



### 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 Standards Expert (CSE)

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

Become a subject matter expert in IPC-A-610.

#### IPC-A-610 CSE Certification

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

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

Jan 10 - 13	Jul 18 - 21
Jan 31 - Feb 3	Aug 8 - 11
Feb 21 - 24	Aug 29 - Sep 1
Mar 14 - 17	Sep 19 - 22
Apr 4 - 7	Oct 10 - 13
Apr 25 - 28	Oct 31 - Nov 3
May 16 - 19	Nov 28 - Dec 1
Jun 6 - 9	Dec 19 - 22
Jun 27 - 30	

#### Challenge Test

Jan 7 ... Manchester, NH
Jan 31 ... Manchester, NH
Feb 25 ... Manchester, NH
Mar 11 ... Manchester, NH
Apr 1 ... Manchester, NH
May 6 ... Manchester, NH
May 20 ... Manchester, NH
Jun 29 ... Manchester, NH
Jul 21 ... Manchester, NH
Aug 5 ... Manchester, NH
Sep 22 ... Manchester, NH
Oct 20 ... Manchester, NH
Nov 18 ... Manchester, NH
Dec 19 ... Manchester, NH

#### Challenge Test

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

Jan 5	Jul 6
Jan 19	Jul 20
Feb 2	Aug 3
Feb 16	Aug 17
Mar 2	Aug 31
Mar 16	Sep 14
Mar 30	Sep 28
Apr 13	Oct 12
Apr 27	Oct 26
May 11	Nov 9
May 25	Nov 22
Jun 8	Dec 7
Jun 22	Dec 21

#### IPC-A-610 CSE Recertification

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

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

Jan 3 - 4	Aug 1 - 2
Jan 17 - 18	Aug 22 - 23
Feb 14 - 15	Sep 12 - 13
Mar 7 - 8	Oct 3 - 4
Apr 18 - 19	Oct 24 - 25
May 9 - 10	Nov 14 - 15
May 31 - Jun 1	Dec 5 - 6
Jun 20 - 21	Dec 26 - 27
Jul 11 - 12	

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Jan 5	Jul 6
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Feb 16	Aug 17
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Mar 16	Sep 14
Mar 30	Sep 28
Apr 13	Oct 12
Apr 27	Oct 26
May 11	Nov 9
May 25	Nov 22
Jun 8	Dec 7
Jun 22	Dec 21

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.

### ALSO AVAILABLE

#### IPC-A-610 Interactive PCB Inspection Lab

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

Utilizes, lectures, visual acuity exercises, and physical assemblies to provide an experience in visually inspecting printed circuit assemblies.