

# Printed Circuit Engineering Professional

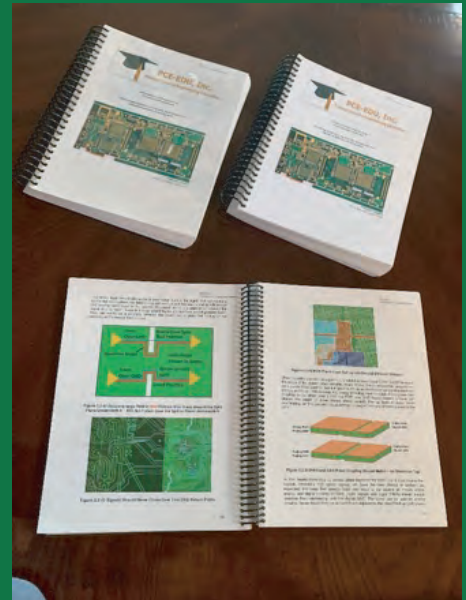
The comprehensive curriculum specifically for the layout of printed circuit boards

The **Printed Circuit Engineering Professional** curriculum teaches a knowledge base and develops a competency for the profession of printed circuit engineering layout, based on current technology trends. It also provides ongoing reference material for continued development in the profession. The 40-hour course was developed by leading experts in printed circuit design with a combined 250 years of industry experience and covers approximately 67 major topics under the following headings: Basics of the profession, materials, manufacturing methods and processes; circuit definition and capture; board layout data and placement; circuit routing and interconnection; signal-integrity and EMI applications; flex PCBs; documentation and manufacturing preparation; and advanced electronics (energy movement in circuits, transmission lines, etc.). Class flow: Books sent to students prior to an instructor lead review. This is followed by an optional exam with a lifetime certification that is recognized by the PCEA Trade Association.

The course references general CAD tool practices and is vendor-agnostic. The instructor, Mike Creeden, CID+, has 44 years of industry experience as an educator, PCB designer, applications engineer and business owner. As Technical Director of Design Education at Insulectro, he helps OEMs and fabricators achieve design success for best material utilization. He has served as a Master Instructor for the CID+ IPC Designer Certification program, was a primary contributor to the CID+ curriculum, and founded San Diego PCB Design, a nationally recognized design service bureau.

For Information or Registration:  
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Upcoming Class Openings:  
Sep 20-24, 2021 & Oct 18-22, 2021



## AUTHORS



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# **Printed Circuit Engineering Professional**

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