

V

Field of specialization 17: Information and Communication

Below you find a list of recommended elective modules from the immediate environment of the specialization. If you would like to broaden your knowledge further, other modules than those can be chosen as well in consultation with the program consultants. In this respect, it is strongly recommended to consult the program consultant already at the beginning of the Master's program in order to discuss your individual study plan.

Recommended elective modules:

| Recommended elective modules for specialization | WS | | SS | |
|---|-------|----|-------|----|
| | SWS | LP | SWS | LP |
| Angewandte Informationstheorie | 3+1 | 6 | | |
| Antennen und Mehrantennensysteme | 2+2 | 5 | | |
| Channel Coding: Algebraic Methods for Communications and Storage | | | 2+0 | 3 |
| Channel Coding: Graph-Based Codes | 3+1 | 6 | | |
| Digitale Strahlenformung für bildgebendes Radar | 2+1 | 4 | | |
| Electromagnetics and Numerical Calculation of Fields | 2+1 | 4 | | |
| Field Propagation and Coherence | 2+1 | 4 | | |
| Funkempfänger | 2+0 | 3 | | |
| Hardware Modeling and Simulation | 2+1 | 4 | | |
| Informationsfusion | 2+1 | 4 | | |
| Methoden der Signalverarbeitung | 2+1+1 | 6 | | |
| Mikrowellenmesstechnik | | | 2+1 | 4 |
| MMIC Design Laboratory | 0+4 | 6 | 0+4 | 6 |
| Mobile Communications | 2+1 | 4 | | |
| Mobile Communications II | | | 2+0 | 3 |
| Mobile Communications Workshop | 3 | 4 | 3 | 4 |
| Navigation and Localization Techniques | | | 2+0 | 3 |
| Optical Transmitters and Receivers | 2+2 | 6 | | |
| Optical Waveguides and Fibers | 2+1 | 4 | | |
| Optimization of Dynamic Systems | 2+1 | 5 | | |
| Optoelectronic Components | 2+1 | 4 | | |
| Photonic Integrated Circuit Design and Applications | | | 2+2 | 6 |
| Photonics and Communications Lab | | | 0+4 | 6 |
| Praktikum Mikrowellentechnik | 0+4 | 6 | 0+4 | 6 |
| Praktikum Nachrichtentechnik | 0+4 | 6 | 0+4 | 6 |
| Praktikum Schaltungsdesign mit FPGA | 0+4 | 6 | 0+4 | 6 |
| Quellencodierung | | | 2+0 | 3 |
| Radar Systems Engineering | 3+1 | 6 | | |
| Regelung linearer Mehrgrößensysteme | 3+1 | 6 | | |
| Satellite Communications | | | 2+0 | 3 |
| Seminar Ausgewählte Kapitel der Nachrichtentechnik | 3 | 4 | 3 | 4 |
| Seminar Radar and Communication Systems | 3 | 4 | 3 | 4 |
| Signal Processing with Nonlinear Fourier Transforms and Koopman Operators | | | 2+2 | 6 |
| Signalverarbeitung in der Nachrichtentechnik | | | 2+1 | 4 |
| Space-Borne Microwave Radiometry – Advanced Methods and Applications | | | 2+0 | 3 |
| Spaceborne Radar Remote Sensing | | | 2+1+1 | 6 |