



### 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

- IPC Designer & IPC

Advanced 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 Certification

### J-STD-001 "Requirements for Soldered Electrical & Electronic Assemblies"

Introduces the basics of soldering, terms & definitions and equipment familiarization. Wires and Terminals, and Through-Hole Soldering and Rework is taught through hands-on construction and inspection of two Through-Hole boards. Students learn the accept/reject criteria for Surface Mount Assembly and Rework first hand through the construction, inspection and rework of a surface mount board. Lead and Lead-free included.

### Hand Soldering Certification

Jan 6 - 10 . . . . .	Manchester, NH	Jul 21 - 25 . . . . .	Toronto, ON
Jan 6 - 10 . . . . .	Philadelphia, PA	Jul 21 - 25 . . . . .	Portland, OR
Jan 13 - 17 . . . . .	Palm Bay, FL	Jul 28 - Aug 1 . . . . .	Palm Bay, FL
Jan 20 - 24 . . . . .	Seattle, WA	Jul 28 - Aug 1 . . . . .	Manchester, NH
Jan 20 - 24 . . . . .	Watertown, CT	Aug 4 - 8 . . . . .	Schaumburg, IL
Jan 27 - 31 . . . . .	Schaumburg, IL	Aug 4 - 8 . . . . .	Long Island, NY
Jan 27 - 31 . . . . .	Syracuse, NY	Aug 11 - 15 . . . . .	Rochester, NY
Feb 3 - 7 . . . . .	Minneapolis, MN	Aug 11 - 15 . . . . .	Toronto, ON
Feb 3 - 7 . . . . .	Manchester, NH	Aug 11 - 15 . . . . .	San Jose, CA
Feb 3 - 7 . . . . .	Buffalo, NY	Aug 18 - 22 . . . . .	Manchester, NH
Feb 10 - 14 . . . . .	Binghamton, NY	Aug 18 - 22 . . . . .	Minneapolis, MN
Feb 10 - 14 . . . . .	Schaumburg, IL	Aug 18 - 22 . . . . .	Buffalo, NY
Feb 24 - 28 . . . . .	San Jose, CA	Sep 8 - 12 . . . . .	Atlanta, GA
Feb 24 - 28 . . . . .	Toronto, ON	Sep 8 - 12 . . . . .	Anaheim, CA
Feb 24 - 28 . . . . .	Manchester, NH	Sep 8 - 12 . . . . .	Kansas City, MO
Mar 3 - 7 . . . . .	San Diego, CA	Sep 15 - 19 . . . . .	Manchester, NH
Mar 3 - 7 . . . . .	Atlanta, GA	Sep 15 - 19 . . . . .	Seattle, WA
Mar 3 - 7 . . . . .	Long Island, NY	Sep 15 - 19 . . . . .	Schaumburg, IL
Mar 10 - 14 . . . . .	Seattle, WA	Sep 15 - 19 . . . . .	Watertown, CT
Mar 10 - 14 . . . . .	Schaumburg, IL	Sep 22 - 26 . . . . .	San Diego, CA
Mar 10 - 14 . . . . .	Watertown, CT	Sep 22 - 26 . . . . .	Toronto, ON
Mar 17 - 21 . . . . .	San Jose, CA	Sep 22 - 26 . . . . .	San Jose, CA
Mar 17 - 21 . . . . .	Toronto, ON	Sep 22 - 26 . . . . .	Philadelphia, PA
Mar 17 - 21 . . . . .	Rochester, NY	Sep 29 - Oct 3 . . . . .	Manchester, NH
Mar 17 - 21 . . . . .	Manchester, NH	Sep 29 - Oct 3 . . . . .	Ottawa, ON
Mar 24 - 28 . . . . .	Anaheim, CA	Oct 6 - 10 . . . . .	San Jose, CA
Mar 24 - 28 . . . . .	Portland, OR	Oct 6 - 10 . . . . .	Minneapolis, MN
Mar 31 - Apr 4 . . . . .	Palm Bay, FL	Oct 13 - 17 . . . . .	Palm Bay, FL
Apr 7 - 11 . . . . .	Manchester, NH	Oct 13 - 17 . . . . .	Syracuse, NY
Apr 7 - 11 . . . . .	Kansas City, MO	Oct 20 - 24 . . . . .	Manchester, NH
Apr 7 - 11 . . . . .	Schaumburg, IL	Oct 20 - 24 . . . . .	Schaumburg, IL
Apr 14 - 18 . . . . .	Syracuse, NY	Oct 20 - 24 . . . . .	Pittsburgh, PA
Apr 21 - 25 . . . . .	Minneapolis, MN	Oct 27 - 31 . . . . .	Binghamton, NY
Apr 28 - May 2 . . . . .	San Jose, CA	Nov 3 - 7 . . . . .	Toronto, ON
Apr 28 - May 2 . . . . .	Pittsburgh, PA	Nov 3 - 7 . . . . .	Seattle, WA
Apr 28 - May 2 . . . . .	Manchester, NH	Nov 10 - 14 . . . . .	Schaumburg, IL
May 12 - 16 . . . . .	Buffalo, NY	Nov 10 - 14 . . . . .	Buffalo, NY
May 12 - 16 . . . . .	Ottawa, ON	Nov 10 - 14 . . . . .	Manchester, NH
May 12 - 16 . . . . .	Toronto, ON	Nov 17 - 21 . . . . .	San Jose, CA
May 12 - 16 . . . . .	Seattle, WA	Nov 17 - 21 . . . . .	Watertown, CT
May 12 - 16 . . . . .	Watertown, CT	Dec 1 - 5 . . . . .	San Diego, CA
May 12 - 16 . . . . .	Philadelphia, PA	Dec 1 - 5 . . . . .	Schaumburg, IL
May 19 - 23 . . . . .	San Diego, CA	Dec 8 - 12 . . . . .	Rochester, NY
May 19 - 23 . . . . .	Schaumburg, IL	Dec 8 - 12 . . . . .	Minneapolis, MN
Jun 2 - 6 . . . . .	Toronto, ON	Dec 8 - 12 . . . . .	San Jose, CA
Jun 2 - 6 . . . . .	Binghamton, NY	Dec 15 - 19 . . . . .	Portland, OR
Jun 2 - 6 . . . . .	San Jose, CA	Dec 15 - 19 . . . . .	Manchester, NH
Jun 9 - 13 . . . . .	Manchester, NH	Dec 15 - 19 . . . . .	Anaheim, CA
Jun 9 - 13 . . . . .	Schaumburg, IL		
Jun 16 - 20 . . . . .	Minneapolis, MN		
Jul 7 - 11 . . . . .	Manchester, NH		
Jul 7 - 11 . . . . .	Seattle, WA		
Jul 7 - 11 . . . . .	San Diego, CA		
Jul 14 - 18 . . . . .	Schaumburg, IL		
Jul 14 - 18 . . . . .	Pittsburgh, PA		
Jul 14 - 18 . . . . .	San Jose, CA		
Jul 21 - 25 . . . . .	Anaheim, CA		

### Hand Soldering Recertification

Jan 3 . . . . .	San Jose, CA	Jun 13 . . . . .	San Diego, CA
Jan 3 . . . . .	Manchester, NH	Jun 18 . . . . .	Manchester, NH
Jan 10 . . . . .	San Diego, CA	Jun 19 . . . . .	Schaumburg, IL
Jan 24 . . . . .	Schaumburg, IL	Jul 2 . . . . .	Manchester, NH
Jan 24 . . . . .	Kansas City, MO	Jul 4 . . . . .	Toronto, ON
Feb 14 . . . . .	Rochester, NY	Jul 23 . . . . .	Minneapolis, MN
Feb 21 . . . . .	Seattle, WA	Jul 25 . . . . .	Rochester, NY
Mar 10 . . . . .	San Diego, CA	Aug 6 . . . . .	Manchester, NH
Mar 14 . . . . .	Manchester, NH	Sep 5 . . . . .	Minneapolis, MN
Mar 26 . . . . .	Minneapolis, MN	Sep 5 . . . . .	San Jose, CA
Mar 26 . . . . .	Watertown, CT	Oct 1 . . . . .	Toronto, ON
Mar 27 . . . . .	Schaumburg, IL	Oct 1 . . . . .	Watertown, CT
Mar 28 . . . . .	San Jose, CA	Oct 10 . . . . .	San Diego, CA
Apr 4 . . . . .	Manchester, NH	Oct 10 . . . . .	Manchester, NH
Apr 28 . . . . .	Anaheim, CA	Oct 17 . . . . .	Schaumburg, IL
May 23 . . . . .	Toronto, ON	Oct 24 . . . . .	Seattle, WA
May 27 . . . . .	Manchester, NH	Nov 21 . . . . .	Manchester, NH
May 30 . . . . .	San Jose, CA	Dec 12 . . . . .	Kansas City, MO
Jun 13 . . . . .	Watertown, CT		

Dates and locations are subject to change. Please call to check current dates and availability. Minimum enrollments are required for a class to be held.