

**Joint Master's program Biomedical Engineering**

X4M 2325 Medical Technology – Selected Topics	Lecture, 2 SWS, Lab/project, 2 SWS
Workload:	see related module
Credit-points:	5
Lecturer:	Stefan Müller
Language:	English
Curriculum:	Master's program Biomedical Engineering, 2nd Semester
Prerequisites according to examination regulations	Medical Technology I or Diploma- or Bachelor's-degree in Biomedical Engineering
Recommended prerequisites:	Basic knowledge in physics, mathematics, engineering sciences, and biomedical engineering
Learning outcomes:	Deeper knowledge in medical devices
Content:	Lecture: <ul style="list-style-type: none">• step by step discussion of the construction for a typical medical device (e.g. pulse oximeter, ECG amplifier) Lab: <ul style="list-style-type: none">• building and test of the device discussed in the lecture
Literature:	Hand-out John G. Webster „Medical Instrumentation“, 3rd edition, Wiley and Sons.
Examination:	graded project-reports
Teaching methods:	Software tools, models, experiments in the lab