Global Electronics Association™

Electronics Workforce Skilling Program

Electronics Assembly for Operators

Details: The Electronics Assembly for Operators course introduces the key tools, materials, and processes for operators working in electronics assembly. This course is designed to encompass the entire assembly process, including a customizable selection of Modules to address the current needs and future goals of operators and organizations.

Course Objective & Overview

After completing this course, candidates will be able to employ the correct procedures for constructing Printed Circuit Board Assemblies (PCAs) within an electronics manufacturing facility

Difference from IPC-A-610 & IPC J-STD-001

Electronics Assembly for Operators course is a Foundation Level course and prerequisite for IPC-A-610 for Operators and J-STD-001 for Operators and not an **alternative** for the IPC Endorsement/Certification programs: https://www.ipc.org/ipc-certifications
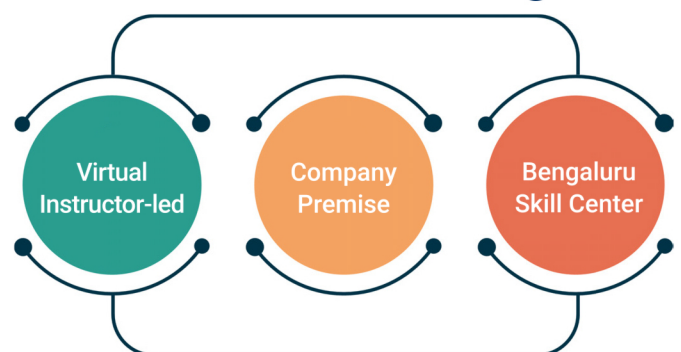
Access

IPC EDGE Learning Management System

Credential
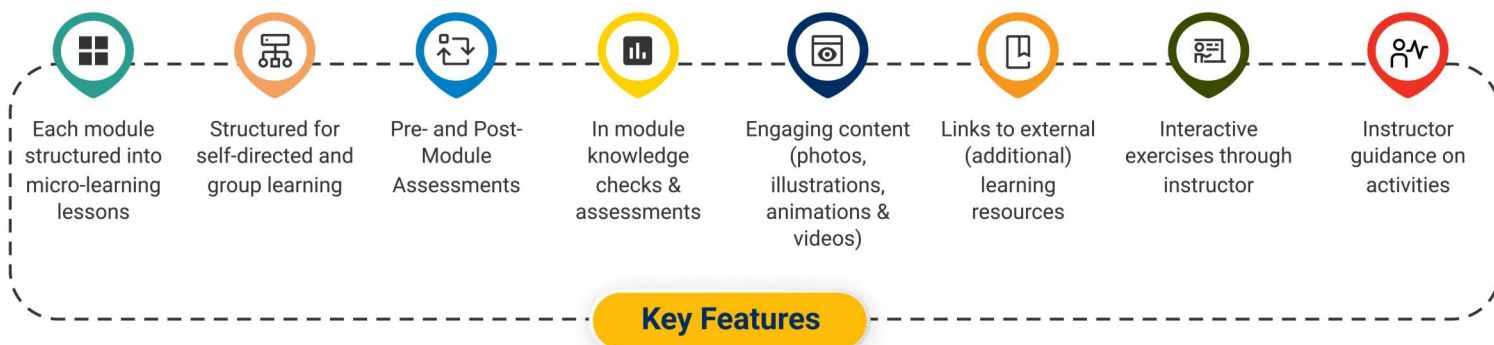
Qualified IPC Assembly Operator

Course Structure:

Contains nine mandatory modules and a final exam. A score of 80% is required to pass the final exam and earn the IPC credential. There are nine additional modules to allow expanded learning on specific topics.

Mode of Training

Virtual Instructor-led

Company Premise

Bengaluru Skill Center

Available through IPC India

Key Features

- Each module structured into micro-learning lessons
- Structured for self-directed and group learning
- Pre- and Post-Module Assessments
- In module knowledge checks & assessments
- Engaging content (photos, illustrations, animations & videos)
- Links to external (additional) learning resources
- Interactive exercises through instructor
- Instructor guidance on activities

Duration: 3 - 4 days (32 hours)

Day 1 (8 hours)

Mandatory Modules

1. Introduction to the Electronics Industry
2. Introduction to Printed Circuit Assembly (PCA)
3. Overview of Assembly and Soldering Processes
4. Safety
5. ESD & Product Handling
6. Component Identification

Day 2 (8 hours)

Mandatory Modules

7. Drawings, Specifications & Measurements
8. Basic PCB/PCA Defects
9. IPC Standards
   Final Exam: Modules 1-9 (90 minutes)

Day 3 (8 hours)

Optional Modules

Important for EMS Companies

10. Introduction to Hand Soldering
11. Surface Mount Technology
12. Through-Hole Technology
16. Hardware
17. Conformal Coating
18. Press Fit

Note : There will be test after each module

Day 4 (8 hours)

Optional Modules

Important for Cable & Wire Harness Companies

13. Wire and Cable Preparation
14. Wires and Terminals Technology
15. Cables and Harness Technology

Manager

Practical Hands On

- Included with Module 10-12 & 13-15
- 5 candidates in each group
- Separate tool list to be provided, to be arranged by Member company
- This hands-on aspect is special initiative of IPC India
- Standard Global Certificate will have no mention of the practical session

IT & Audio-Visual Requirement

- Laptop with high speed internet connection
- Projector & screen connected with Instructor's laptop
- Audio system
- Table for demonstration

Minimum no of candidates: 15 Per Batch

Maximum no of candidates: 25 Per Batch

Facility requirement at company premise

Training Room to be arranged for instructor by the company. Lab to be equipped with the required tools and equipment's as stated by IPC India (along with consumables). Lunch & refreshments to be arranged by the Company

www.electronics.org/india-regional-team