

Course

RFSD - RF System Design

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^ General information

Long name	RF System Design
Approving CModule	RFSD_MaCSN
Responsible	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Level	Master
Semester in the year	winter semester
Duration	Semester
Hours in self-study	96
ECTS	5
Professors	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Requirements	No formal requirements, but students should have knowledge in High Frequency and Microwave Topics
Language	English
Separate final exam	Yes

Final exam

Details

Written Exam

Minimum standard

Minimum Score 4.0

Exam Type

^ Lecture / Exercises

Learning goals

Knowledge

RF System, Applications

Noise in RF systems

noise classification and characterization

noise calculation

noise figure

noise matching

Linear and nonlinear circuit behaviour

theory

nonlinearities with mixers

nonlinearities with amplifiers

RF system components

receiver componenets

transmitter components

frequency generation

Skills

Students learn how to adapt the components to each other and how to plan and design the complete system (transmitter and / or receiver)

Expenditure classroom teaching

Type	Attendance (h/Wk.)
Lecture	2
Exercises (whole course)	1
Exercises (shared course)	0
Tutorial (voluntary)	0

Separate exam

