



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-620 CERTIFIED STANDARDS EXPERT (CSE)

IPC/WHMA-A-620

COURSE DESCRIPTION

If you are looking at becoming a subject matter expert in IPC/WHMA-A-620, "Requirements and Acceptance for Cable and Wire Harness 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/WHMA-A-620, 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 4-day, lectured course is a comprehensive certification that teaches inspection and assembly criteria for all three classes of cable and wire harness assembly. This course is based on the IPC/WHMA-A-620, the most widely used inspection specification for the cable and wire harness assembly industry.

Obtain a CSE Certification in one standard and, if you choose, add additional certifications in IPC-A-610, J-STD-001, 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

- Module 1: General and Applicable Documents
- Module 2: Wire Preparation
- Module 3: Soldered Terminations
- Module 4: Crimp Terminations

DAY 2

- Review and Review Exercise
- Module 4 (cont.): Crimp Terminations
- Module 5: Insulation Displacement (IDC)
- Module 6: Ultrasonic Welding
- Module 7: Splices
- Module 8: Connectorization

DAY 3

- Review and Review Exercise
- Module 8 (cont.): Connectorization
- Module 9: Molding / Potting
- Module 10: Cable Assemblies and Wires
- Module 11: Marking Labeling
- Module 12: Coaxial and Biaxial Assemblies
- Module 13: Wire Bundle Securing

DAY 4

- Review and Review Exercise
- Module 13 (cont.): Wire Bundle Securing
- Module 14: Shielding
- Module 15: Cable/Wire Harness Protective Coverings
- Module 16: Finished Assembly Installation
- Module 17: Testing
- Module 18: High Voltage
- Review and 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