



# NEW LECTURE (WS19/20):

## Medical Measurement Methods



### Target Students

- Students of M.Sc. 'Medizintechnik' or 'Maschinenbau/MGT'
- Specialisation 'Medizingerätekonstruktion'
- Highly interested in creating devices that interact with the body

### Course Information

- 2 + 2 SWS, 6 LP, EF
- Lecture and hands-on lab (every week)
- Written exam
- Course language: English
- Max. 32 students

### Course Goals



Explain the basic principles of a sensor

Describe measurement properties

Explain how a physical value is converted into a digital value

Implement basic electrical circuits transforming physical values into electrical values

Explain measurement methods of multiple physical quantities in medical engineering

Implement signal amplifiers and methods to reduce noise

Select and setup the appropriate sensor for a given medical application

### Content

