

# COURSE CONTENTS

## PHYSICAL ENGINEERING

SEM.	MODUL OVERVIEW						ECTS
1	Analysis 1 (Differential & integral calculus) 5	Physics 1 (Mechanics) 5	Lineare Algebra 5	Electrical engineering 5	Computer science & practical course 5	Chemistry 5	30
2	Analysis 2 (Differential equations & vector analysis) 5	Physics 2 (Electrodynamics) 5	Software development & practical course 5	Electronics 1 & practical course 5	Languages 5	Construction 1 (CAD & technical mechanics) 5	30
3	Analysis 3 (Series development & transformations) 5	Physics 3 (Optics & waves) 5	Physics 4 (Oscillations & quanta) 5	Elektronics 2 5	Materials science 5	Construction 2 (Machine structures) 5	30
4	Physical metrology 5	Control engineering 5	Digital technologies 5	Technical documentation 5	Advanced studies (mechatronics or optics) 10		30
5	Patents & technical project management 5	Business management 5	Modelling and simulation 5	Microcontroller & practical course 5	Advanced studies (mechatronics or optics) 10		30
6	Internship						30
7	Bachelor-Thesis 15			Elective module technology 5	Elective module non-technology 5	Project 5	30

■ Lecture subjects

■ Projects and internship

■ Thesis