

Certified Solder Training Courses



Some of the equipment provided to each student



Training Centers located in:
 - North Carolina - Maryland
 - Florida - Texas

Circuit Technology

www.CircuitTechnology.com
 340 Raleigh Street
 Holly Springs, NC 27540
 919-552-3434 Phone
 919-552-2772 Fax

CTI Training Course offerings

IPC Certifications

IPC-600 Certified IPC Specialist.....	\$ 950.00
IPC-600 Certified IPC Trainer.....	\$1995.00
IPC-610 Certified IPC Specialist*.....	\$ 950.00
IPC-610 Certified IPC Trainer	\$1995.00
IPC/WHMA-620 Certified IPC Specialist*.....	\$ 950.00
IPC/WHMA-620 Certified IPC Trainer	\$1995.00
IPC JSTD-001 Certified IPC Specialist*.....	\$1450.00
IPC JSTD-001 Certified IPC Trainer	\$2795.00
IPC 7711/7721 Certified IPC Specialist*.....	\$1450.00
IPC 7711/7721 Certified IPC Trainer	\$2795.00

All IPC CIS classes pricing includes the IPC Standard.

CTI / WELLER Certifications

Weller SMT/TH Soldering and Rework Specialist.....	\$ 695.00
Board Level Repair	\$ 995.00
Advance BGA/CSP/SMT	\$1495.00
SMT Boot Camp	\$ 595.00
1 Day Soldering Workshop (lead free).....	\$ 249.00
On-site—3-day.....	\$8500.00
On-site—4-day.....	\$10500.00
On-site—5-day.....	\$12500.00

See back for more details on these certifications.

Online schedule at

www.circuittechnology.com

Call 919-552-3434 for Availability & Registration

Circuit Technology, Inc. offers certifications in our custom designed courses as well as IPC Registered Instructor and Specialists certifications in IPC-A-610, IPC/WHMA-620-A, IPC J-STD-001, and IPC 7711/7721. We are authorized by Pace, Inc. to offer any of the Pace PCT certifications as well. CTI will customize courses for specific needs as requested. In addition, we also offer consulting services in all areas of the electronic assembly, repair, rework, and modification process.

CTI & IPC Certification Class Overviews

IPC 7711/7721 CIS SMT/TH Soldering and Rework

This course recognizes the successful candidate with an official IPC certification in Rework of electronic assemblies. The 5-day course utilizes lecture and practical application to convey the rework criteria in Modules 1, 3 - 7 of IPC 7711/7721. The modules include common procedures, through hole rework, SMT chip style component rework, SOT & SOIC rework, and QFP & PLCC rework and track & pad repair. The successful candidate will receive an IPC certification valid for 2 years

IPC-77121 CIS Board Level Repair

The Board Level Repair Certification is a 3-day course that explores the various techniques to repair damaged circuit boards. The student will repair damaged plated thru holes and reestablish the electrical interconnections, repair burned and damaged laminate material, perform an undercut, and complete the repair with 2 part epoxy. The course also explains the use of coloring agents to make "equal to new" appearances and will repair damaged surface mount pads/lands and traces using thermo-bond methodology. The course is in accordance with IPC - 7721.

IPC-7711 & 7721 CIT

This 5-day class is designed for experienced personnel who wish to become IPC certified Registered Instructors. This is IPC's most comprehensive hands-on training program where students are evaluated on both lab and course work. Upon completion the students will know the technical guidelines of IPC 7711/7721 and will have demonstrated the proficiency necessary to perform rework, repair, and modification of printed circuit boards at the expert level. Registered Instructors are formally recognized and certified by IPC and given the instructional materials required to conduct modularized operator training. Prospective students should have advanced level experience in rework and repair as well as a desire to become training centers of competence within their organization

IPC-A-610F CIS Workmanship Standards

This 3-day class is designed to teach the appropriate accept/reject criteria for soldered electrical and electronic assemblies. The IPC-A-610 is universally recognized as the workmanship criteria for the electronics industry. The successful candidate will receive an official IPC certification valid for 2 years

IPC-A-610F CIT Workmanship Standards

This 4-day course is designed to qualify the successful candidate to teach students the appropriate accept/reject criteria for soldered electrical and electronic assemblies. Instructors are formally recognized by IPC and given the instructional materials required to conduct IPC 610 Worker Proficiency Training

IPC/WHMA-A-620B CIS

This 3 day engineering level course teaches the IPC/WHMA-A-620 Industry Standard for Cable and Wire Harness, Fabrication & Installation. This course focuses on what line workers, operators, inspectors & Buyers need to know to inspect or make accept/deny decisions.

IPC/WHMA-A-620B CIT

This 4 day engineering level course is designed to prepare potential Trainers to teach the IPC/WHMA-A-620 Industry Standard for Cable and Wire Harness, Fabrication & Installation. This program provides expanded information and materials to prepare future instructors to deliver CIS training.

J-STD-001F CIS Process Control

This 5 day engineering level, hands-on solder training program is based on J-STD-001F. The program describes materials, methods and verification criteria for producing high quality soldered interconnections. The standard emphasizes process control and sets industry consensus requirements for a broad range of electronic products

J-STD-001F CIT Process Control

This 5 day engineering level course is designed to allow the successful candidate to certify individuals in their company to the J-STD worker proficiency level. The course emphasizes process control and sets industry consensus requirements for a broad range of electronics products. Candidates for this course should have a broad range of experience in the electronics industry and some skills in interconnecting both PTH and SMT components and some background in technical training. Certification is valid for a two year period

CTI/Weller SMT/TH Soldering and Rework Certification

The Surface Mount Rework Certification is a 3-day course designed for personnel who have some experience in surface mount installation and removal and a desire to refine their skills. The course includes installation and removal of common chip style components, SOT's and SOIC's, PLCC's, QFP's down to 20 mil pitch, and TSOP's. The student will install and remove components using both conductive and convective techniques.

It will also detail the considerations and complication of converting to a lead free process from a hand soldering and rework perspective. Topics covered are profile considerations, board finishes, component finishes and more. The course is structured to be in accordance with IPC-A-610 and IPC 7711

CTI Advanced BGA, CSP, μ BGA Rework Certification

This 3-day course is designed to refine the student's skills in the installation and removal of complex SMT devices. Students will be introduced to the PACE TF-3000 or the Air-Vac DRS-24 Surface Mount Rework System then will experiment with attaching thermocouples to devices and boards to capture a real-time image of their thermal characteristics and use that information to create the correct profile for removals and replacements. The student will also use an X-Ray inspection system to inspect and characterize defects associated with leadless devices. This class is limited to six students per session to insure adequate hands-on experience

IPC-600 CIS Acceptability of Printed Boards

This 3-day class is designed to help all segments of the electronics interconnection industry. This class will improve their understanding of printed board quality issues, enhances communication between PCB manufacturers, Suppliers and their customers.

IPC-600 CIT Acceptability of Printed boards

This 4-day course is designed to qualify the successful candidate to teach students how to recognize acceptable printed boards, understand printed board quality issues and enhance communication between PCB manufacturers, suppliers and their customers.

SMT Boot Camp

This customizable 2-5 day on-site class immerses the student into SMT assembly. Students will be introduced to Printing, Placement, Reflow, Inspection and Testing of PCB's with their own equipment and process.

Definitions:

IPC CIS "certified IPC specialist"- this certification is typically for operators who use the skills but will not teach them.

IPC CIT "certified IPC trainer"- this is a higher level certification and allows the student to teach others to the CIS level.

CTI Certification- this certification follows the IPC curriculum but no official IPC certification is awarded.

*Custom &
On-Site Classes Available!*

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