

Schedule – Summer Term 2020

Robotics and Navigation in Medicine

Date	Lecture	Tutorial	Project Deadline
23.04.	Introduction	–	–
28.04.	–	–	Registration form
30.04.	Robotics: Basic principles	ROS tutorial	–
07.05.	Robotics: Kinematics	Transformations	–
14.05.	Robotics: Paths and trajectories	Direct kinematics	–
18.05.	–	–	Project plan
21.05.	Holiday	Holiday	–
25.05.	–	–	Direct kinematics
28.05.	Navigation: Calibration	Inverse kinematics	–
04.06.	Holiday break	Holiday break	–
11.06.	Navigation: Localization	Incremental inverse kinematics and camera calibration	–
18.06.	Navigation: Image guidance	Path planning and trajectory planning	–
25.06.	Backup*	Parallel kinematics and localization *	–
29.06.	–	–	Kinematics
02.07.	–	Backup*	–
06.07.	–	–	Hand-Eye Calibration
13.07.	–	–	Model recording and registration
13.07.	–	–	Planning of feasible needle paths
27.-29.07.	–	–	Project presentation
21.09.	–	–	Project report

* Reserved time slot to be used in case one of the earlier lectures/tutorial sessions needs to be canceled.