



### 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-610 Certified IPC Specialist (CIS)

### IPC-A-610 "The Acceptability of Electronic Assemblies"

Learn accept/reject criteria for all 3 classes of assembly production as published in the most widely used inspection specification, IPC-A-610.

### IPC-A-610 CIS Certification & Recertification

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

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

Jan 6 - 8	Jul 14 - 16
Jan 27 - 29	Aug 4 - 6
Feb 17 - 19	Aug 25 - 27
Mar 10 - 12	Sep 15 - 17
Mar 31 - Apr 2	Oct 6 - 8
Apr 21 - 23	Oct 27 - 29
May 12 - 14	Nov 17 - 19
Jun 2 - 4	Dec 8 - 10
Jun 23 - 25	

### 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.