





# **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

# J-STD-001 CERTIFIED IPC SPECIALIST

IPC's J-STD-001 Operator Training & Certification Program

# J-STD-001

## **Also Available:**

Optional J-STD-001 Space Electronics Hardware Addendum

# **COURSE DESCRIPTION**

# This class is not designed to teach anyone how to solder. The focus is on the knowledge of the J-STD-001 criteria

This program is for experienced solderers seeking an in depth knowledge of the J-STD-001 Document. The course reviews this document and helps students learn how to interpret the criteria. Open book exams are required after each module. Hand Soldering skills need to be performed and pass inspection. Students must pass both exams and soldering in order to successfully complete this program. **Attendees must be experienced solderers.** 

The program is divided into 5 one-day modules, each covering a different area of soldered electronics assemblies. Students may be trained in any combination of modules that includes module 1. This course addresses all three classes of manufacturing in Wires and Terminals, Through-Hole and Surface Mount Technologies.

An optional J-STD Space module is available for anyone needing certification to the J-STD-001 Space Addendum.

# WHO SHOULD BECOME CERTIFIED

Experienced assemblers who wish to gain in depth understanding of assembly requirements and soldering practices should become certified to this program.

Attendees must be experienced solderers.

# **PREREQUISITES**

- Proficiency in soldering
- 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 - MODULE 1 OVERVIEW OF J-STD-001

Students will learn the requirements of J-STD-001 and related standards as they apply to operators and inspectors involved in the assembly of products to the requirements of J-STD-001.

## Module 1 is a prerequisite to all other modules.

- General
- Applicable Documents
- Materials Components and Equipment
- General Soldering and Assembly Requirements
- Cleaning and Residue Requirements
- Rework and Repair
- Module 1 Review
- Module 1 Examination

#### DAY 2 - MODULE 2 - WIRES AND TERMINALS MODULE 3 - PCB, COATING ENCAPSULATION AND STAKING

Students will learn the requirements of J-STD-001, and demonstrate the skills for stripping and tinning wire and hand soldering wires of different gauges to various types of commonly used solder terminals.

- Wire and Terminals Connections (excluding Jumper Wires)
- Wire and Terminal Demonstration
- Wire and Terminal Lab
- Module 2 Review
- Module 2 Examination
- Printed Board Requirements
- Coating, Encapsulation and Staking
- Witness Stripe

# **DAY 3 - MODULE 4 - THROUGH-HOLE TECHNOLOGY**

Students will learn the requirements of J-STD-001, and demonstrate the skills for preparing and mounting Through-Hole components to PWBs.

- Module 3 Review
- Module 3 Examination
- Through-Hole Mounting and Terminations (with THT Jumpers)
- PTH Soldering Demonstration
- PTH Lab
- Module 4 Review
- Module 4 Examination

#### DAY 4 - MODULE 5 - SURFACE MOUNT TECHNOLOGY

Students will learn the requirements of J-STD-001, and demonstrate the skills for preparing and mounting Leaded and Leadless Surface Mount components to PWBs.

- Surface Mounting of Components (with SMT Jumpers)
- SMT Demonstration
- SMT Lab
- Module 5 Review
- Module 5 Examination

## **DAY 5 - MODULE 6 - INSPECTION METHODOLOGY**

Students will learn the quality and inspection requirements of J-STD-001.

- Theory of Inspection, SPC
- Defect Definition and Disposition
- Inspection Skills Demonstration
- Inspection Skills Lab
- Module 6 Review
- Module 6 Examination