



### 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 Trainer (CIT)

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

Become certified to train your workforce to identify accept/reject criteria for all three classes of assembly production.

#### IPC-A-610 CIT Certification

Jan 10 - 13 ... Watertown, CT  
 Jan 10 - 13 ... Buffalo, NY  
 Jan 17 - 20 ... Schaumburg, IL  
 Jan 17 - 20 ... Toronto, ON  
 Jan 18 - 21 ... Pittsburgh, PA  
 Jan 24 - 27 ... San Diego, CA  
 Jan 24 - 27 ... Palm Bay, FL  
 Feb 7 - 10 ... Manchester, NH  
 Feb 14 - 17 ... Anaheim, CA  
 Feb 14 - 17 ... Kansas City, MO  
 Feb 22 - 25 ... Minneapolis, MN  
 Feb 22 - 25 ... Rochester, NY  
 Feb 28 - Mar 3 ... Seattle, WA  
 Mar 14 - 17 ... Long Island, NY  
 Mar 14 - 17 ... Toronto, ON  
 Mar 22 - 25 ... San Jose, CA  
 Mar 28 - 31 ... Ottawa, ON  
 Apr 4 - 7 ... San Diego, CA  
 Apr 4 - 7 ... Binghamton, NY  
 Apr 11 - 14 ... Manchester, NH  
 Apr 11 - 14 ... Schaumburg, IL  
 Apr 18 - 21 ... San Jose, CA  
 Apr 18 - 21 ... Watertown, CT  
 Apr 18 - 21 ... Palm Bay, FL  
 May 9 - 12 ... Rochester, NY  
 May 16 - 19 ... Anaheim, CA  
 May 16 - 19 ... Minneapolis, MN  
 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  
 Jul 18 - 21 ... San Diego, CA

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

#### 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

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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 CIT Recertification

Jan 3 - 4 ... Palm Bay, FL  
 Jan 3 - 4 ... Manchester, NH  
 Jan 10 - 11 ... San Diego, CA  
 Jan 10 - 11 ... Kansas City, MO  
 Jan 18 - 19 ... Minneapolis, MN  
 Jan 18 - 19 ... Rochester, NY  
 Jan 24 - 25 ... Schaumburg, IL  
 Jan 24 - 25 ... Toronto, ON  
 Feb 3 - 4 ... Anaheim, CA  
 Feb 7 - 8 ... Binghamton, NY  
 Feb 14 - 15 ... Watertown, CT  
 Feb 14 - 15 ... Seattle, WA  
 Feb 22 - 23 ... Akron, OH  
 Mar 7 - 8 ... Manchester, NH  
 Mar 21 - 22 ... Long Island, NY  
 Mar 22 - 23 ... Ottawa, ON  
 Mar 29 - 30 ... Buffalo, NY  
 Apr 4 - 5 ... Schaumburg, IL  
 Apr 19 - 20 ... Seattle, WA  
 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

Aug 2 - 3 ... Toronto, ON  
 Aug 2 - 3 ... Seattle, WA  
 Aug 9 - 10 ... Minneapolis, MN  
 Aug 15 - 16 ... Long Island, NY  
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 Aug 23 - 24 ... Kansas City, MO  
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 Sep 12 - 13 ... Palm Bay, FL  
 Sep 19 - 20 ... Rochester, NY  
 Oct 3 - 4 ... San Diego, CA  
 Oct 3 - 4 ... Manchester, NH  
 Oct 3 - 4 ... Seattle, WA  
 Oct 11 - 12 ... Buffalo, NY  
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 Nov 7 - 8 ... Manchester, NH  
 Nov 7 - 8 ... Toronto, ON  
 Nov 14 - 15 ... Watertown, CT  
 Nov 14 - 15 ... Minneapolis, MN

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Apr 18 - 19	Nov 14 - 15
May 9 - 10	Dec 5 - 6
May 31 - Jun 1	Dec 26 - 27
Jun 20 - 21	
Jul 11 - 12	
Aug 1 - 2	

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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.



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### 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

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

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May 16 - 18	Nov 28 - 30
Jun 6 - 8	Dec 19 - 21
Jun 27 - 29	

#### Challenge Test

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Jun 29 . . . . . Manchester, NH
Jul 21 . . . . . Manchester, NH
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#### ALSO AVAILABLE

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#### 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.

#### IPC-A-610 CIS Recertification

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

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#### Challenge Test

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### TECHNICAL SUPPORT

- Manufacturing Start-Up
- Process Evaluation
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- 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
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Jan 3 - 4 ... Manchester, NH	Aug 2 - 3 ... Seattle, WA
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Jul 11 - 12 ... Anaheim, CA	
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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	

#### 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

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.



### 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 Interactive PCB Inspection Lab (CIT or CIS Option)

### 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.

#### IPC-A-610 Interactive Inspection Labs

Jan 14 . . . . . Watertown, CT	Jul 22 . . . . . Schaumburg, IL
Jan 14 . . . . . Buffalo, NY	Jul 28 . . . . . Manchester, NH
Jan 20 . . . . . Manchester, NH	Jul 29 . . . . . Toronto, ON
Jan 21 . . . . . Schaumburg, IL	Aug 11 . . . . . Manchester, NH
Jan 21 . . . . . Toronto, ON	Aug 26 . . . . . Anaheim, CA
Jan 28 . . . . . San Diego, CA	Sep 16 . . . . . San Diego, CA
Feb 11 . . . . . San Jose, CA	Sep 16 . . . . . Rochester, NY
Feb 17 . . . . . Manchester, NH	Sep 23 . . . . . San Jose, CA
Feb 18 . . . . . Anaheim, CA	Sep 29 . . . . . Manchester, NH
Mar 4 . . . . . Seattle, WA	Oct 7 . . . . . Watertown, CT
Mar 18 . . . . . Long Island, NY	Oct 7 . . . . . Buffalo, NY
Mar 18 . . . . . Toronto, ON	Oct 14 . . . . . Manchester, NH
Mar 24 . . . . . Manchester, NH	Oct 21 . . . . . Schaumburg, IL
Apr 1 . . . . . Ottawa, ON	Oct 21 . . . . . Long Island, NY
Apr 15 . . . . . Schaumburg, IL	Oct 28 . . . . . Toronto, ON
Apr 21 . . . . . Manchester, NH	Nov 4 . . . . . Minneapolis, MN
Apr 22 . . . . . Watertown, CT	Nov 11 . . . . . San Jose, CA
May 19 . . . . . Manchester, NH	Nov 11 . . . . . Akron, OH
May 20 . . . . . Anaheim, CA	Nov 11 . . . . . Ottawa, ON
May 27 . . . . . Seattle, WA	Nov 18 . . . . . Kansas City, MO
Jun 9 . . . . . Manchester, NH	Dec 2 . . . . . Pittsburgh, PA
Jun 10 . . . . . Pittsburgh, PA	Dec 9 . . . . . Anaheim, CA
Jun 17 . . . . . Kansas City, MO	Dec 9 . . . . . Manchester, NH
Jun 17 . . . . . Syracuse, NY	
Jul 22 . . . . . San Diego, CA	

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.





### 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

## J-STD-001 Certified IPC Trainer (CIT)

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

Acquire the skills, instructional materials and industry certification to deliver IPC's J-STD-001 Operator Training program.

#### J-STD-001 CIT Certification

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

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

#### FOR LECTURE AND EXAM ONLY\*

Feb 21 - 24
Apr 25 - 28
Jun 27 - 30
Aug 15 - 18
Oct 17 - 20
Dec 26 - 29

#### Challenge Test

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

### J-STD-001 CIT Space Addendum Certification

Jan 28 . . . . . Manchester, NH	Oct 21 . . . . . San Diego, CA
Feb 18 . . . . . Watertown, CT	Nov 11 . . . . . Manchester, NH
Feb 21 . . . . . San Diego, CA	Nov 11 . . . . . Toronto, ON
Feb 23 . . . . . Toronto, ON	Dec 20 . . . . . Manchester, NH
Mar 28 . . . . . Manchester, NH	
Apr 29 . . . . . Rochester, NY	
May 13 . . . . . Watertown, CT	
May 13 . . . . . Toronto, ON	
Jun 30 . . . . . Manchester, NH	
Jul 22 . . . . . Manchester, NH	
Aug 5 . . . . . Watertown, CT	
Sep 30 . . . . . Manchester, NH	

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CIT Recertification

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

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

#### FOR LECTURE AND EXAM ONLY\*

Feb 16 - 17
Apr 20 - 21
Jun 22 - 23
Aug 24 - 25
Oct 5 - 6
Nov 16 - 17

#### Challenge Test

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

### J-STD-001 CIT Space Addendum Recertification

Jan 28 . . . . . Manchester, NH	Oct 21 . . . . . San Diego, CA
Feb 18 . . . . . Watertown, CT	Nov 11 . . . . . Manchester, NH
Feb 21 . . . . . San Diego, CA	Nov 11 . . . . . Toronto, ON
Feb 23 . . . . . Toronto, ON	Dec 20 . . . . . Manchester, NH
Mar 28 . . . . . Manchester, NH	
Apr 29 . . . . . Rochester, NY	
May 13 . . . . . Watertown, CT	
May 13 . . . . . Toronto, ON	
Jun 30 . . . . . Manchester, NH	
Jul 22 . . . . . Manchester, NH	
Aug 5 . . . . . Watertown, CT	
Sep 30 . . . . . Manchester, NH	

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

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.

**\*Important Note: J-STD-001 ON-LINE CLASS DATES ARE FOR THE LECTURE AND EXAM ONLY.** Attendees will need to travel to a confirmed, in-person J-STD-001 class to complete their workmanship requirements with an EPTAC Instructor.



### 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

## J-STD-001 Certified IPC Specialist (CIS)

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

Interpret the J-STD-001 specification in 5 one-day modules: Theory, Wires & Terminals, Through-Hole, Surface Mount and Inspection.

#### J-STD-001 CIS Certification

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

#### J-STD-001 CIS Recertification

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

#### J-STD-001 CIS Space Addendum Certification

Jan 28	Manchester, NH	Oct 21	San Diego, CA
Feb 18	Watertown, CT	Nov 11	Manchester, NH
Feb 21	San Diego, CA	Nov 11	Toronto, ON
Feb 23	Toronto, ON	Dec 20	Manchester, NH

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### Challenge Test

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

#### J-STD-001 CIS Space Addendum Recertification

Jan 28	Manchester, NH	Oct 21	San Diego, CA
Feb 18	Watertown, CT	Nov 11	Manchester, NH
Feb 21	San Diego, CA	Nov 11	Toronto, ON
Feb 23	Toronto, ON	Dec 20	Manchester, NH

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### Challenge Test

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

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.



### TRAINING

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- Industry-Demanded Certifications

### PCB TECHNOLOGY

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#### 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

## J-STD-001 Certified Standards Expert (CSE)

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

Become a subject matter expert in J-STD-001.

#### J-STD-001 CSE Certification

Jan 3 - 7 . . . . . Buffalo, NY  
 Jan 3 - 7 . . . . . San Jose, CA  
 Jan 17 - 21 . . . . . Manchester, NH  
 Jan 24 - 28 . . . . . Anaheim, CA  
 Jan 24 - 28 . . . . . Rochester, NY  
 Jan 31 - Feb 4 . . . . . Schaumburg, IL  
 Jan 31 - Feb 4 . . . . . Toronto, ON  
 Feb 14 - 18 . . . . . San Diego, CA  
 Feb 21 - 25 . . . . . Palm Bay, FL  
 Feb 28 - 4 . . . . . Ottawa, ON  
 Mar 7 - 11 . . . . . Kansas City, MO  
 Mar 14 - 18 . . . . . Seattle, WA  
 Mar 21 - 25 . . . . . Minneapolis, MN  
 Mar 21 - 25 . . . . . Manchester, NH  
 Mar 28 - Apr 1 . . . . . San Jose, CA  
 Apr 4 - 8 . . . . . Buffalo, NY  
 Apr 11 - 15 . . . . . Anaheim, CA  
 Apr 18 - 22 . . . . . Rochester, NY  
 Apr 18 - 22 . . . . . Toronto, ON  
 May 2 - 6 . . . . . San Jose, CA  
 May 2 - 6 . . . . . Palm Bay, FL  
 May 2 - 6 . . . . . Long Island, NY  
 May 16 - 20 . . . . . Watertown, CT  
 May 16 - 20 . . . . . Binghamton, NY  
 May 16 - 20 . . . . . Manchester, NH  
 May 23 - 27 . . . . . Schaumburg, IL  
 Jun 13 - 17 . . . . . San Diego, CA  
 Jun 13 - 17 . . . . . Toronto, ON  
 Jun 20 - 24 . . . . . Minneapolis, MN  
 Jul 11 - 15 . . . . . Kansas City, MO  
 Jul 25 - 29 . . . . . Anaheim, CA  
 Jul 25 - 29 . . . . . Buffalo, NY  
 Jul 25 - 29 . . . . . Manchester, NH  
 Aug 8 - 12 . . . . . Palm Bay, FL

Aug 8 - 12 . . . . . Ottawa, ON  
 Aug 15 - 19 . . . . . San Diego, CA  
 Aug 15 - 19 . . . . . Watertown, CT  
 Aug 15 - 19 . . . . . Seattle, WA  
 Aug 22 - 26 . . . . . Rochester, NY  
 Aug 22 - 26 . . . . . Toronto, ON  
 Aug 29 - Sep 2 . . . . . Manchester, NH  
 Sep 12 - 16 . . . . . Minneapolis, MN  
 Sep 12 - 16 . . . . . Toronto, ON  
 Sep 19 - 23 . . . . . Schaumburg, IL  
 Oct 3 - 7 . . . . . Binghamton, NY  
 Oct 3 - 7 . . . . . Toronto, ON  
 Oct 10 - 14 . . . . . Anaheim, CA  
 Oct 31 - Nov 4 . . . . . San Jose, CA  
 Oct 31 - Nov 4 . . . . . Manchester, NH  
 Nov 7 - 11 . . . . . Watertown, CT  
 Nov 14 - 18 . . . . . San Diego, CA  
 Nov 21 - 25 . . . . . Ottawa, ON  
 Nov 28 - Dec 2 . . . . . Seattle, WA  
 Dec 5 - 9 . . . . . Schaumburg, IL  
 Dec 12 - 16 . . . . . Palm Bay, FL  
 Dec 12 - 16 . . . . . Kansas City, MO  
 Dec 12 - 16 . . . . . Long Island, NY  
 Dec 12 - 16 . . . . . Toronto, ON  
 Dec 19 - 23 . . . . . Buffalo, NY

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

Feb 21 - 24  
 Apr 25 - 28  
 Jun 27 - 30  
 Aug 15 - 18  
 Oct 17 - 20  
 Dec 26 - 29

#### 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

#### J-STD-001 CSE Space Addendum Certification

Jan 28 . . . . . Manchester, NH  
 Feb 18 . . . . . Watertown, CT  
 Feb 21 . . . . . San Diego, CA  
 Feb 23 . . . . . Toronto, ON  
 Mar 28 . . . . . Manchester, NH  
 Apr 29 . . . . . Rochester, NY  
 May 13 . . . . . Watertown, CT  
 May 13 . . . . . Toronto, ON  
 Jun 30 . . . . . Manchester, NH  
 Jul 22 . . . . . Manchester, NH  
 Aug 5 . . . . . Watertown, CT  
 Sep 30 . . . . . Manchester, NH

Oct 21 . . . . . San Diego, CA  
 Nov 11 . . . . . Manchester, NH  
 Nov 11 . . . . . Toronto, ON  
 Dec 20 . . . . . Manchester, NH

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

Feb 25  
 Apr 29  
 Jul 1  
 Aug 26  
 Oct 21  
 Nov 18

#### J-STD-001 CSE Recertification

Jan 5 - 6 . . . . . Palm Bay, FL  
 Jan 5 - 6 . . . . . Manchester, NH  
 Jan 12 - 13 . . . . . San Diego, CA  
 Jan 12 - 13 . . . . . Kansas City, MO  
 Jan 20 - 21 . . . . . Minneapolis, MN  
 Jan 20 - 21 . . . . . Rochester, NY  
 Jan 26 - 27 . . . . . Schaumburg, IL  
 Jan 26 - 27 . . . . . Toronto, ON  
 Feb 1 - 2 . . . . . Anaheim, CA  
 Feb 9 - 10 . . . . . Binghamton, NY  
 Feb 16 - 17 . . . . . Watertown, CT  
 Feb 16 - 17 . . . . . Seattle, WA  
 Mar 9 - 10 . . . . . Manchester, NH  
 Mar 23 - 24 . . . . . Long Island, NY  
 Mar 24 - 25 . . . . . Ottawa, ON  
 Mar 31 - Apr 1 . . . . . Buffalo, NY  
 Apr 6 - 7 . . . . . Schaumburg, IL  
 Apr 21 - 22 . . . . . Seattle, WA  
 Apr 25 - 26 . . . . . Palm Bay, FL  
 Apr 27 - 28 . . . . . Rochester, NY  
 May 4 - 5 . . . . . Manchester, NH  
 May 11 - 12 . . . . . Watertown, CT  
 May 11 - 12 . . . . . Toronto, ON  
 May 12 - 13 . . . . . Minneapolis, MN  
 Jun 8 - 9 . . . . . San Diego, CA  
 Jun 15 - 16 . . . . . Binghamton, NY  
 Jul 7 - 8 . . . . . Manchester, NH  
 Jul 13 - 14 . . . . . Anaheim, CA  
 Jul 27 - 28 . . . . . Rochester, NY

Aug 3 - 4 . . . . . Watertown, CT  
 Aug 3 - 4 . . . . . Buffalo, NY  
 Aug 4 - 5 . . . . . Toronto, ON  
 Aug 4 - 5 . . . . . Seattle, WA  
 Aug 11 - 12 . . . . . Minneapolis, MN  
 Aug 14 - 15 . . . . . Long Island, NY  
 Aug 24 - 25 . . . . . Schaumburg, IL  
 Aug 25 - 26 . . . . . Kansas City, MO  
 Sep 8 - 9 . . . . . Manchester, NH  
 Sep 14 - 15 . . . . . Palm Bay, FL  
 Sep 21 - 22 . . . . . Rochester, NY  
 Oct 5 - 6 . . . . . San Diego, CA  
 Oct 5 - 6 . . . . . Manchester, NH  
 Oct 5 - 6 . . . . . Seattle, WA  
 Oct 13 - 14 . . . . . Buffalo, NY  
 Nov 3 - 4 . . . . . Schaumburg, IL  
 Nov 9 - 10 . . . . . Manchester, NH  
 Nov 9 - 10 . . . . . Toronto, ON  
 Nov 16 - 17 . . . . . Watertown, CT  
 Nov 16 - 17 . . . . . Minneapolis, MN

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

Feb 16 - 17  
 Apr 20 - 21  
 Jun 22 - 23  
 Aug 24 - 25  
 Oct 5 - 6  
 Nov 16 - 17

#### 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

#### J-STD-001 CSE Space Addendum Certification

Jan 28 . . . . . Manchester, NH  
 Feb 18 . . . . . Watertown, CT  
 Feb 21 . . . . . San Diego, CA  
 Feb 23 . . . . . Toronto, ON  
 Mar 28 . . . . . Manchester, NH  
 Apr 29 . . . . . Rochester, NY  
 May 13 . . . . . Watertown, CT  
 May 13 . . . . . Toronto, ON  
 Jun 30 . . . . . Manchester, NH  
 Jul 22 . . . . . Manchester, NH  
 Aug 5 . . . . . Watertown, CT  
 Sep 30 . . . . . Manchester, NH

Oct 21 . . . . . San Diego, CA  
 Nov 11 . . . . . Manchester, NH  
 Nov 11 . . . . . Toronto, ON  
 Dec 20 . . . . . Manchester, NH

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

Feb 25  
 Apr 29  
 Jul 1  
 Aug 26  
 Oct 21  
 Nov 18



### 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

## J-STD-001 Space Addendum (CIT, CIS, CSE)

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

Acquire the skills, instructional materials and industry certification to deliver IPC's J-STD-001 Operator Training program.

#### J-STD-001 CIT Space Addendum Certification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CSE Space Addendum Certification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CIT Space Addendum Recertification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CSE Space Addendum Certification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CIS Space Addendum Certification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

#### J-STD-001 CIS Space Addendum Recertification

Jan 28 . . . . .	Manchester, NH	Oct 21 . . . . .	San Diego, CA
Feb 18 . . . . .	Watertown, CT	Nov 11 . . . . .	Manchester, NH
Feb 21 . . . . .	San Diego, CA	Nov 11 . . . . .	Toronto, ON
Feb 23 . . . . .	Toronto, ON	Dec 20 . . . . .	Manchester, NH
Mar 28 . . . . .	Manchester, NH		
Apr 29 . . . . .	Rochester, NY		
May 13 . . . . .	Watertown, CT		
May 13 . . . . .	Toronto, ON		
Jun 30 . . . . .	Manchester, NH		
Jul 22 . . . . .	Manchester, NH		
Aug 5 . . . . .	Watertown, CT		
Sep 30 . . . . .	Manchester, NH		

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

Feb 25
Apr 29
Jul 1
Aug 26
Oct 21
Nov 18

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.





### 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 Trainer (CIT)

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

Become an expert in the quality standards of Wire, Cable and Harness, and be certified for inspection and instruction.

#### IPC-A-620 CIT Certification

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

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

Jan 17 - 20
Feb 7 - 10
Feb 28 - Mar 3
Mar 21 - 24
Apr 11 - 14
May 2 - 5
May 23 - 26
Jun 13 - 16
Jul 5 - 8
Jul 25 - 28
Aug 15 - 18
Sep 6 - 9
Sep 26 - 29
Oct 17 - 20
Nov 7 - 10
Nov 28 - Dec 1
Dec 12 - 15
Dec 26 - 29

#### 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 23
Jun 8	Dec 7
Jun 22	Dec 21

#### IPC-A-620 CIT Recertification

Jan 5 - 6 . . . . . Toronto, ON
Jan 31 - Feb 1 . Minneapolis, MN
Jan 31 - Feb 1 . Manchester, NH
Feb 2 - 3 . . . . . Palm Bay, FL
Feb 3 - 4 . . . . . Rochester, NY
Feb 22 - 23 . . . San Diego, CA
Feb 22 - 23 . . . Schaumburg, IL
Feb 28 - Mar 1 . Manchester, NH
Mar 21 - 22 . . . Watertown, CT
Apr 25 - 26 . . . Seattle, WA
May 26 - 27 . . . Toronto, ON
May 31 - Jun 1 . Manchester, NH
Jun 2 - 3 . . . . . Long Island, NY
Jun 9 - 10 . . . . Anaheim, CA
Jun 9 - 10 . . . . Watertown, CT
Jun 15 - 16 . . . Schaumburg, IL
Jun 27 - 28 . . . Rochester, NY
Jun 27 - 28 . . . Pittsburgh, PA
Jul 11 - 12 . . . . Minneapolis, MN
Jul 18 - 19 . . . Palm Bay, FL
Aug 8 - 9 . . . . . Buffalo, NY
Aug 29 - 30 . . . Anaheim, CA
Aug 29 - 30 . . . Kansas City, MO
Aug 29 - 30 . . . Manchester, NH
Sep 1 - 2 . . . . . Seattle, WA
Sep 12 - 13 . . . Schaumburg, IL

Sep 26 - 27 . . . Toronto, ON
Oct 10 - 11 . . . Watertown, CT
Oct 10 - 11 . . . Rochester, NY
Oct 19 - 20 . . . San Diego, CA
Oct 19 - 20 . . . Palm Bay, FL
Oct 27 - 28 . . . Minneapolis, MN
Nov 7 - 8 . . . . . Long Island, NY
Nov 21 - 22 . . . Manchester, NH
Nov 21 - 22 . . . Buffalo, NY
Dec 19 - 20 . . . Toronto, ON

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

Jan 27 - 28
Feb 16 - 17
Mar 9 - 10
Apr 11 - 12
May 11 - 12
Jun 2 - 3
Jul 13 - 14
Aug 3 - 4
Sep 14 - 15
Oct 26 - 27
Nov 21 - 22
Dec 7 - 8

#### 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 23
Jun 8	Dec 7
Jun 22	Dec 21

### ALSO AVAILABLE

#### IPC-A-620 Hands-on Lab

Through hands-on labs, students perform necessary procedures for building an entire wire harness assembly.

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.



### 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

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

#### IPC-A-620 CIS Recertification

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

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

Jan 17 - 20	
Feb 7 - 10	
Feb 28 - Mar 3	
Mar 21 - 24	
Apr 11 - 14	
May 2 - 5	
May 23 - 26	
Jun 13 - 16	
Jul 5 - 8	
Jul 25 - 28	
Aug 15 - 18	
Sep 6 - 9	
Sep 26 - 29	
Oct 17 - 20	
Nov 7 - 10	
Nov 28 - Dec 1	
Dec 12 - 15	
Dec 26 - 29	

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

Jan 17 - 20	
Feb 7 - 10	
Feb 28 - Mar 3	
Mar 21 - 24	
Apr 11 - 14	
May 2 - 5	
May 23 - 26	
Jun 13 - 16	
Jul 5 - 8	
Jul 25 - 28	
Aug 15 - 18	
Sep 6 - 9	
Sep 26 - 29	
Oct 17 - 20	
Nov 7 - 10	
Nov 28 - Dec 1	
Dec 12 - 15	
Dec 26 - 29	

#### 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

#### 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

### ALSO AVAILABLE

#### IPC-A-620 Hands-on Lab

Through hands-on labs, students perform necessary procedures for building an entire wire harness assembly.

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.



### 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 Standard Expert (CSE)

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

Become a subject matter expert in IPC-A-620.

#### IPC-A-620 CSE Certification

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

Sep 12 - 15 . . . . . Manchester, NH  
 Sep 19 - 22 . . . . . San Diego, CA  
 Sep 19 - 22 . . . . . Palm Bay, FL  
 Sep 19 - 22 . . . . . Minneapolis, MN  
 Sep 19 - 22 . . . . . Buffalo, NY  
 Sep 26 - 29 . . . . . Schaumburg, IL  
 Sep 26 - 29 . . . . . Long Island, NY  
 Oct 3 - 6 . . . . . Rochester, NY  
 Oct 10 - 13 . . . . . Kansas City, MO  
 Oct 17 - 20 . . . . . Watertown, CT  
 Nov 14 - 17 . . . . . Schaumburg, IL  
 Nov 14 - 17 . . . . . Seattle, WA  
 Nov 15 - 18 . . . . . Anaheim, CA  
 Nov 28 - Dec 1 . . . . . Toronto, ON  
 Nov 29 - Dec 2 . . . . . Minneapolis, MN  
 Dec 5 - 8 . . . . . San Jose, CA  
 Dec 5 - 8 . . . . . Palm Bay, FL  
 Dec 12 - 15 . . . . . Manchester, NH  
 Dec 19 - 22 . . . . . San Diego, CA

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

Jan 17 - 20  
 Feb 7 - 10  
 Feb 28 - Mar 3  
 Mar 21 - 24  
 Apr 11 - 14  
 May 2 - 5  
 May 23 - 26  
 Jun 13 - 16  
 Jul 5 - 8  
 Jul 25 - 28  
 Aug 15 - 18  
 Sep 6 - 9  
 Sep 26 - 29  
 Oct 17 - 20  
 Nov 7 - 10  
 Nov 28 - Dec 1  
 Dec 12 - 15  
 Dec 26 - 29

#### 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-620 CSE Recertification

Jan 5 - 6 . . . . . Toronto, ON  
 Jan 31 - Feb 1 . . . . . Minneapolis, MN  
 Jan 31 - Feb 1 . . . . . Manchester, NH  
 Feb 2 - 3 . . . . . Palm Bay, FL  
 Feb 3 - 4 . . . . . Rochester, NY  
 Feb 22 - 23 . . . . . San Diego, CA  
 Feb 22 - 23 . . . . . Schaumburg, IL  
 Feb 28 - Mar 1 . . . . . Manchester, NH  
 Mar 21 - 22 . . . . . Watertown, CT  
 Apr 25 - 26 . . . . . Seattle, WA  
 May 26 - 27 . . . . . Toronto, ON  
 May 31 - Jun 1 . . . . . Manchester, NH  
 Jun 2 - 3 . . . . . Long Island, NY  
 Jun 9 - 10 . . . . . Anaheim, CA  
 Jun 9 - 10 . . . . . Watertown, CT  
 Jun 15 - 16 . . . . . Schaumburg, IL  
 Jun 27 - 28 . . . . . Rochester, NY  
 Jun 27 - 28 . . . . . Pittsburgh, PA  
 Jul 11 - 12 . . . . . Minneapolis, MN  
 Jul 18 - 19 . . . . . Palm Bay, FL  
 Aug 8 - 9 . . . . . Buffalo, NY  
 Aug 29 - 30 . . . . . Anaheim, CA  
 Aug 29 - 30 . . . . . Kansas City, MO  
 Aug 29 - 30 . . . . . Manchester, NH  
 Sep 1 - 2 . . . . . Seattle, WA  
 Sep 12 - 13 . . . . . Schaumburg, IL

Sep 26 - 27 . . . . . Toronto, ON  
 Oct 10 - 11 . . . . . Watertown, CT  
 Oct 10 - 11 . . . . . Rochester, NY  
 Oct 19 - 20 . . . . . San Diego, CA  
 Oct 19 - 20 . . . . . Palm Bay, FL  
 Oct 27 - 28 . . . . . Minneapolis, MN  
 Nov 7 - 8 . . . . . Long Island, NY  
 Nov 21 - 22 . . . . . Manchester, NH  
 Nov 21 - 22 . . . . . Buffalo, NY  
 Dec 19 - 20 . . . . . Toronto, ON

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

Jan 27 - 28  
 Feb 16 - 17  
 Mar 9 - 10  
 Apr 11 - 12  
 May 11 - 12  
 Jun 2 - 3  
 Jul 13 - 14  
 Aug 3 - 4  
 Sep 14 - 15  
 Oct 26 - 27  
 Nov 21 - 22  
 Dec 7 - 8

#### 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

### ALSO AVAILABLE

#### IPC-A-620 Hands-on Lab

Through hands-on labs, students perform necessary procedures for building an entire wire harness assembly.

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.



### 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 Hands-on Labs

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

*Through hands-on labs, students perform necessary procedures for building an entire wire harness assembly.*

#### 620 Hands-on Labs (CIT or CIS Option)

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

#### ALSO AVAILABLE

#### Crimp Terminations Certification

- Apr 15 . . . . . Manchester, NH
- Aug 12 . . . . . Manchester, NH
- Dec 19 . . . . . Manchester, NH

#### Crimp Terminations Recertification

- Apr 15 . . . . . Manchester, NH
- Aug 12 . . . . . Manchester, NH
- Dec 19 . . . . . Manchester, NH

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.





### 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-600 Certified IPC Trainer (CIT)

### IPC-A-600 "The Acceptability of Printed Boards"

Become an expert in the quality standards of printed circuit boards and be certified for inspection and instruction.

#### IPC-A-600 CIT Certification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 21 - 23 . . . . . Schaumburg, IL  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . . . San Jose, CA  
 May 24 - 26 . . . . . Manchester, NH  
 Jul 13 - 15 . . . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . . . Toronto, ON  
 Nov 16 - 18 . . . . . Toronto, ON  
 Nov 29 - Dec 1 . . . . . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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 23
Jun 8	Dec 7
Jun 22	Dec 21

#### IPC-A-600 CIT Recertification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 21 - 23 . . . . . Schaumburg, IL  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . . . San Jose, CA  
 May 24 - 26 . . . . . Manchester, NH  
 Jul 13 - 15 . . . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . . . Toronto, ON  
 Nov 16 - 18 . . . . . Toronto, ON  
 Nov 29 - Dec 1 . . . . . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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 23
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.



### 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

### HARNESST 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-600 Certified IPC Specialist (CIS)

### IPC-A-600 "The Acceptability of Printed Boards"

Learn quality standards of PCBs and be certified for inspection of bare boards.

#### IPC-A-600 CIS Certification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 16 - 18 . . . San Diego, CA  
 Mar 21 - 23 . . . Schaumburg, IL  
 Apr 12 - 14 . . . Seattle, WA  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . San Jose, CA  
 May 24 - 26 . . . Manchester, NH  
 Jul 13 - 15 . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . Toronto, ON  
 Sep 7 - 9 . . . . . Seattle, WA  
 Sep 28 - 30 . . . San Diego, CA  
 Nov 16 - 18 . . . Toronto, ON  
 Nov 29 - Dec 1 . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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-600 CIS Recertification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 16 - 18 . . . San Diego, CA  
 Mar 21 - 23 . . . Schaumburg, IL  
 Apr 12 - 14 . . . Seattle, WA  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . San Jose, CA  
 May 24 - 26 . . . Manchester, NH  
 Jul 13 - 15 . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . Toronto, ON  
 Sep 7 - 9 . . . . . Seattle, WA  
 Sep 28 - 30 . . . San Diego, CA  
 Nov 16 - 18 . . . Toronto, ON  
 Nov 29 - Dec 1 . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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

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.



### 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-600 Certified Standards Expert (CSE)

### IPC-A-600 "The Acceptability of Printed Boards"

Become a subject matter expert in IPC-A-600.

#### IPC-A-600 CSE Certification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 21 - 23 . . . . . Schaumburg, IL  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . . . San Jose, CA  
 May 24 - 26 . . . . . Manchester, NH  
 Jul 13 - 15 . . . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . . . Toronto, ON  
 Nov 16 - 18 . . . . . Toronto, ON  
 Nov 29 - Dec 1 . . . . . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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-600 CSE Recertification

Feb 7 - 9 . . . . . Toronto, ON  
 Mar 21 - 23 . . . . . Schaumburg, IL  
 May 4 - 6 . . . . . Toronto, ON  
 May 23 - 25 . . . . . San Jose, CA  
 May 24 - 26 . . . . . Manchester, NH  
 Jul 13 - 15 . . . . . Schaumburg, IL  
 Aug 2 - 4 . . . . . Manchester, NH  
 Aug 29 - 31 . . . . . Toronto, ON  
 Nov 16 - 18 . . . . . Toronto, ON  
 Nov 29 - Dec 1 . . . . . Manchester, NH

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

Jan 4 - 6  
 Mar 1 - 3  
 May 10 - 12  
 Jul 11 - 13  
 Sep 6 - 8  
 Nov 1 - 3

#### 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

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.



### 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-7711/7721 Certified IPC Trainer (CIT)

### IPC-7711 "Rework of Electronic Assemblies"

### IPC-7721 "Repair & Modification of Printed Boards and Electronic Assemblies"

Become qualified to instruct operators in the required knowledge and skills for component rework and bare board repair.

#### IPC-7711/7721 CIT Certification

Jan 10 - 13 . . . Palm Bay, FL	Oct 24 - 28 . . . Manchester, NH
Jan 10 - 14 . . . Seattle, WA	Nov 14 - 17 . . . Palm Bay, FL
Jan 24 - 28 . . . Minneapolis, MN	Nov 28 - Dec 2 . Manchester, NH
Jan 24 - 28 . . . Manchester, NH	Nov 28 - Dec 2 . San Jose, CA
Mar 7 - 11 . . . Schaumburg, IL	Dec 5 - 9 . . . . . Minneapolis, MN
Mar 7 - 11 . . . Toronto, ON	Dec 5 - 9 . . . . . Toronto, ON
Apr 4 - 8 . . . . . San Jose, CA	Dec 12 - 16 . . . Seattle, WA
Apr 18 - 22 . . . Manchester, NH	
May 2 - 6 . . . . . Minneapolis, MN	
Jun 6 - 10 . . . . . Toronto, ON	
Jun 6 - 10 . . . . . Seattle, WA	
Jun 13 - 16 . . . Palm Bay, FL	
Jun 20 - 24 . . . Schaumburg, IL	
Jul 18 - 22 . . . Manchester, NH	
Aug 8 - 12 . . . . . San Jose, CA	
Aug 22 - 26 . . . Manchester, NH	
Oct 17 - 21 . . . Toronto, ON	
Oct 24 - 28 . . . Schaumburg, IL	

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

#### FOR LECTURE AND EXAM ONLY\*

Jan 24 - 26
Apr 13 - 15
Jul 6 - 8
Oct 10 - 12
Dec 19 - 21

#### IPC-7711/7721 CIT Recertification

Jan 19 - 20 . . . Seattle, WA	Jul 13 - 14 . . . Minneapolis, MN
Jan 31 - Feb 1 . Palm Bay, FL	Aug 15 - 16 . . . Manchester, NH
Feb 3 - 4 . . . . . Manchester, NH	Sep 1 - 2 . . . . . Toronto, ON
Feb 24 - 25 . . . Schaumburg, IL	Sep 14 - 15 . . . Schaumburg, IL
Feb 24 - 25 . . . Toronto, ON	Sep 26 - 27 . . . Manchester, NH
Mar 17 - 18 . . . Minneapolis, MN	Oct 17 - 18 . . . Palm Bay, FL
Mar 28 - 29 . . . Manchester, NH	Nov 7 - 8 . . . . . Manchester, NH
May 2 - 3 . . . . . Toronto, ON	Nov 14 - 15 . . . Toronto, ON
May 23 - 24 . . . Manchester, NH	Dec 12 - 13 . . . Schaumburg, IL
Jun 27 - 28 . . . Manchester, NH	

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.

**\*Important Note: IPC-7711/7721 ON-LINE CLASS DATES ARE FOR THE LECTURE AND EXAM ONLY.** Attendees will need to travel to a confirmed, in-person IPC-7711/7721 class to complete their workmanship requirements with an EPTAC Instructor.





### 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-7711/7721 Certified IPC Specialist (CIS)

### IPC-7711 "Rework of Electronic Assemblies"

### IPC-7721 "Repair & Modification of Printed Boards and Electronic Assemblies"

Learn general requirements and practice damage-free removal and replacement techniques for wires and terminals, through-hole and surface mount components. Develop skills for repairing PVVBs, including conductor/ land repair, lifted conductor/ land/pad repair and base material.

#### IPC-7711/7721 CIS Certification

Jan 10 - 13 . . . Palm Bay, FL	Jul 18 - 22 . . . Manchester, NH
Jan 10 - 14 . . . Seattle, WA	Jul 25 - 29 . . . Watertown, CT
Jan 24 - 28 . . . Manchester, NH	Aug 8 - 12 . . . San Jose, CA
Mar 7 - 11 . . . Schaumburg, IL	Aug 22 - 26 . . . Manchester, NH
Mar 7 - 11 . . . Toronto, ON	Oct 17 - 21 . . . Toronto, ON
Mar 14 - 18 . . . Watertown, CT	Oct 24 - 28 . . . Schaumburg, IL
Apr 4 - 8 . . . San Jose, CA	Oct 24 - 28 . . . Manchester, NH
Apr 18 - 22 . . . Manchester, NH	Nov 14 - 17 . . . Palm Bay, FL
Jun 6 - 10 . . . Toronto, ON	Nov 28 - Dec 2 . Manchester, NH
Jun 6 - 10 . . . Seattle, WA	Nov 28 - Dec 2 . San Jose, CA
Jun 13 - 16 . . . Palm Bay, FL	Dec 5 - 9 . . . Toronto, ON
Jun 20 - 24 . . . Schaumburg, IL	Dec 12 - 16 . . . Seattle, WA

#### IPC-7711/7721 CIS Recertification

Jan 19 - 20 . . . Seattle, WA	Aug 15 - 16 . . . Manchester, NH
Jan 31 - Feb 1 . . Palm Bay, FL	Sep 1 - 2 . . . Toronto, ON
Feb 3 - 4 . . . Manchester, NH	Sep 14 - 15 . . . Schaumburg, IL
Feb 24 - 25 . . . Schaumburg, IL	Sep 26 - 27 . . . Manchester, NH
Feb 24 - 25 . . . Toronto, ON	Oct 17 - 18 . . . Palm Bay, FL
Mar 28 - 29 . . . Manchester, NH	Nov 7 - 8 . . . Manchester, NH
May 2 - 3 . . . Toronto, ON	Nov 14 - 15 . . . Toronto, ON
May 23 - 24 . . . Manchester, NH	Nov 21 - 22 . . . Watertown, CT
Jun 27 - 28 . . . Manchester, NH	Dec 12 - 13 . . . Schaumburg, IL

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.



### 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

### HARNESST 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-7711/7721 Certified Standards Expert (CSE)

### IPC-7711 "Rework of Electronic Assemblies"

### IPC-7721 "Repair & Modification of Printed Boards and Electronic Assemblies"

Become a subject matter expert in IPC-7711 and IPC-7721.

#### IPC-7711/7721 CSE Certification

Jan 10 - 13 ... Palm Bay, FL  
 Jan 10 - 14 ... Seattle, WA  
 Jan 24 - 28 ... Minneapolis, MN  
 Jan 24 - 28 ... Manchester, NH  
 Mar 7 - 11 ... Schaumburg, IL  
 Mar 7 - 11 ... Toronto, ON  
 Apr 4 - 8 ... San Jose, CA  
 Apr 18 - 22 ... Manchester, NH  
 May 2 - 6 ... Minneapolis, MN  
 Jun 6 - 10 ... Toronto, ON  
 Jun 6 - 10 ... Seattle, WA  
 Jun 13 - 16 ... Palm Bay, FL  
 Jun 20 - 24 ... Schaumburg, IL  
 Jul 18 - 22 ... Manchester, NH  
 Aug 8 - 12 ... San Jose, CA  
 Aug 22 - 26 ... Manchester, NH  
 Oct 17 - 21 ... Toronto, ON

Oct 24 - 28 ... Schaumburg, IL  
 Oct 24 - 28 ... Manchester, NH  
 Nov 14 - 17 ... Palm Bay, FL  
 Nov 28 - Dec 2 ... Manchester, NH  
 Nov 28 - Dec 2 ... San Jose, CA  
 Dec 5 - 9 ... Minneapolis, MN  
 Dec 5 - 9 ... Toronto, ON  
 Dec 12 - 16 ... Seattle, WA

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

#### FOR LECTURE AND EXAM ONLY\*

Jan 24 - 26  
 Apr 13 - 15  
 Jul 6 - 8  
 Oct 10 - 12  
 Dec 19 - 21

#### 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-7711/7721 CSE Recertification

Jan 19 - 20 ... Seattle, WA  
 Jan 31 - Feb 1 ... Palm Bay, FL  
 Feb 3 - 4 ... Manchester, NH  
 Feb 24 - 25 ... Schaumburg, IL  
 Feb 24 - 25 ... Toronto, ON  
 Mar 17 - 18 ... Minneapolis, MN  
 Mar 28 - 29 ... Manchester, NH  
 May 2 - 3 ... Toronto, ON  
 May 23 - 24 ... Manchester, NH  
 Jun 27 - 28 ... Manchester, NH

Jul 13 - 14 ... Minneapolis, MN  
 Aug 15 - 16 ... Manchester, NH  
 Sep 1 - 2 ... Toronto, ON  
 Sep 14 - 15 ... Schaumburg, IL  
 Sep 26 - 27 ... Manchester, NH  
 Oct 17 - 18 ... Palm Bay, FL  
 Nov 7 - 8 ... Manchester, NH  
 Nov 14 - 15 ... Toronto, ON  
 Dec 12 - 13 ... Schaumburg, IL

#### 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

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.



### 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

### HARNESST 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-6012 Certified IPC Trainer (CIT)

### IPC-6012 "Qualification and Performance Specification for Rigid Printed Boards"

Become an expert in the design, specifications, fabrication and inspection of printed circuit boards.

#### IPC-6012 CIT Certification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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-6012 CIT Recertification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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

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.



### 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

### HARNESST 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-6012 Certified IPC Specialist (CIS)

### IPC-6012 "Qualification and Performance Specification for Rigid Printed Boards"

Learn about the design, specifications, fabrication and inspection of printed circuit boards.

#### IPC-6012 CIS Certification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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-6012 CIS Recertification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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

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.





### 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

### HARNESST 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-6012 Certified Standards Expert (CSE)

### IPC-6012 "Qualification and Performance Specification for Rigid Printed Boards"

Become a subject matter expert in IPC-A-6012.

#### IPC-6012 CSE Certification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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-6012 CSE Recertification

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

Jan 31 - Feb 3  
Jun 13 - 16  
Nov 14 - 17

#### 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

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.



### 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 Interconnect Designer Certification (CID and CID+)

### IPC-2221 "Generic Standard on Printed Board Design"

### IPC-2222 "Sectional Standard on Rigid Organic Printed Boards"

*These courses go beyond the fundamentals of component placement and track routing to encompass a complete understanding of all the elements that go into the development of a printed circuit board.*

#### IPC CID Certification

Jan 21 - 24 . . . San Diego, CA  
 Feb 21 - 24 . . . Manchester, NH  
 Jul 25 - 28 . . . Seattle, WA  
 Oct 31 - Nov 3 Manchester, NH  
 TBD . . . . . TBD APEX,

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

#### FOR LECTURE AND EXAM ONLY\*

Jan 10 - 13  
 Feb 7 - 10  
 Mar 7 - 10  
 Mar 28 - 31  
 Apr 4 - 7  
 May 2 - 5  
 May 23 - 26  
 Jun 6 - 9  
 Jul 11 - 14  
 Jul 25 - 28  
 Aug 8 - 11  
 Aug 22 - 25  
 Sep 6 - 9  
 Sep 26 - 29  
 Oct 3 - 6  
 Oct 24 - 27  
 Nov 7 - 10  
 Dec 12 - 15

#### IPC CID+ Certification

Jan 21 - 24 . . . San Diego, CA  
 Jun 27 - 30 . . . Manchester, NH  
 Oct 31 - Nov 3 Seattle, WA  
 TBD . . . . . TBD APEX,

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

#### FOR LECTURE AND EXAM ONLY\*

Jan 24 - 27  
 Mar 21 - 24  
 Apr 18 - 21  
 May 16 - 19  
 Jun 20 - 23  
 Jul 18 - 21  
 Sep 19 - 22  
 Nov 28 - Dec 1

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.



### 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

## IDEA Counterfeit Component Training

IDEA-TRN-2000 "Inspection for Visual Indicators of Counterfeit Parts"

IDEA-STD-1010 "Acceptability of Electronic Components Distributed in the Open Market"

### IDEA Counterfeit Component Workshop

IDEA-TRN-2000 Inspection for Visual Indicators of Counterfeit Parts  
*A basic introduction to Counterfeit Mitigation and to IDEA-STD-1010*

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

Jan 21  
Apr 15  
Aug 3  
Nov 23

### IDEA Essentials

IDEA-STD-1010 "Acceptability of Electronic Components Distributed in the Open Market"

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

Jan 17 - 18 . . . Peabody, MA  
Apr 11 - 12 . . . Peabody, MA  
Aug 4 - 5 . . . . . Peabody, MA  
Oct 10 - 11 . . . Schaumburg, IL

Jan 19 - 20  
Apr 13 - 14  
Aug 1 - 2  
Nov 21 - 22

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.



### 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

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

### Hand Soldering Recertification

Jan 7 . . . . . Manchester, NH	Jun 17 . . . . . Schaumburg, IL
Jan 7 . . . . . Toronto, ON	Jul 1 . . . . . Manchester, NH
Jan 14 . . . . . San Diego, CA	Jul 8 . . . . . Toronto, ON
Jan 14 . . . . . Kansas City, MO	Jul 15 . . . . . Anaheim, CA
Jan 21 . . . . . Seattle, WA	Aug 17 . . . . . Manchester, NH
Jan 28 . . . . . Schaumburg, IL	Sep 16 . . . . . Watertown, CT
Jan 31 . . . . . Anaheim, CA	Sep 28 . . . . . Toronto, ON
Feb 18 . . . . . Manchester, NH	Oct 7 . . . . . San Diego, CA
Mar 4 . . . . . Manchester, NH	Oct 7 . . . . . Manchester, NH
Mar 11 . . . . . San Jose, CA	Oct 7 . . . . . Seattle, WA
Apr 1 . . . . . Manchester, NH	Oct 31 . . . . . Schaumburg, IL
Apr 8 . . . . . Anaheim, CA	Nov 11 . . . . . Kansas City, MO
May 6 . . . . . Manchester, NH	Nov 11 . . . . . Manchester, NH
May 25 . . . . . Toronto, ON	Nov 18 . . . . . Watertown, CT
Jun 10 . . . . . San Diego, CA	Nov 18 . . . . . Palm Bay, FL
Jun 10 . . . . . Manchester, NH	

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.



### 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

## Advanced Surface Mount Micro Hand Soldering

### J-STD-001 / IPC-A-610 / IPC-7711

*Learn proper techniques for placement, soldering and rework of fine pitch and multi-leaded extra fine pitch surface mount components*

### Advanced SMT Micro Hand Soldering Certification

Mar 2 - 3 . . . . . Manchester, NH	Jun 13 - 14 . . . Schaumburg, IL
Mar 10 - 11 . . . Seattle, WA	Oct 17 - 18 . . . Manchester, NH
Mar 24 - 25 . . . Schaumburg, IL	Nov 10 - 11 . . . Seattle, WA
Jun 7 - 8 . . . . . Manchester, NH	Dec 14 - 15 . . . Schaumburg, IL

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.





### 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

## PCB Fundamentals Training

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

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

### Crimp Terminations Certification

Apr 15 . . . . . Manchester, NH  
 Aug 12 . . . . . Manchester, NH  
 Dec 19 . . . . . Manchester, NH

### Crimp Terminations Recertification

Apr 15 . . . . . Manchester, NH  
 Aug 12 . . . . . Manchester, NH  
 Dec 19 . . . . . Manchester, NH

### Electrostatic Discharge (ESD) Training

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

Feb 25  
 Jun 10  
 Oct 7

### Component ID Training

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

Mar 25  
 Jun 17  
 Oct 28

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.