



## TRAINING

- Expert Training in the Latest Technologies
- Industry-Demanded Certifications

## PCB TECHNOLOGY

### Quality & Inspection

- IPC-A-610 Instructor & Operator Certification

### Soldering & Assembly

- IPC J-STD-001 Instructor & Operator Certification

### Bare Board Inspection

- IPC-A-600 Instructor & Operator Certification
- IPC-6012 Instructor & Operator Certification

### Rework & Repair

- IPC-7711 & IPC-7721 Instructor & Operator Certification

### Hand Soldering Skills

- Soldering Basics, Wires & Terminals, Lap Solder Joints, Through-Hole and Surface Mount Training

### PCB Fundamentals

- Component Identification
- Electrostatic Discharge

### PCB Design

- Essentials of PCB Design
- IPC Designer Certification

## COUNTERFEIT COMPONENTS

### IDEA-STD-1010

- Seminars & Workshops
- IDEA-STD-1010 Essentials
- SAE AS5553 Counterfeit Electronics

## CABLE & WIRE

## HARNESS TECHNOLOGY

### Quality & Inspection

- IPC-A-620 Instructor & Operator Certification

### Hands-On Labs

- Crimping & Harness Assembly Training

## TECHNICAL SUPPORT

- Manufacturing Start-Up
- Process Evaluation
- Subcontractor Qualification
- Equipment Evaluation
- Lead-Free, ESD, Process and Quality Audits

## IPC-A-610 CERTIFIED IPC SPECIALIST WITH OPTIONAL LAB

IPC-A-610 Operator and Inspector Training & Certification Program

### IPC-A-610

INCLUDES  
LEAD AND  
LEAD-FREE  
CRITERIA

## COURSE DESCRIPTION

This 3-day, lectured course utilizes the images in the IPC-A-610 inspection document to provide visual accept/reject criteria examples for all three classes of assembly production—in both lead and lead-free. The IPC-A-610, "The Acceptability of Electronic Assemblies", is the most widely used inspection specification for post assembly inspection.

### Optional Interactive PCB Inspection Lab (additional fee applies)

This is an optional (1) day course intended for any employee who will be inspecting printed circuit assemblies or any employee who wants to improve or reinforce their observation and inspection skills of printed circuit assemblies. This course utilizes lectures, visual acuity exercises, and physical assemblies to provide the students with an experience in visually inspecting printed circuit assemblies.

## WHO SHOULD BECOME CERTIFIED

This course is for anyone responsible for the quality and reliability of electronic assemblies. This includes engineers, quality supervisors, inspectors and manufacturing personnel responsible for quality assurance.

## PREREQUISITES

- Understanding of the Electronics Manufacturing Process
- Understanding of the English language, oral and written

## CLASS SIZE

Maximum number of students is limited to ten (10) to provide greater instructor interaction. Call early to reserve your space.

**eTRAINING** On-line training is available for some courses. Please inquire.

**ON-SITE TRAINING** Please call a training consultant and ask about customized course content, on-site training and training around your production schedules.

**REGISTRATION** For up to date pricing and more information on any of the EPTAC programs, or to enroll, please call us toll free or visit eptac.com.

**Toll Free:** 1-800-64-EPTAC

**email:** register@eptac.com

**Web:** eptac.com

## COURSE OUTLINE

### DAY 1

- Introduction - Establishing and Maintaining Program Integrity
- General, Applicable Documents and Handling
- Soldering and High Voltage
- Open Book Examinations

### DAY 2

- Component Damage and Printed Boards & Assemblies
- Terminal Connections
- Through-Hole Technology and Jumper Wires
- Open Book Examinations

### DAY 3

- Surface Mount Assemblies and Jumper Wires
- Hardware
- Open Book Examinations
- Instructor/Student Conference

### DAY 4 - OPTIONAL INTERACTIVE PCB INSPECTION LAB (additional fee applies)

This optional, 1-day lab utilizes, lectures, visual acuity exercises, and physical assemblies to provide the students with an experience in visually inspecting printed circuit assemblies

#### Introduction

- Terms and definitions
- Why inspect
- How to inspect

#### Observation Skills Practice 1

##### The Needs of Visual Inspection

- Good Visual Acuity
- The ability to detect differences
- Review of Basic Manufacturing Knowledge
- Systematic approach
- Patience, Discipline, Consistency

#### Inspection Lab 1: Through-Hole Board

- Review results of Lab 1
- Discuss improvements

#### Observation Skills Practice 2

##### Inspection Lab 2: Surface Mount Board

- Review results of Lab 2
- Discuss improvements

#### Observation Skills Practice 3

##### Inspection Lab 3: Mixed Technology Board

- Review results of Lab 3
- Discuss improvements
- Instructor to grade results

#### Wrap up

- Certificate of Attendance