

## Course Description – Summer 2020

|                         |   |
|-------------------------|---|
| <b>Title</b>            | Communication Systems   |
| <b>Faculty</b>          | Electrical Engineering  |
| <b>Professor</b>        | Prof. Dr. Carsten Roppel  |
| <b>ECTS</b>             | 5   |
| <b>Level</b>            | Master  |
| <b>Requirements</b>     | Basic knowledge in electrical engineering, signals and systems, digital signal processing and MATLAB/Simulink is recommended.   |
| <b>Add. Information</b> | Lecture and laboratory exercises  |
| <b>Content</b>          | <p>1 Introduction</p> <p>2 Signal Transmission (Impulse Response and Convolution, Frequency Response)</p> <p>3 Digital Baseband Transmission</p> <p>4 Digital Modulation (ASK, PSK, QAM)</p> <p>5 Channel Coding (Block codes, Convolutional Codes)</p> <p>6. Sensor Networks</p> |