



### 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

## IPC-A-620 Certified IPC Specialist (CIS)

### IPC/WHMA-A-620 "Requirements and Acceptance for Cable and Wire Harness Assemblies"

Learn assembly requirements and accept/reject criteria for all three classes of cable and wire harness assembly.

#### IPC-A-620 CIS Certification & Recertification

Jan 6 - 9 . . . . . Kansas City, MO	May 12 - 15 . . . . . Manchester, NH	Sep 15 - 18 . . . . . Manchester, NH
Jan 6 - 9 . . . . . Minneapolis, MN	May 19 - 22 . . . . . Minneapolis, MN	Sep 22 - 25 . . . . . Buffalo, NY
Jan 13 - 16 . . . . . San Jose, CA	May 19 - 22 . . . . . Portland, OR	Sep 22 - 25 . . . . . Palm Bay, FL
Jan 20 - 23 . . . . . Long Island, NY	May 19 - 22 . . . . . Binghamton, NY	Sep 29 - Oct 2 . . . . . Binghamton, NY
Jan 27 - 30 . . . . . Ottawa, ON	May 19 - 22 . . . . . Akron, OH	Sep 29 - Oct 2 . . . . . Long Island, NY
Jan 27 - 30 . . . . . Portland, OR	Jun 2 - 5 . . . . . Palm Bay, FL	Oct 6 - 9 . . . . . Seattle, WA
Jan 27 - 30 . . . . . Manchester, NH	Jun 2 - 5 . . . . . Schaumburg, IL	Oct 6 - 9 . . . . . Rochester, NY
Feb 3 - 6 . . . . . Anaheim, CA	Jun 2 - 5 . . . . . Manchester, NH	Oct 6 - 9 . . . . . Schaumburg, IL
Feb 3 - 6 . . . . . Atlanta, GA	Jun 9 - 12 . . . . . Buffalo, NY	Oct 6 - 9 . . . . . Manchester, NH
Feb 10 - 13 . . . . . Watertown, CT	Jun 9 - 12 . . . . . Seattle, WA	Oct 13 - 16 . . . . . San Diego, CA
Feb 10 - 13 . . . . . Seattle, WA	Jun 16 - 19 . . . . . Toronto, ON	Oct 13 - 16 . . . . . Kansas City, MO
Feb 10 - 13 . . . . . San Diego, CA	Jun 16 - 19 . . . . . Anaheim, CA	Oct 20 - 23 . . . . . Watertown, CT
Feb 17 - 20 . . . . . San Jose, CA	Jun 23 - 26 . . . . . San Jose, CA	Oct 27 - 30 . . . . . Toronto, ON
Feb 17 - 20 . . . . . Manchester, NH	Jun 23 - 26 . . . . . Ottawa, ON	Oct 27 - 30 . . . . . Portland, OR
Feb 18 - 21 . . . . . Toronto, ON	Jun 23 - 26 . . . . . Rochester, NY	Oct 27 - 30 . . . . . Manchester, NH
Feb 24 - 27 . . . . . Schaumburg, IL	Jun 23 - 26 . . . . . Manchester, NH	Nov 3 - 6 . . . . . Anaheim, CA
Feb 24 - 27 . . . . . Pittsburgh, PA	Jun 23 - 26 . . . . . Watertown, CT	Nov 3 - 6 . . . . . Minneapolis, MN
Mar 3 - 6 . . . . . Palm Bay, FL	Jul 7 - 10 . . . . . Syracuse, NY	Nov 3 - 6 . . . . . Ottawa, ON
Mar 10 - 13 . . . . . San Jose, CA	Jul 14 - 17 . . . . . Minneapolis, MN	Nov 10 - 13 . . . . . San Jose, CA
Mar 10 - 13 . . . . . Minneapolis, MN	Jul 14 - 17 . . . . . Manchester, NH	Nov 10 - 13 . . . . . Manchester, NH
Mar 10 - 13 . . . . . Manchester, NH	Jul 21 - 24 . . . . . San Jose, CA	Nov 17 - 20 . . . . . Atlanta, GA
Mar 17 - 20 . . . . . Buffalo, NY	Aug 4 - 7 . . . . . San Diego, CA	Dec 1 - 4 . . . . . Toronto, ON
Mar 17 - 20 . . . . . Portland, OR	Aug 4 - 7 . . . . . Portland, OR	Dec 1 - 4 . . . . . Manchester, NH
Mar 24 - 27 . . . . . Rochester, NY	Aug 4 - 7 . . . . . Manchester, NH	Dec 8 - 11 . . . . . Schaumburg, IL
Mar 31 - Apr 3 . . . . . Manchester, NH	Aug 4 - 7 . . . . . Atlanta, GA	Dec 8 - 11 . . . . . Seattle, WA
Apr 1 - 4 . . . . . Syracuse, NY	Aug 11 - 14 . . . . . Schaumburg, IL	Dec 8 - 11 . . . . . Palm Bay, FL
Apr 8 - 11 . . . . . San Diego, CA	Aug 11 - 14 . . . . . Seattle, WA	Dec 8 - 11 . . . . . Philadelphia, PA
Apr 14 - 17 . . . . . Watertown, CT	Aug 11 - 14 . . . . . Watertown, CT	Dec 15 - 18 . . . . . Watertown, CT
Apr 14 - 17 . . . . . Toronto, ON	Aug 11 - 14 . . . . . Philadelphia, PA	
Apr 14 - 17 . . . . . Philadelphia, PA	Aug 18 - 21 . . . . . Toronto, ON	
Apr 21 - 24 . . . . . Anaheim, CA	Aug 18 - 21 . . . . . Anaheim, CA	
Apr 21 - 24 . . . . . Seattle, WA	Aug 25 - 28 . . . . . Manchester, NH	
Apr 21 - 24 . . . . . Schaumburg, IL	Sep 8 - 11 . . . . . Minneapolis, MN	
Apr 21 - 24 . . . . . Manchester, NH	Sep 8 - 11 . . . . . Binghamton, NY	
Apr 28 - May 1 . . . . . Atlanta, GA	Sep 9 - 12 . . . . . Pittsburgh, PA	
May 5 - 8 . . . . . Kansas City, MO	Sep 15 - 18 . . . . . San Jose, CA	
May 12 - 15 . . . . . San Jose, CA	Sep 15 - 18 . . . . . Halifax NS	
May 12 - 15 . . . . . Long Island, NY	Sep 15 - 18 . . . . . Akron, OH	

#### ON-LINE Start time: 10am E.S.T.

Jan 13 - 16	Jul 7 - 10
Feb 3 - 6	Jul 28 - 31
Feb 24 - 27	Aug 18 - 21
Mar 17 - 20	Sep 8 - 11
Apr 7 - 10	Sep 29 - Oct 2
Apr 28 - May 1	Oct 20 - 23
May 19 - 22	Nov 10 - 13
Jun 9 - 12	Dec 1 - 4

#### Challenge Test

##### IN-PERSON Manchester, NH

Jan 3	Jun 19
Jan 24	Aug 7
Feb 14	Sep 12
Feb 26	Oct 17
Apr 11	Nov 7
May 9	Dec 22
Jun 6	

##### ON-LINE Start time: 10am E.S.T.

Jan 8	May 14	Sep 17
Jan 22	May 28	Oct 1
Feb 5	Jun 11	Oct 15
Feb 19	Jun 25	Oct 29
Mar 5	Jul 9	Nov 12
Mar 19	Jul 23	Nov 24
Apr 2	Aug 6	Dec 10
Apr 16	Aug 20	Dec 22
Apr 30	Sep 3	

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.