

Course

HF - High Frequency Technologies

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^ General information

Long name	High Frequency Technologies
Approving CModule	<u>HF_BaET</u> , <u>HF_BaTIN</u>
Responsible	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Level	Bachelor
Semester in the year	summer semester
Duration	Semester
Hours in self-study	60
ECTS	5
Professors	Prof. Dr. Rainer Kronberger Professor Fakultät IME
Requirements	GE1-GE3, MA1, MA2
Language	German
Separate final exam	Yes

Final exam

Details

Exam with ca. 80% Exercises and ca. 20% Multiple Choice

Minimum standard

Minimum score 4.0

Exam Type

Exam with ca. 80% Exercises and ca. 20% Multiple Choice

^ Lecture

Learning goals

Knowledge

Introduction to frequency range and high frequency systems
Linear, passive circuits with inductances and capacitors
Currents, voltages and power in passive high frequency circuits
Smith-Diagram
Resonance circuits and filters
Transmission line theory and application
Impedance transformation circuits
Scattering parameters and matrices

Skills

Students will learn fundamentals in high frequency technologies in theory and application

Expenditure classroom teaching

Type	Attendance (h/Wk.)
Lecture	2
Tutorial (voluntary)	0

Separate exam

none

^ Exercises / Practical training

Learning goals

Knowledge

.Students will learn fundamentals in high frequency technologies in theory and application

Skills

Exercises and paractical work in close relationship to lecture

Students will learn fundamentals in high frequency technologies in theory and application

Expenditure classroom teaching

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

Separate exam

none