



IMST

European School of Antennas



Industrial Antenna Design Course

IMST, Kamp-Lintfort, Germany

April 7th – 11th 2025



Leibniz
Universität
Hannover

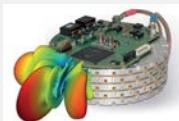


Lecture Program

Monday 7th April

Industrial Antenna Design Fundamentals

Hour	Topic	Lecturer
09:00-09:15	Welcome, Schedule, Introduction "Be part of a large project"	W.Simon, S. Bruni
09:15-10:45	Challenges in radar antenna design	M. Martínez Vázquez
11:00-12:30	Antennas • Antenna basics • Antenna arrays	D. Manteuffel
12:30 - 13:30	Lunch	
13:30-14:30	Antenna Design Tools - Overview and Introduction	D. Manteuffel
14:30-15:30	Efficient EM design - Introduction	W. Simon
15:30-17:00	Basic antenna & array antenna design - Tutorial	W. Simon



Tuesday 8th April

Antenna Concepts / Project start

Hour	Topic	Lecturer
09:00-10:00	Industrial Antenna design	Simona Bruni
10:00-11:00	Dielectric lens antenna design	Marta Arias Campo
11:00-12:30	The Project: Introduction • Presentation of the project • Schedule • Build teams • Define responsibilities	W: Simon, S. Bruni, M. Arias Campo, D. Manteuffel, A. Friedrich
12:30 - 13:30	Lunch	
13:30-17:00	The Project: Concept development • Find an appropriate concept for the given specifications	S. Bruni, M. Arias Campo, D. Manteuffel
13:30-17:00	The Project: Material characterization	A. Friedrich

Lecture
Computer exercise and personal work
Experimental Labs

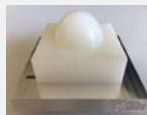
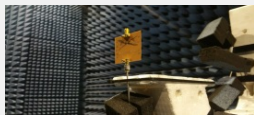
Lecture Program

Wednesday 9th April
The project

Hour	Topic	Lecturer
09:00-11:00	Project Phase 1: Design • Concept evaluation • First design review • Adaption of the antenna	S. Bruni, M. Arias Campo,
11:00-13:00	Project Phase 2 • Second design review • Adaption of the antenna • Prepare first antenna layout for mock up production	S. Bruni, M. Arias Campo,
13:00 - 14:00	Lunch	
14:00-16:00	Project Phase 2: Optimization • Antenna optimization for final product 1	A. Friedrich

Thursday 10th April
The product / Intellectual Property rights

Hour	Topic	Lecturer
09:00-11:00	Project Phase 2: Optimization • Prepare antenna layout for product production	S. Bruni, M. Arias Campo, A. Friedrich
11:00-12:00	Project Phase 3: Characterization Assemble and measure product	A. Friedrich
12:00 - 13:00	Lunch	
13:00-15:00	Intellectual Property rights	A. Moumen
15:00-16:00	Intellectual Property rights	A. Moumen
16:00-17:00	Project Phase 3: Characterization Assemble and measure product	A. Friedrich



Lecture
Computer exercise and personal work
Experimental Labs



Lecture Program

Friday 11th April

Exam / Product presentation

Hour	Topic	Lecturer
09:00-11:00	Project Phase 3 (continued): Assemble and measure product	A. Friedrich
11:00-12:30	Prepare Product presentation	M. Arias Campo
12:30 - 13:30	Lunch	
13:30-15:00	Product presentation by groups // Exam	M. Arias Campo, A. Friedrich
15:00	End of course	

Lecture

Computer exercise and personal work

Experimental Labs

Course lecturer:

Prof. Dr. Manteuffel

Dr. Marta Martinez,

Dr. Abderrahim Moumen

Dr. Simona Bruni, Dr. Aline Friedrich,

Dr. Marta Arias Campo, Winfried Simon

University Hannover

Renasas

European Patent Office

IMST GmbH

Social Event:

City tour in Düsseldorf followed by a Brewery tour with dinner at 'Hausbrauerei Zum Schlüssel' Düsseldorf, one of the oldest breweries in Germany.



Course location & local contact:

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Please contact Winfried Simon for any questions regarding the course and also for accommodation recommendations.

