



## 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-7711/7721 CERTIFIED STANDARDS EXPERT (CSE)

### IPC-7711 AND IPC-7721

## COURSE DESCRIPTION

If you are looking at becoming a subject matter expert in IPC-7711/21, "Rework, Modification and Repair of Electronic Assemblies" without the need to provide any IPC Certification to others, then this is the program for you. As a CSE-Certified Standard's Expert, you have the opportunity to support your organization as a key subject expert on the IPC-7711/21, interfacing with a variety of functions within your firm and providing critical interpretation support of the standards, without the requirements carried under previous IPC Instructor Certifications.

This is a 5-day, advanced course for anyone responsible for quality and reliability of reworked or repaired electronic assemblies. Students will be attending a combination lectured and hands-on course, CSE students do not need to perform the hands-on workmanship. The lecture content will cover the information in the IPC J-STD-001 document and describes materials, methods and acceptance criteria for producing soldered electrical and electronic assemblies. The IPC-7711 is designed for soldered assembly rework-restoring PCB assemblies to their original drawings and the IPC-7721 is designed for board repair- restoring a board's functional capability.

Obtain a CSE Certification in one standard and, if you choose, add additional certifications in IPC-A-610, J-STD-001, IPC/WHMA-A-620, IPC-A-600, or IPC-6012. With three (3) CSE certifications, apply with the IPC to become a Senior Certified Standard's Expert.

## WHO SHOULD BECOME CERTIFIED

This course is designed for individuals who are required to act as a subject matter expert for this standard but DO NOT need to conduct training.

## PREREQUISITES

- Understanding of the English language, oral and written
- To qualify to take any CSE standard exam, each attendee must:
  1. Complete and Pass IPC's on-line Enhanced Policies and Procedures Exam, on your own outside of class
- To obtain CSE Certification, candidates must successfully pass:
  1. General Knowledge Exam, on-line, closed book, in class
  2. Standard Endorsement Exam, on-line, open book, in class.

## CLASS SIZE

Maximum number of students is limited to eight (8) to provide greater instructor interaction. Call early to reserve your space.

## COURSE OUTLINE

### DAY 1

- Introduction to IPC-7711/7721
- Common Procedures
- Wire Splicing (Mesh, Wrap, Hook & Lap)
- Instructor Demonstration and Skills Development Lab

### DAY 2

- Conformal Coating Identification, Removal & Replacement
- Through-Hole Rework Procedures
- Instructor Demonstration and Skills Development Lab

### DAY 3

- Chip & MELF Removal/Installation and Localized Cleaning
- Instructor Demonstration and Skills Development Lab
- Gull Wing Procedures (SOIC, SOT, D-Pak, QFP)
- Instructor Demonstration and Skills Development Lab

### DAY 4

- J-Lead Procedures
- Instructor Demonstration and Skills Development Lab
- BGA Removal/Replacement Discussion
- Laminate Repair
- Instructor Demonstration and Skills Development Lab
- PWB Circuit Repair
- Instructor Demonstration and Skills Development Lab

### DAY 5

- Open & Closed Book Exams

**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