

Courses Summer Semester 2025 MSc Communication and Information Technology

The courses listed are from the Engineering Sciences, Computer Science and the Centre for Languages and Philology

Status 09.04.2025

Please address any questions to Dr. Sandra Mann

highlighted in green = course takes place

highlighted in red = course does not take place

highlighted in yellow = still unclear, more information to follow

Categories of courses

1. On-Site-format: The contents relevant to examinations are taught exclusively on site. In addition to organisational information, lecture recordings, additional materials for interested students and exercise materials can be made available on Moodle. The teaching of practical methods and techniques can be part of the teaching format. You must ensure that you can participate in the course on site.
2. Combi-format: The exam-relevant content is taught on-site and online. Teachers can post exam-relevant online learning materials on Moodle. The teaching of practical methods and techniques may be part of the teaching format. You must ensure that you can participate in the course on site.
3. Hybrid-format: The contents relevant to the examination are taught equally well both on-site and online. As a student, you have the choice between on-site or online participation. The lecturers can post exam-relevant online learning materials on Moodle. This teaching format does not usually teach practical methods and techniques. The lecturers decide whether people can switch between online and on-site participation during the semester.
4. Online-format: The contents relevant to the examination are taught exclusively online. The lecturers can post exam-relevant online learning materials on Moodle. As a rule, no practical methods and techniques are taught in this teaching format. On-site participation is not required.

<i>Lectures</i>	<i>Lecturer</i>	<i>CP</i>	<i>Format</i>	<i>LSF Link</i>
COMPULSORY MODULES				
Digital Communications	Prof. Fischer, Dr. Stern	7	On-site	Link ins LSF
Integrated High-Frequency Circuits	Prof. Kissinger	6	On-site	Link ins LSF
Integrierte Analogschaltungen (WS) / Integrated Analog Circuits (SS)	Dr. Kauffman, Prof. Ortmanns, Dr. Becker, Prokein	6	On-site	Link ins LSF
Introduction to Microwave Engineering	Prof. Waldschmidt	5	On-site	Link ins LSF

Optical Communications	Prof. Michalzik , Dr. Maehnss	6	Hybrid	Link ins LSF
SPECIALISATION MODULES				
Active Optoelectronic Devices	Prof. Michalzik	6	Hybrid	Link ins LSF
Advanced Quantum Engineering	Prof. Braxmaier, Dr. Wörner	4	On-site	Link ins LSF
Channel Coding	Dr. Sebastian Stern	6	On-site	Link ins LSF
Digital Communications	Prof. Fischer, Dr. Stern	7	On-site	Link ins LSF
Integrated High-Frequency Circuits	Prof. Kissinger	6	On-site	Link ins LSF
Integrated Interface Circuits	Prof. Ortmanns, Dr. Becker, Prokein	6	On-site	Link ins LSF
Integrierte Analogschaltungen (WS) / Integrated Analog Circuits (SS)	Prof. Ortmanns , Dr. Becker , Dr. Kauffman, Prokein	6	On-site	Link ins LSF
Introduction to Microwave Engineering	Prof. Waldschmidt	5	On-site	Link ins LSF
Mixed-Signal CMOS Chip Design	Dr. Becker, Prokein	4	Online	Link ins LSF
Multiuser Communications and MIMO Systems	Prof. Fischer, Schulz	6	On-site	Link ins LSF
Neural Networks and Pattern Recognition	Dr. Kreßel	4	On-site	Link ins LSF
Optical Communications	Prof. Michalzik , Dr. Maehnss	6	Hybrid	Link ins LSF
Quantum Sensing II	Prof. Braxmaier, Dr. Ashari	4	On-site	Link ins LSF
RF-Design of Communication and Navigation Systems	Prof. Damm	5	On-site	X
Satellite Communications and Navigation	Dr. Walter, Schulz	4	On-site	Link ins LSF
Solid State Sensors	Dr. Pasquarelli	6		X
Terahertz Sensors	Prof. Damm	5		X
Systems Benchmarking - For Researchers and Practicians	Dr. Domaschka	6	On-site	X
Architektur Eingebetteter Systeme (Informatik)	Prof. Slomka, Fattohi	6	On-site	Link ins LSF
Dependable Embedded Systems (Informatik)	Prof. Glaß	6		Link ins LSF
Sicherheit in IT-Systemen (Informatik)	Prof. Kargl, Meißner	6		Link ins LSF
SPECIALISATION MODULES - SEMINARS				
Seminar Communications Engineering	Dr. Stern	3	Combi	Link ins LSF
Seminar High-Frequency Circuits in Silicon Technologies	Prof. Kissinger	3	On-site	Link ins LSF
Seminar Microelectronics	Prof. Ortmanns, Prof. Rothermel, Dr. Becker	3	On-site	Link ins LSF

Seminar Millimeter-Wave Antennas, Systems and Technology	Prof. Waldschmidt	3	On-site	Link ins LSF
Seminar on Biomedical Signal and Data Processing	Prof. Karlen, Götz	3	On-site	Link ins LSF
Seminar Research Trends in the Internet of Things	Prof. Karlen, Leznik	3	On-site	X
Seminar Research Trends Metamaterials and Metasurfaces	Prof. Damm	3	On-site	X
Seminar Research Trends Terahertz Technology and Applications	Prof. Damm	3	On-site	X
Seminar zur Industriepraxis	Prof. Minker	9	On-site	Link ins LSF
PRACTICAL MODULES				
Lab Vector Network Analysis	Prof. Kissinger	5	On-site	Link ins LSF
Laboratory Digital Communications	Prof. Fischer, Dr. Haas	5	On-site	Link ins LSF
Praktikum - Halbleitertechnologie	Prof. Kissinger, Dr. Buchheim, Dr. Mohr	5	On-site	Link ins LSF
Project Analog CMOS Circuit Design	Prof. Ortmanns, Dr. Becker , Dr. Kauffman, Prokein	6	On-site	Link ins LSF
Projekt Automatisiertes Fahren	Prof. Dietmayer	5	On-site	Link ins LSF
Project Design of Integrated Systems	Prof. Ortmanns, Dr. Becker	6	On-site	Link ins LSF
Project Dialogue Systems for Engineers	Prof. Minker	6	On-site	Link ins LSF
Project High-Frequency Amplifier Design	Prof. Kissinger	6	On-site	Link ins LSF
Project High-Frequency Integrated Circuit Design	Prof. Kissinger	6	On-site	Link ins LSF
Project Medical Wearables	Prof. Karlen	6	On-site	Link ins LSF
Project Radar Design	Dr. Hitzler, Prof. Waldschmidt	5	On-site	Link ins LSF
Project RF Engineering	Dr. Hitzler, Prof. Waldschmidt	5	On-site	Link ins LSF
Laboratory of Embedded Systems / Labor Eingebettete Systeme (Informatik)	Slomka	6		Link ins LSF
COMPLEMENTARY MODULES				
Deutsch für Communication and Information Technology I - Kurs 1 (GER A1)	Gerstberger, Husemann	4		Link ins LSF
Deutsch für Communication and Information Technology I - Kurs 2 (GER A2)	Husemann	4		Link ins LSF
Deutsch für Communication and Information Technology I - Kurs 3 (GER B1)	Husemann	4		Link ins LSF
Cultural Crossroads for Communication and Information Technology	Dr. Mann	2	On-site	Link ins LSF
Learning Systems I: Introduction to Machine Learning (Informatik)	Prof. Braun, Dr. Gottwald	6	On-site	Link ins LSF
Pattern Recognition (Informatik)	Prof. Schwenker	6		Link ins LSF
Project Learning Robots / Projekt Learning Robots (Informatik)	Braun	8		Link ins LSF