



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-600 CERTIFIED STANDARDS EXPERT (CSE)

IPC-A-600

COURSE DESCRIPTION

If you are looking at becoming a subject matter expert in IPC-A-600, "The Acceptability of Printed Boards" 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-600, 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 3-day, lectured course utilizes the images in the IPC-A-600 document to provide visual accept/reject criteria examples for all three classes of bare board fabrication and inspection. The IPC-A-600 describes the preferred, acceptable, and nonconforming conditions that are either externally or internally observable on printed boards.

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-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 is an advanced course 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 ten (10) to provide greater instructor interaction. Call early to reserve your space.

COURSE OUTLINE

DAY 1

Introduction

- General Overview
- Terms and Definitions
- Acceptance Criteria

Externally Observable Characteristics

- Board Edges
- Base Material Surface and Subsurface
- Solder Coatings and Fused Tin Lead
- Holes-Plated Through and Unsupported
- Printed Contacts
- Marking
- Solder Mask
- Pattern Definition
- Dimensional Flatness

DAY 2

Internally Observable Characteristics

- Dielectric Materials
- Conductive Patterns
- Plated Through-Holes (General, Drilled, Punched)

Flex Printed Circuit & Metal Core

- Flexible Printed Circuits
- Rigid - Flex Printed Boards
- Metal Core Printed Boards
- Flush Printed Boards
- Cleanliness Testing
- Solderability Testing
- Electrical Integrity

DAY 3

- Course Summary/Review
- 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