



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

HAND SOLDERING OPERATOR CERTIFICATION - LEAD & LEAD-FREE

Wires & Terminals, Through-Hole & Surface Mount Hand Soldering Training & Certification Program

J-STD-001 / IPC-A-610

COURSE DESCRIPTION

Customize this course by selecting only the days/modules that meet your training requirements.

Using both lead and lead-free alloys, Hand Soldering Operator Certification introduces the basics of soldering in Wires & Terminals, Lap Solder Joints, Through-Hole and Surface Mount Technologies and Rework. Students will learn about electrostatic discharge, industry terminology, equipment familiarization and the accept/reject criteria for all three technologies. Hands-on efforts include the soldering and inspection of five (5) different types of terminal connections; the assembly, soldering, inspection and rework of two (2) through-hole boards with 100 inspection points; and the assembly, soldering, inspection and rework of a surface mount board with over sixty components. This program is a "hands-on" experience. With approximately 75% of the time spent doing, students experience the technology first hand.

WHO SHOULD BECOME CERTIFIED

Hand Soldering Operator Certification is a course designed to teach the fundamentals of soldering technology and rework. Anyone involved in the assembly of electronics with Wires & Terminals, Lap Solder Joints, Through-Hole and Surface Mount components should be certified to this program.

PREREQUISITES

An understanding of the English language, both oral and written is all that is required to benefit from EPTAC's Hand Soldering Operator Certification Program. ESL Students are encouraged to inquire.

CLASS SIZE

Maximum number of students is limited to ten (10) in order to provide greater instructor interaction and a complete hands-on experience. 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 - REOUIRED

- Introduction to Soldering
- Specifications/Applicable Documents
- Terms and Definitions
- Tools and Material Selection and Maintenance
- · Procedures in Making a Good Solder Joint
- Soldering Technology-Wires & Terminals
- Acceptability Criteria
- Wire Preparation
- Terminal Connections and Soldering
- Practical Session-Soldering Terminals

DAY 2

- Lap Soldering
- · Acceptability Criteria
- Splices Wrap / Hook
- Heat Shrink Sleeving
- Practical Session-Lap Solder Joints
- Introduction to Through-Hole
- Specifications/Applicable Documents
- Electrostatic Discharge
- Through-Hole Terms and Definitions
- Tools and Material Selection and Maintenance
- Procedures in Making a Good Solder Joint
- Soldering Technology Through-Hole

DAY 3

- Practical Session-Through-Hole Practice Board
- Instructor/Student Review
- Acceptability Criteria
- Solder Rework Techniques-Through-Hole
- Through-Hole Component Removal Methods
- Practical Session-Through-Hole Rework-Practice Board
- Instructor/Student Review
- Practical Session-Through-Hole Test Board
- Instructor Inspection/Feedback

DAY 4

- Introduction to Surface Mount
- Specifications/Applicable Documents
- Surface Mount Terms and Definitions
- Tools and Material Selection and Maintenance
- · Procedures in Making a Good Solder Joint
- Soldering Technology Surface Mount
- Practical Session-Surface Mount Practice Board
- Instructor/Student Review

DAY 5

- Acceptability Criteria
- Solder Rework Techniques-Surface Mount
- Surface Mount Component Removal Methods
- Practical Session-Surface Mount Rework-Practice Board
- Instructor/Student Review
- Practical Session-Surface Mount Test Board
- Instructor Inspection/Feedback
- · Course Summary/Review