

## **IPC CID (Certified Interconnect Designer) Certification**

Education Duration : 2,5 Days

Education Language : English - Italian

Trainer : Pietro Vergine

Prerequisite : -

Target Audiance : -

Content :

Designing a PCB is a process requiring specific competencies to transform an electrical schematic in an feasible, affordable, reliable, assemblable and testable Printed Cirtuit Board.

IPC developed the CID class with the purpose to provide the proper tools to anybody involved with the design of a PCB, from the electrical engineer to the PCB designer, the PCB manufacturer as well as the assembler including the sales, the management, the qulity and the purchase departments.

The class last 2,5 days (two days for the lectures and half a day for the exam/review) and goes beyond the components' placement or the routing of the interconnections as it gives a global vision of all it is required to develop a PCB, from the electrical requirements to the PCB development passing through the choice of the package of each component as those will impact the assembly stage without neglecting all the physical requirements needed to get a producible and reliable product.

At the end for the two and half days, the student will test his knowledge with an exam: there are 110 multiple choices questions and a positive score of at least 73% will guarantee a succesfull outcome and the student will receive a certificate which is well recognized among the electronic industry worldwide.

## **IPC CID+ (Advanced Interconnect Designer Certification)**

Education Duration : 2,5 Days

Education Language : English - Italian

Trainer : Pietro Vergine

Prerequisite : -

Target Audiance : -

Content :

For the creation of a robust and good design a good designer should work through a long and complicated process. As the industry is changing at an ever-faster pace and although the CID designation is an important recognition for a designer, continuing education becomes necessary to maintain a designer's effectiveness and marketability. The Advanced Module covers several key goals beyond the CID.



The certification test is based on several critical IPC documents that link design principles to the end product use of the printed wiring assembly.

The training is meant for who design PCB's as well as who need to have knowledge of the IPC Design Standard. The PCB Designer Certification exam is a challenging exam. At the end for the two and half days, the student will test his knowledge with an exam: there are 120 multiple choices questions and a positive score of at least 73% will guarantee a succesfull outcome and the student will receive a certificate which is well recognized among the electronic industry worldwide.

## **ESD Control Certification for Operators**

Education Duration : 2 Hours

Education Language : English - Italian

Tranier : Pietro Vergine

Prerequisite : -

Target Audionce : -

Content :

IPC and EOS/ESD Association Inc. have partnered to develop a standardized ESD training and certification course for operators in the electronics industry. Besides providing professional credentials as ESD Certified Operator, this certification program insures that your company's ESD training meets industry standards (ANSI/ESD S20.20) and the quality requirements of your customers.

With semiconductor devices becoming more ESD sensitive every day, many companies require ESD training that clearly outlines the specific ESD technical requirements of the organization where they work.

The online portion of the ESD certification course for operators delivers basic ESD principles and theory. It also provides you with procedures and controls you can put into place to minimize the effects of ESD on electronic assemblies you handle every day.

The final portion of the course will be delivered by a certified trainer, in a classroom setting. The trainer will provide the specific requirements your company has put in place to manage and control ESD.

The certification is valid for 2 years and the course can only be only purchased by a certified trainer (CET).

## **IPC WHMA-A-620**

Education Duration : 3 Days

Education Language : English - Italian

Trainer : Pietro Vergine

Prerequisite : -

Target Audience : -

Content :

IPC/WHMA-A-620, published in 2017 as revision C, is the first industry standard for cable and wire harness fabrication and installation. The IPC Wire Harness Acceptability Task Group of the Product Assurance Committee and the Wire Harness Manufacturers' Association Industry Technical Guidelines Committee prepared this standard and represents a consensus among industry leaders.

Classes of products are defined and include criteria for Target, Acceptable, Process Indicator and Defect conditions to support the collection of visual quality acceptability requirements for each class with the help of a lot of color illustrations.

The standard describes acceptability criteria for crimped, mechanically secured, and soldered interconnection and the corresponding lacing/restraining criteria associated with cable and harness assemblies.

An industry developed and approved program that includes training, certification, and instructional materials based on the IPC/WHMA-A-620C is available for the operators (CIS). Certification is valid for 24 months