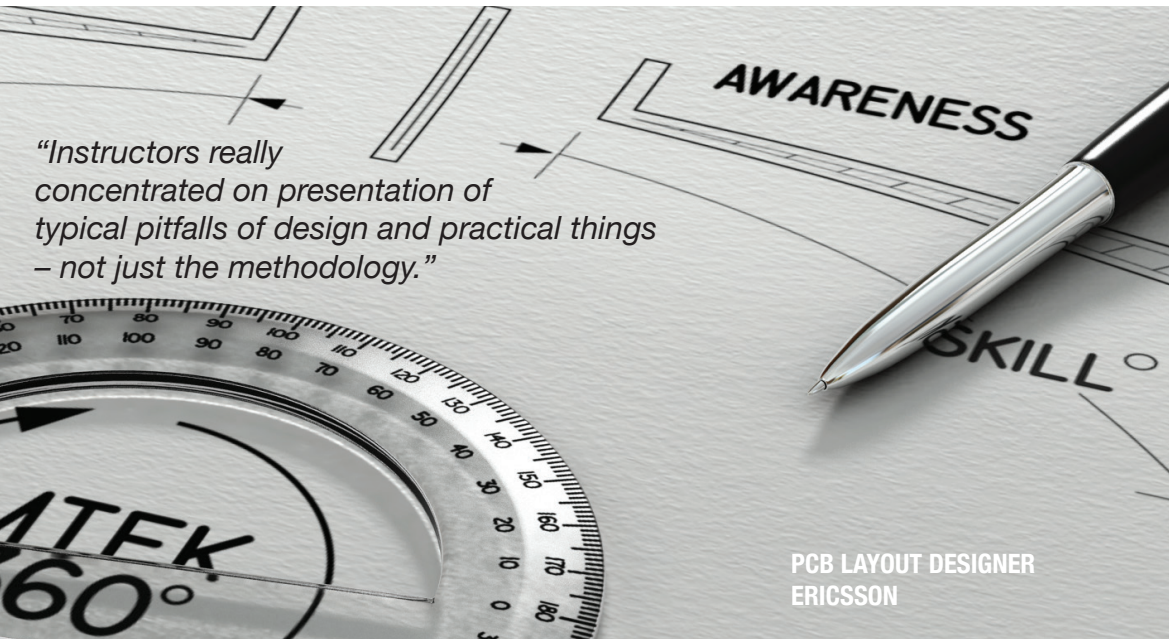


# PROCESS CORRELATIONS

## DESIGN FOR EXCELLENCE »



*“Instructors really concentrated on presentation of typical pitfalls of design and practical things – not just the methodology.”*

PCB LAYOUT DESIGNER  
ERICSSON

## ABOUT THE COURSE

This course will investigate most of the available manufacturing processes that a normal assembly will encounter during electronic manufacturing. Each section is dedicated to a specific production process that starts with a process description. The second part includes the most common design challenges for that specific process. Each challenge will be discussed together with how and why these choices will make it more difficult to succeed in producing products with a high yield and reliability.

The material is filled with practical challenges and will include workshops where the attendees will work together to find viable solutions.

## FOR WHOM?

The course is intended for design engineers, their managers and preferably their closest manufacturing suppliers. Focus is placed on how to recognize and eliminate common design challenges that occurs during electronic manufacturing.

The course can also prove valuable for sourcing to understand how product failures can be correlated towards the design and manufacturing processes.

Understanding the correlations between design and the process is a prerequisite to shorten the time-to-market and to avoid undesired product performance.

### WHAT IS IN IT?

#### CONTENTS

- ▶ Process and Concepts
- ▶ Printed Circuit Boards
- ▶ Identification
- ▶ Solder Paste Printing
- ▶ Stencil Design
- ▶ Inspection
- ▶ Surface Mounting
- ▶ Reflow Soldering
- ▶ Selective Soldering
- ▶ Wave Soldering
- ▶ Hand Soldering

### SESSION PLAN

#### FULL TRAINING PROGRAM

- ▶ Performed on-site during 3 days
- ▶ Workshops that can have a direct impact on your design
- ▶ 190 pages of literature

#### THEORY

- ▶ Performed on-site during two separate four hour sessions
- ▶ Lecture environment
- ▶ Aimed towards designers and their managers

#### PRACTICAL IMPROVEMENT PROJECT

- ▶ Performed by attendees during a four week period
- ▶ Independent work
- ▶ Results are presented in a workshop environment

#### CERTIFICATION TEST

- ▶ Performed on-site during 1 hour
- ▶ Lecture environment
- ▶ Ensures that the attendees have acquired the intended skill set

*Would you like to know more?*

Contact: **Tord Johnson**  
tord.johnson@mtek.se  
+46 (0)73-970 01 76