



## 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

### Rework & Repair

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

### Hand Soldering Skills

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

### PCB Fundamentals

- Component Identification
- Electrostatic Discharge

## 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

## J-STD-001 CERTIFIED IPC SPECIALIST

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

### J-STD-001

## COURSE DESCRIPTION

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 and closed 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.

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

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 Module 6 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.

## WHAT STUDENTS RECEIVE

Everyone who successfully completes the program will receive:

- The J-STD-001
- IPC Certificate of Training

## PREREQUISITES

This knowledge-based course requires the ability to understand and interpret technical information. As this course is designed to compliment existing soldering skills, prior soldering experience is required. Familiarity with the J-STD-001 is beneficial.

## CLASS SIZE

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

**MATERIALS** For each class, all the necessary tools and materials will be supplied. Students are welcome to bring their own documents if they wish.

**LOCATION** Classes are held at EPTAC's Corporate Training Center located just 35 miles from Boston and at locations throughout the US and Canada.

**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  
**Fax:** 603-296-2377  
**email:** register@eptac.com  
**Web:** www.eptac.com

## Also Available:

Optional J-STD-001 Space Electronics Hardware Addendum

## 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.**

- Course Overview
- Safety
- EOS/ESD
- Classes of Equipment
- Solder Theory
- Solderability
- Solder Flux and Solder Alloys
- Facilities, Tools & Equipment Training
- PTH - Assembly/Solder
- Surface Mount Technology
- Cleaning
- Module 1 Review
- Module 1 Examination

### DAY 2 - MODULE 2 - WIRES & TERMINALS

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 Preparation
- Solder to Terminals
- Terminal Inspection
- Wire & Terminal Demonstration
- Wire & Terminal Lab
- Module 2 Review
- Module 2 Examination

### DAY 3 - MODULE 3 - 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.

- Lead Preparation
- Component Mounting
- PTH Inspection Criteria
- PTH Soldering Demonstration
- PTH Lab
- Module 3 Review
- Module 3 Examination

### DAY 4 - MODULE 4 - 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.

- SMT Criteria
- SMT Inspection Criteria
- SMT Demonstration
- SMT Lab
- Module 4 Review
- Module 4 Examination

### DAY 5 - MODULE 5 - 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 5 Review
- Module 5 Examination