

APRIL 29 - MAY 2  
&  
MAY 6 - 9 2025

ONLINE

4 HOURS / DAY  
NOON-4:30 PM ESST



# LIVE, ONLINE EMC TRAINING SPRING 2025

## ABOUT THE INSTRUCTOR:



**Randal Vaughn** is a Partner at SILENT, an independent EMC and RF design firm established in 1992 that specializes in EMC and RF design, troubleshooting, and training. Randal received his Bachelor of Science in Physics from Louisiana State University in 1982 and advanced training in electromagnetic compatibility in 1997 from the Missouri University of Science & Technology, [emclab.mst.edu](http://emclab.mst.edu).

Randal has over 40 years of RF & EMC design and troubleshooting experience in a wide variety of electronic systems including high performance industrial and military radio system and circuit designs, including high speed digital frequency synthesizers, cellular base stations, and high frequency receivers & high power RF transmitters.

Randal consults worldwide and has developed and taught classes on circuit-to-circuit interference. Randal is a senior member of the IEEE EMC Society.

- ***Applying Practical EMI Design & Troubleshooting Techniques***
- ***Advanced Printed Circuit Board Design for EMC + SI***
- ***Mechanical Design (enclosure & cable shielding) for EMC***

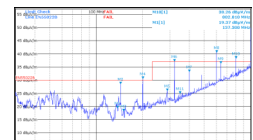
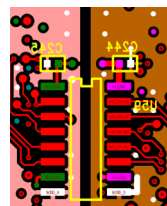
**Taught by Randal Vaughn, BSc Physics, SILENT Solutions LLC**  
Senior member IEEE EMC Society



**Each course is an intensive and interactive online classroom experience that includes many hardware EMC demonstrations**

## After attending these courses, you will be able to:

- Systematically analyze and solve noise problems by using the noise model
- Understand and solve radiated emissions, immunity, and ESD problems
- Understand ground loops, how to model them, and how to eliminate them
- Clearly identify and manage the different types of "ground" in schematics and physical circuits
- Understand modern high frequency digital power decoupling
- Understand and measure common-mode current in order to characterize and solve both regulatory and functional noise problems
- Improve the quality of sensor and instrumentation signals in the presence of noise



**SILENT**

Solutions for your noisy world.

Course content is identical to that which is presented annually at the [University of Oxford, England](http://www.oxford.ac.uk/emc).

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Are you frustrated with high frequency noise problems? Tired of failing radiated emissions requirements at EMI test labs? Looking for a logical, systematic way of analyzing and solving electrical noise problems that is based on the latest academic research? Sign up now for North America's premier EMC design & troubleshooting educational event!

This class presents a unique blend of applications, hardware demonstrations, and supporting theory to help design engineers and EMC engineers master key electrical noise reduction techniques. The underlying theory and techniques are equally applicable during design or troubleshooting of regulatory compliance, electrostatic discharge (ESD), RF/wireless, and self-interference problems.

## TESTIMONIALS

*"Hardware Demos were very, very helpful"*

*"Everything you didn't learn about EMC in college but wish you had! Never heard such a complex subject spoken about in such a clear way"*

*"If your company designs electrical products, you need your engineers to take this course. For all those EMC topics and solutions never covered in school, this course hits them all"*

*"Our employees work in an atmosphere where they are encouraged to ask questions, no matter how silly they might seem, and this class was no exception. The course was excellent. The sessions were refreshing because SILENT encouraged questions and spent whatever time was required to answer them."*

SILENT Solutions LLC  
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(603) 578-1842  
[www.silent-solutions.com](http://www.silent-solutions.com)

SILENT provides  
**EMC Education Worldwide**  
through **WPI, University of Oxford**, and via our partners  
**Rohde & Schwarz, Wurth Electronics Midcom and Langer EMV**

## TO REGISTER



### ONLINE

<https://buytickets.at/silentsolutions/1548136>

### EMAIL

[courses@silent-solutions.com](mailto:courses@silent-solutions.com)

**PHONE** +1 (603) 578-1842 x201



Training fee: \$1195 per person, per course.

Day #1 is common to all courses

Discounts: Early Registration (expires 4/4/25) receive a \$100 discount  
Register for two courses and receive a \$400 discount  
Register for all three courses and receive an \$800 discount  
Credit cards and Corporate POs accepted (NET 30 only)

[Download course syllabus here](#)

## SILENT Partner Companies

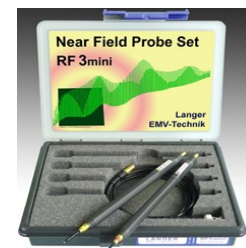
ROHDE & SCHWARZ



WÜRTH  
ELEKTRONIK  
MORE THAN  
YOU EXPECT



LANGER  
EMV-Technik



## COURSE LOCATION:

ONLINE  
THROUGHOUT  
NORTH AMERICA

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