



PCB DESIGNING: SYLLABUS

The PCB Designing Course Includes:

1. Introduction of PCB
2. Advantages of PCB
3. Schematics Creation:--
 - Starting a project
 - Basics used for operating design tool
 - Component Selection from Libraries to circuit design
 - Placing, Editing & connecting Components for Ckt design (Th, SMD)
 - Top---down & Down --- top Circuit check list .
 - Multiple peaces and interconnetions of schematics.
 - Component creation for over own Liberaries.
 - Exporting and importing Schematic data.
4. Pad's Design:--
 - Importing PCB
 - Foot print Generation & Package selection Component check based on requirement.
 - Components placing
 - Detailes of Routing tracks and adjustments by Layers
 - Layout Creation & components connection --Through hole, SMD
 - Design rules check (DRC) Checking
 - Pad / pattern Editors creation for over own Liberaries
 - Final PCB Board Creator
5. Reference component names / Adding Reference Texts silk screen prints on PCB.



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6. PCB manufacturing rules:

- Tracks , PAD's , Hole width and design rules
- Gerber file generation for manufacturing

Knowledge on Symbols:--

SMD

Through Hole

Resistors (Sizes/ Watt's.....)

Resistors (Sizes/Watt's...)

Capacitors (Sizes...)

Capacitors (Sizes...)

IC's (Sizes...)

IC's (Sizes...)

Component Editors using Data sheet (Through hole, SMD)

Component calling / Connecting

Pattern Editors using Data sheet (Through hole, SMD)

Board's quality based on copper pour