

Course Description – Summer Semester

Title	Communication Systems
Faculty	Electrical Engineering
Professor	Prof. Dr. Carsten Roppel
ECTS	5
Level	Master
Requirements	Completed bachelor's degree
Add. Information	<p>Basic knowledge in electrical engineering, signals and systems, digital signal processing is recommended.</p> <p>Lecture and laboratory</p>
Content	<p>1 Design Principles The OSI Reference Model, Network Topologies, Circuit Switching and Packet Switching, Reliable Transmission</p> <p>2 The Physical Layer Digital Baseband Transmission, Digital Modulation, Wireless Transmission, Wireline Transmission, Channel Coding</p> <p>3 The Data Link Layer Medium Access Control, Ethernet</p> <p>4 The Network Layer and the Transport Layer Internet Protocol (IP), Transport Protocols, Performance Parameters</p> <p>5 Sensor Networks</p>