

Electromagnetic Systems Laboratories

EMS hosts a range of high-quality laboratories for research and teaching.



Electromagnetics
Laboratory



Microwave Circuit
Laboratory



IC Probe Station



Computer
Laboratory



Semi-clean Room



DTU-ESA
Spherical Near-Field
Antenna Test Facility

Find More Information

The links below offer all relevant information for international students pursuing educational stays at DTU.

DTU
www.dtu.dk

DTU Course Base
www.kurser.dtu.dk

Electromagnetic Systems
www.ems.elektro.dtu.dk

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Öncel Acar

- B.Sc. Middle East Technical University, Turkey
- M.Sc. Technical University of Denmark

"I joined DTU for the M.Sc. education and specialized in microwave circuit technology. Today, I am a Industrial Ph.D. student with the EMS Group and employed with the company MTI Radiocomp; my research is on reconfigurable microwave filters for communication systems."

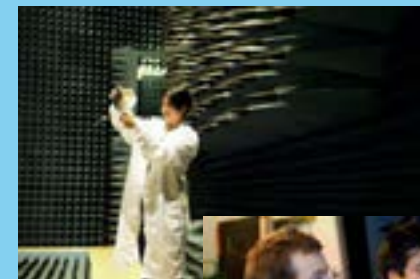


DTU Electromagnetic Systems March 2014. Foto: Jens Rosenfeldt, Sonja Iskov

Technical University of Denmark



Electromagnetic Systems Courses and Projects

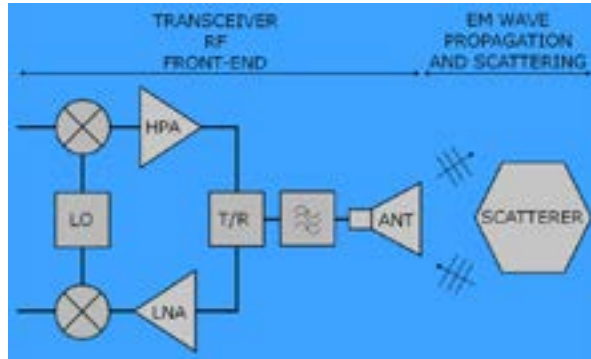


A guide for international Bachelor and Master students pursuing high-quality research-based education in Electromagnetic Systems.

Electromagnetic Systems Group

Electromagnetic Systems (EMS) is one of seven research groups in the Department of Electrical Engineering at the Technical University of Denmark.

EMS conducts research and teaching in areas of electromagnetics ranging from electrostatics to terahertz technology and covering all levels from theory through techniques, components, and circuits to full systems.



Major research areas are:

- Electromagnetic Metamaterials
- Microwave Antennas and Circuits
- Microwave Measurements
- Communication, Imaging, and Sensing Technologies

Electromagnetic Systems Courses

31400 Electromagnetics
10 ECTS, B.Sc., 3rd semester

31405 Wireless Communications
5 ECTS, B.Sc., 4th semester

31412 Antenna and Microwave
Technology for Wireless Communications
10 ECTS, B.Sc., 5th semester

31418 Microwave Engineering
5 ECTS, B.Sc., 5-6th semester

31415 RF Communication Circuits
10 ECTS, M.Sc., 7th semester

31420 Microwave Techniques
10 ECTS, M.Sc., 8th semester

31428 Advanced Electromagnetics
5 ECTS, M.Sc., 8th semester

31430 Antennas
10 ECTS, M.Sc., 9th semester

31435 Antenna Measurements in
Radio Anechoic Chambers
5 ECTS, M.Sc., 9th semester

Electromagnetic Systems Projects

EMS offers a wide range of student projects related to on-going research and often in cooperation with a company. These projects are conducted by one or more students under supervision by EMS faculty.

Bachelor Thesis Project
15 ECTS, 6th semester

Master Special Course Project
5-10 ECTS, 7-9th semester

Master Thesis Project
30 ECTS, 10th semester

Paula I. Popa

- B.Sc. "Politehnica" University of Timisoara, Romania
- M.Sc. Technical University of Denmark

"I joined DTU for the M.Sc. education and specialized in antennas. During my thesis project, I designed, manufactured and tested microstrip antennas for 30 GHz. Today, I am a research assistant in the EMS Group working with near-field antenna measurements"

