Course of Study Technomathematics (Study Cohort w17)

Sample course plan F Bachelor Technomathematics (TMBS) Specialisation Compulsory Specialisation I. Mathematics, Specialisation II. Informatics, Specialisation III. Engineering Science, Specialisation Core Qualification Elective Compulsory Specialisation Elective Compulsory Focus Elective Compulsory Interdisciplinary complement IV Subject Specific Focus Form Hrs/wk Semester 2 **Procedural Programming Higher Analysis** Foundations of Management **Seminar Technomathematics Compiler Construction** Procedural Programming VL 1 Structures Higher Analysis Introduction to Management VL 3 Seminar: Technomathematics Compiler Construction VL 2 H0 1 Objectoriented Programming, Algorithms and VL 4 GÜ 2 Management Tutorial HÜ 2 Compiler Construction GÜ 2 Higher Analysis Procedural Programming 3 Procedural Programming Data Structures Objectoriented Programming, Algorithms and GÜ 1 Data Structures 5 Introduction to Mathematical Modeling Introduction in Mathematical Modeling Introduction in Mathematical Modeling GÜ 2 Analysis for Technomathematicians (part 1) Analysis for Technomathematicians (part 2) **Functional Analysis** Operating Systems VI 4 Functional Analysis Analysis I for Technomathematicians Analysis II for Technomathematicians VI 4 Operating Systems VI 2 Analysis I for Technomathematicians GÜ 2 Analysis II for Technomathematicians GÜ 2 Functional Analysis GÜ 2 Operating Systems GŪ 2 10 Numerical Mathematics Numerical Mathematics 11 GÜ 2 Numerical Mathematics 12 13 Rachelor Thesis 14 Electrical Engineering III: Circuit Theory and Transients Linear Algebra for Technomathematicians (part 1) Linear Algebra for Technomathematicians (part 2) Circuit Theory VL 3 Linear Algebra 1 for Technomathematicians VL 4 Linear Algebra 2 for Technomathematicians VL 4 16 Optimization GÜ 2 Circuit Theory Linear Algebra 1 for Technomathematicians GÜ 2 Linear Algebra 2 for Technomathematicians Optimization VI 4 17 GÜ 2 Optimization 18 19 Mathematical Stochastics Mathematical Stochastics VI 4 20 Mechanics III (Hydrostatics, Kinematics, Kinetics I) Mathematical Stochastics GÜ 2 VL 3 21 Mechanics III GÜ 2 22 HÜ 1 Mechanics III 23 **Electrical Engineering for Technomathematicians Electrical Engineering for Technomathematicians** (part 2) Electrical Engineering I for Electrical Engineering II for 25 Technomathematicians Technomathematicians Electrical Engineering L for Electrical Engineering II for 27 Mechanics for Technomathematicians (part 1) Mechanics for Technomathematicians (part 2) Mechancis I for Technomathematicians Mechanics II for Technomathematicians 28 **Proseminar Technomathematics** Mechancis I for Technomathematicians GÜ 2 Mechanics II for Technomathematicians 29 30 Nontechnical Complementary Courses for Bachelors (from catalogue) - 6LP

Technical Complementary Course I for Technomathematics (according to Subject Specific Regulations) - 6LP

Technical Complementary Course II for Technomathematics (according to Subject Specific Regulations) - 6LP

The choice of courses from the catalogue is flexible (depends on the semestral work load), provided the necessary number of required credits is reached.