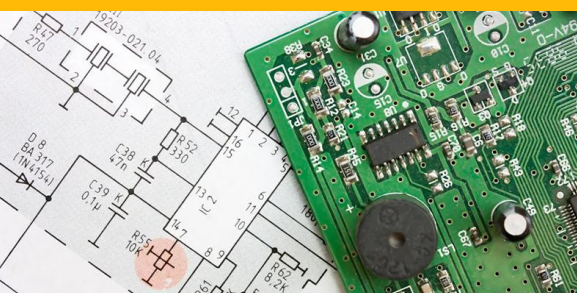


SKILL DEVELOPMENT TRAINING PROGRAMS

**Global Electronics Assn Sdn Bhd
(IPC Training Centre)**

NCER Technology Innovation Centre (NTIC)
Level 1 - Lot 05-06, Plot 36, Hilir Sungai Keluang, 2, Phase 4,
Bayan Lepas Industrial Park, 11900 Bayan Lepas, Penang, Malaysia

PCB DESIGN



This program provides a comprehensive introduction to Printed Circuit Board (PCB) design concepts and processes. Participants will gain insights into schematic creation, layout principles, design tools and PCB Fabrication process. Through instructor-led presentations and demonstrations, learners will understand essential design tools, workflows, and industry standards followed in PCB manufacturing.

Who can Participate

Operators, technicians, design engineers, and production personnel involved in electronics manufacturing, assembly, or testing who wish to gain knowledge of PCB design.

Benefits of Participation:

Participants will learn the key steps in PCB design from concept to production, understand design tools and layout optimization, and develop skills to improve product reliability and manufacturability

Certificate:

Participation certificate will be provided

Mode of Training

Instructor-led Training

Instructor

Certified IPC Designer (CID)

Duration: Full Day

Session No	Session Name	Description
1	Overview and Introduction to PCB Design • Overview of PCB and its applications • Types of PCBs: Single-layer, double-layer, and multi-layer and other complex PCBs • Common materials used in PCB fabrication and limitations.	General overview of the course

Session No	Session Name	Description
2	PCB Design Tools • Introduction to popular software, key selection criteria • Basic interface and key functions • Block Diagram and Simple schematic design • Industry standards, guidelines	Presentation
	Schematic Design Basics • Component selection and placement • Understanding circuit diagrams • Net connections and DRC verification	Presentation
3	PCB Layout Principles • Component placement strategies • Routing techniques (single vs. multi-layer routing) • Design for manufacturing, Assembly and testing (DFM/DFA/DFT) considerations	Presentation
4	PCB Fabrication Process • Manufacturing steps: etching, drilling, surface finish • Assembly techniques (SMT, through-hole), Placement Soldering • Design documentation and file preparation for production (communication)	Presentation
5	Q&A	Interaction with Instructor

IMPORTANT NOTES

- Session can be organized on Weekend
- Participation certificate shall be provided to the candidates
- The course contents and materials are Global Electronics Association USA Copyright. Copy & sharing not permitted

Price

Non Member

RM 1,430.00

Member

RM 1320

For discounts, please connect

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www.electronics.org/SEA-Training-Calendar-Malaysia