Course Description – Summer 2021

Title	Communication Systems
Faculty	Electrical Engineering
Professor	Prof. Dr. Carsten Roppel
ECTS	5
Level	Master
Requirements	Completed bachelor's degree
	Basic knowledge in electrical engineering, signals and systems, digital signal processing and MATLAB/Simulink is recommended.
Add. Information	Lecture and laboratory
Content	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