

Course Description – Winter 2023/24

Title	Communication Systems
Faculty	Electrical Engineering
Professor	Prof. Dr. Carsten Roppel
ECTS	5
Level	Master
Requirements	Bachelor Degree
Add. Information	Basic knowledge in electrical engineering, signals and systems and digital signal processing is recommended.
Content	<p>Lecture and laboratory</p> <ol style="list-style-type: none"> 1 Design Principles The OSI Reference Model, Network Topologies, Circuit Switching and Packet Switching, Reliable Transmission 2 The Physical Layer Digital Baseband Transmission, Digital Modulation, Wireless Transmission, Wireline Transmission, Channel Coding 3 The Data Link Layer Medium Access Control, Ethernet 4 The Network Layer and the Transport Layer Internet Protocol (IP), Transport Protocols, Performance Parameters 5 Sensor Networks