

PCB Design



Course Overview:

dridhOn PCB Design training is industry-designed to help you become a certified PCB design expert. You will learn about the key concepts of PCB, various PCB tools, like OrCAD, Altium, Cadence, Solid work designing the PCB Board, invoking a Schematics, Floorplanning, Analog circuits, Power analysis, Multilayer with Placements in the PCB environment, and more. The key guidelines for implementing PCB as part of the PCB certification training, as well as handson projects and case studies to ensure that you are Industry ready upon completion of the course.

Training Features:

- 8X higher interaction in live online classes conducted by industry experts
- 48 Hrs. live Classes of PCB Design Engineer with Interview Preparation
- 3 real-time industry projects with hands-on preparation
- Unlimited Interview Opportunities with Placement Support
- Industry-recognized course completion certificate

Delivery Mode:

• Online Live Virtual Instructor Led Training

Target Audiance:

The Basic Requirement to start a career as a PCB Design Engineer, you'll need a Bachelor's degree or at least 1+ years of experience in the Electrical or Electronics core. A Bachelor's degree in Technology justice will help you get the job.

Key Learning Outcomes:

The ability to do something well expertise.

- Floor planning
- Logic synthesis
- Power analysis and Optimization
- Analog circuits
- Schematics
- Multilayer Routing
- Auto Routing
- Smart Routing
- Placements
- Concept and Reliability of Simulation
- Gerber Generation

Certification Details:

- Complete at least 85 percent of the course or attend one complete batch
- Successful completion and evaluation of the project



Curriculum

Introduction:

- Introduction to various technologies in Electronics
- Introduction to Printed Circuit boards
- Types of Designing
- Concept of EDA

Design Specifications:

- Design and Architecture
- Floorplanning, Logic synthesis
- EDA databases, Simulation, and Logic simulation
- Power analysis and optimization
- Place and route
- Design for Manufacturability
- Design closure
- Design rule checking
- Layout versus schematic
- Layout extraction
- Automatic test pattern generation

Analog And Digital Electronics:

- Different types of Power supplies
- Basic Features Required in Power Supply
- Selection of different components of the Power supply according to load
- Analog circuits and their Importance
- Practical applications of different
- analog devices (BJT, FET, MOSFET, OPAMPS, etc.)
- Selection and implementation Of
- Components according to circuit application
- Designing of transistor-based (bipolar,
- FET, MOSFET) circuits
- Introduction to OPAMP and its
- practical implementation

Industrial Packages:

- Importance of packages in designing
- Package Details of different components
- Datasheet details
- Designing of Various Footprints according to Packages



Schematics:

- Design Environment
- Basic schematic rules
- Design flow & Schematics
- Component information Server
- Managing parts and libraries
- Editing tool Handling
- Adding text and graphics
- Making new parts
- Print & plotting
- Compatibility check
- Editing of Net list
- DRC & Processing of design

Layout:

- Concept of ECO & Making design files
- Managing footprints & libraries
- Making new footprints
- Tool handling for design
- The preliminary setting for making design
- Types of routing
- MULTI layer routing
- Auto placement
- Auto routing
- Copper pouring
- Smart routing
- Drill management
- DRC & Back annotation
- Post Processing

Simulation:

- Concept and Reliability of Simulation
- Tools & Design editing
- Waveform analysis
- Simulation models
- Checkpoints on board

