Add Compound from Icon Menu
- Parent Child Relationship



- Compound and Attribute Edition
- Line and Drafting Settings
- Polyline
- Special Line, XL Line & Ray
- Arc Methods
- Circle Tool
- Polyline
- Polygon
- Ellipse
- Hatch Solid Type
- Hatch Pattern Type
- Hatch Gradient Type
- Hatch Edit
- Move, Copy & Rotate

MEP

- Introduction
- MEP Introduction

HVAC DESIGN

- Fundamentals of HVAC
- Basic Refrigeration Cycle
- Types of AC System
- HVAC Loop System
- Chiller Loop
- Psychrometric Chart
- Psychrometric Process
- Manual Cooling Load Calculation



HAP

- HAP
- Duct
- Duct Insulation and Duct Sizing
- Classification of Duct and Cost Estimation
- Drafting Idea for Duct Accessories
- Diffuser and it's Types
- Based on Smacna Rule Diffuser Sizing
- Mechanical Machine
- VRF, FAHU, Cooling Tower and Chiller Unit

HVAC DRAFTING

- HVAC Drafting, X ref and Layer
- To Find Space Area and Ton
- Drafting for Diffuser & Mechanical Machine
- SLD and DLD System
- Drafting for Duct Accessories
- Main Project

ELECTRICAL DESIGN

- Introduction for Electrical Design
- Scope of Electrical Design



ELECTRICAL POWER GENERATION

- Transmission Line
- Electrical Building Services
- Transformers
- Factors in Transformers
- Bus Bar
- Electrical Lighting System
- Type of Lighting Fixtures
- To Find No of Fixtures
- Switches and Sockets
- Types of Switches and Socket
- Electrical Equipment

ELECTRICAL DRAFTING

- Drafting for Electrical Compounds
- Electrical Layout in Domestic Building
- DWG to PDF

PLUMBING SYSTEM

- Fundamentals of Plumbing
- List of Codes & Standards
- Type of Plumbing System Used in Buildings
- Wash Basin
- Bath Tub
- Shower
- Urinals
- Kitchen Sink
- Floor Drain



DESIGN OF DOMESTIC WATER SUPPLY & DISTRIBUTION SYSTEM



- Requirements of Water Supply System
- Water Closet
- Bidet
- Water Demand Calculations
- Storage Calculations Underground Sump
- Elevated Storage Reservoir
- Direct Pumping System
- Hydro-Pneumatic System
- Over Head Tank Distribution
- Design Procedure for Internal Water Supply
- Flow Rate (q) & Loading Unit (z)

DESIGN OF SANITARY DRAINAGE SYSTEM

- Requirements of Sanitary Drainage System
- Types of Sanitary Drainage Systems
- Single Stack System
- Single Stack (Partially Ventilated) System
- One Pipe System
- Two Pipe System
- Software and Functions of Tools
- System Requirement for Internal Sanitary Drainage
- Design Procedure for External Sanitary Drainage
- Material used in Sanitary Drainage
-



- External Sanitary Drainage Pipe Sizing
- Sanitary Drainage Schematic Layout
- Design of Basement Drainage System
- Design of Storm Water Drainage
- Using Manning's Formula
- Storm Water Drainage Pipe Sizing
- Calculating Depth of Inspection
- Revit Models
- Revit Mechanical
- Revit Electrical
- Revit Plumbing

Offline Center



Kochi
(Head Quarters)



Hyderabad



Mumbai



Bangalore



Chennai



Delhi



Trivandrum



Ernakulam



Kannur



Thrissur



Kottayam



Kozhikode



Coimbatore

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Chennai, Tamil Nadu - 600017

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Seaport - Airport Road,
Vidya Nagar Colony,
Kakkanad, Kerala 682022

Kannur Regional office

3rd Floor, Rubco House,
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Caltex, Kannur, Kerala 670012

Trivandrum Regional Office

2nd Floor Asiatic Business
Centre Near Technopark Phase
3 Campus, Kazhakkootam,
Kerala - 695582

Hyderabad Regional Office

Level 6, N Heights,
HITEC City, Hyderabad,
Telangana - 500081

Delhi Regional Office

1st Floor, B-39, Connaught
Place, New Delhi,
Delhi - 110001

Kozhikode Offline Center

Sreevalsam Building, State Highway 29,
East Nadakkave,
Nadakkave, Kozhikode, Kerala 673006

Bangalore Regional Office

GoodWorks Infinity Park,
Electronics City Phase 1,
Bengaluru Karnataka - 560100

Mumbai Regional Office

10th Floor, Parinee Cresenzo,
Mumbai, Maharashtra - 400051

Kottayam Offline Center

The Dispensary by Creative Coworking Cube (C³)
Thamarapally,
Pulimoodu JN, SH 1, Kottayam, Kerala 686001

Thrissur Offline Center

dewSpace - Coworking, G6C2+XCR, West Fort,
Asvary Nagar, Ayyanthole, Thrissur, Kerala 680011