

VIP SECTION SPRING 2020

Lecture and Lab
Saturday 9:00-12:00

Electromagnetic Compatibility/Signal Integrity

Register: ENGR 279, 379, 479

Interested Students Contact:

Prof. J. V. Krogmeier (JVK@purdue.edu) or
Prof. Barrett Robinson (robinbar@purdue.edu)

REGISTER

Sophomores --- ENGR 27920-010

Juniors --- ENGR 37920-010

Seniors --- ENGR 47920-010

EMC/Signal Integrity

Conducted Emission Tests

Radiated Emission Tests

**IF AN ELECTRICAL/ELECTRONIC DEVICE IS SOLD
IT NEEDS TO PASS
ELECTROMAGNETIC COMPATIBILITY TESTS
LEARN HOW TO PERFORM THESE TESTS**

EACH STUDENT WILL:

Refresh ECE skills.

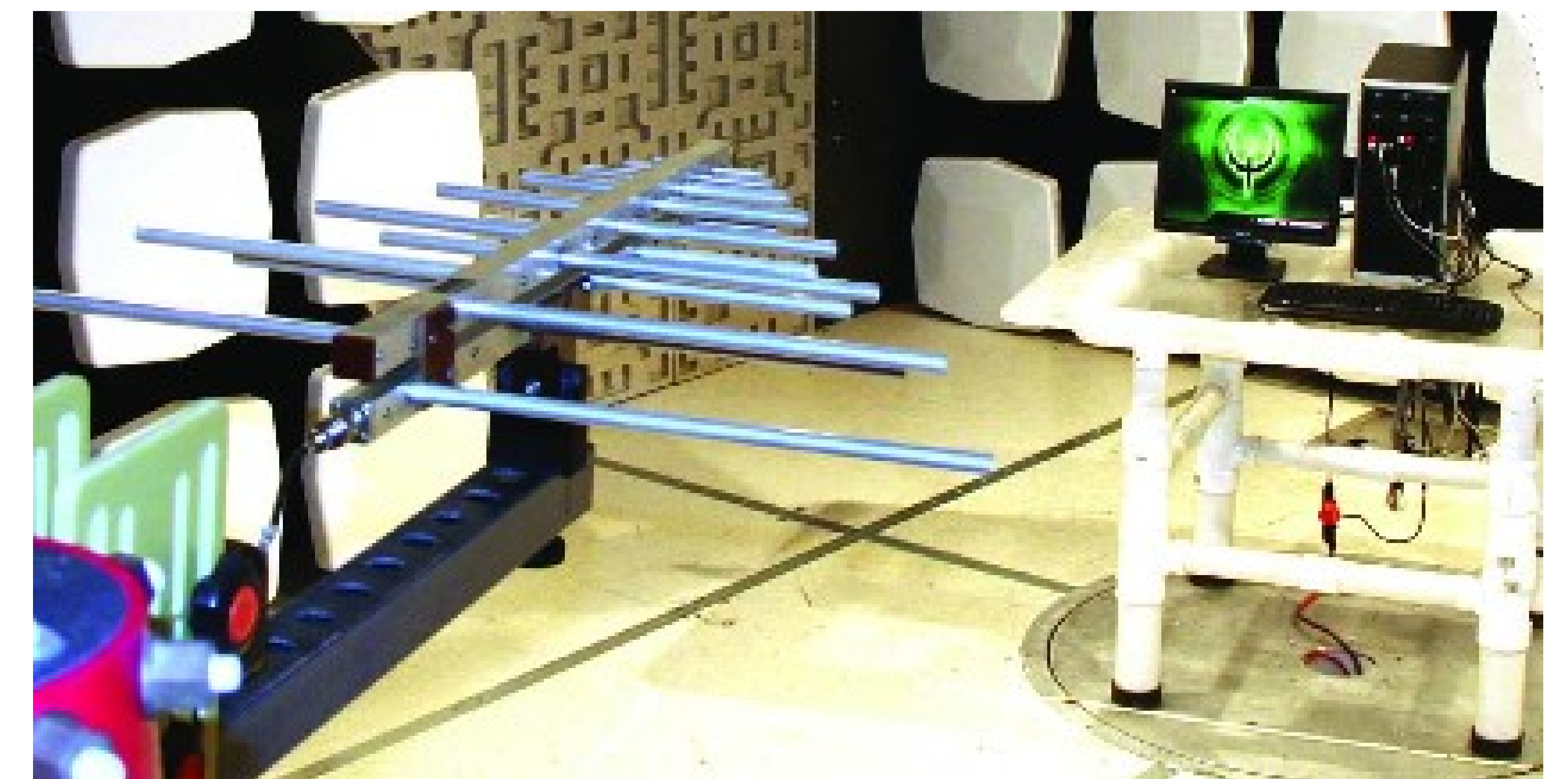
Design and use EMC sensors on student designed experiments,

Learn relevant regulations for instrumentation and emissions testing for Class A and Class B.

Learn to recognize situations that will increase/decrease emissions.

Work with a group to prepare and test a commercial product to meet a specified compliance goal.

FIELD TRIP



Date and Location to be specified.

Date	Topic
1/18	Intro EMC + FFT + Partners Time & Frequency Domain
1/25	E&M Field Basics + Prep Twisted Pair vs. Open Loop
2/1	Poster Project + Groups + Prep Coaxial Shielding
2/8	Ground Noise in Digital Logic + Laboratory Investigation
2/15	FCC Conducted Emissions Laboratory Investigation
2/22	FCC Radiated Emissions Laboratory Investigation
2/29	Poster Device, Procedure, Regs Presentations and Demos
3/7	Characteristic Impedance + Mono & Dipole Study Dipole and Monopole
3/14	PCB Assignment 1 PCB Assignment 1
3/21	SPRING VACATION No Class on Saturday
3/28	Prep for Poster Project
4/7	POSTER PRESENTATION No class on Saturday
*	4/17 Uncertainty
*	4/25 Don's Talk
*	5/2 Field Trip
• Dates to be determined	