



## 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

- IPC Designer & IPC Advanced Designer Certification

## COUNTERFEIT COMPONENTS

### IDEA-STD-1010

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

## CABLE & WIRE

### HARNESST 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 STANDARDS EXPERT (CSE)

## IPC-A-610



## COURSE DESCRIPTION

If you are looking at becoming a subject matter expert in IPC-A-610, "The Acceptability 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-A-610, 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.

Based on the most widely used inspection standard in the PWB assembly industry, IPC-A-610, this lectured course covering the standard in its entirety, utilizes the images in the IPC-A-610 document to provide visual accept/reject criteria examples for all three classes of assembly production—for both lead and lead-free.

Obtain a CSE Certification in one standard and, if you choose, add additional certifications in J-STD-001, IPC/MHMA-A-620, IPC-A-600, IPC-6012, or IPC-7711/7721. 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:
  - 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:
  - General Knowledge Exam, on-line, closed book, in class
  - Standard Endorsement Exam, on-line, open book, in class.

## CLASS SIZE

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

## COURSE OUTLINE\*

### DAY 1

- Introduction -Establishing and Maintaining Program Integrity
- Foreword, Applicable Documents and Handling
- Hardware Installation
- Soldering (including High Voltage)

### DAY 2

- Terminal Connections
- Through-Hole Technology (including Jumper Wires)

### DAY 3

- Surface Mount Assemblies (including Jumper Wires)
- Component Damage / PCBs and Assemblies
- Solderless Wire Wrap

### DAY 4

- Open & Closed Book Exams

\* Course length can vary from 3-4 days depending upon dates/location you attend.

**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