

Semester	Credits	h/week	Course 1	Course 2	Course 3	Course 4	Course 5	Course 6	Course 7	Course 8	Notes
1 <sup>st</sup> semester	31 credits	27 h/week	Mathematics A1 4/2/0/e/6 BMETE90AX00	Physics 1 3/1/0/e/4 BMETE11AX21	Foundation of computer science 2/2/0/e/5 BMEVISZAA05	Digital design 1 3/1/1/e/6 BMEVIAA04	Basics of programming 1 2/2/2/m/7 BMEVIAA01	English 1 0/4/0/m/3 BMEGT63EE1			
2 <sup>nd</sup> semester	30 credits	26 h/week	Mathematics A2 4/2/0/m/6 BMETE90AX26	Physics 2 2/1/0/e/4 BMETE11AX22	Signals and systems 1 3/2/0/e/6 BMEVHVA00	Digital design 2 3/1/0/e/5 BMEVIAA02	Basics of programming 2 2/0/2/m/6 BMEVIAA01	English 2 0/4/0/m/3 BMEGT63EE2	Mathematics A1 Mathematics A2 Comprehensive exam TE90AX16		
3 <sup>rd</sup> semester	30 credits	26 h/week	Mathematics A3 2/1/0/e/4 BMETE90AX09	Mathematics A4 2/2/0/e/4 BMETE90AX51	Electronics technology and materials 3/0/2/m/6 BMEVIETAB00	Signals and systems 2 3/3/0/e/6 BMEVHVA01	Electrotechnics 3/0/1/m/5 BMEVIEAB00	Electronics 1 2/2/0/e/5 BMEVHIA02			<b>DISCLAIMER:</b> this document is for information purposes only and has no contractual value. Its content is subject to change without notice.
4 <sup>th</sup> semester	29 credits	25 h/week	Informatics 1 4/0/0/m/4 BMEVIA08	Informatics 2 3/0/1/e/5 BMEVIA01	Measurement technology 3/2/0/m/5 BMEVIMAB01	Infocommunication 2/2/0/e/5 BMEVITAB03	Control engineering 2/1/1/e/5 BMEVIA05	Power engineering 2/1/1/e/5 BMEVIEAB01			
5 <sup>th</sup> semester	32 credits	26 h/week	Introduction to electromagnetic fields 2/1/0/e/4 BMEVHAC03	Laboratory 1 0/0/3/m/4 BMEVIMAC12	Electronics 2 4/1/0/m/5 BMEVIAUC05	Study specialization subject 2/1/0/e/4 3x	Training Project Laboratory 0/0/2/m/3 BMEVI**AL02	Management and business economics 4/0/0/m/4 BMEGT20A001			<b>THESIS DEFENSE</b> Organized during the last exam period in front of a committee. Includes presentation of thesis work, its discussion and oral exam in one specialization subject. Written comprehensive final exam is required in advance
6 <sup>th</sup> semester	31 credits	26 h/week	Microelectronics 2/0/2/e/5 BMEVIEAB00	Laboratory 2 0/0/4/m/5 BMEVIMAC13	Free elective 2/0/0/e/2	Study specialization subject 2/1/0/e/4	Study specialization laboratory 0/0/3/m/4	Project laboratory 0/0/4/m/5 BMEVI**AL03	Business law 2/0/0/m/2 BMEGT55A001	Micro- and macroeconomics 4/0/0/e/4 BMEGT30A001	
7 <sup>th</sup> semester	27 credits	22 h/week	Free elective 2/0/0/m/2 4x	Human & economic science elective 2/0/0/m/2 2x BMEGT*****	BSc thesis project 0/10/0/m/15 BMEVI**AT01	<b>PROJECT subjects</b> Topics of the project subjects must be related the study specialization block. Training laboratory, Project Laboratory and BSc Thesis project can only be taken in a fixed order.		<b>THESIS WORK enrollment conditions</b> - at least 174 credits are completed (up to 10 credits free elective) - all courses of the first four semesters are completed - all specialization courses are completed (up to the 6th semester)			



**Semester structure:**

- registration (1w)
- classes (14w)
  - lectures
  - classroom practices
  - lab. practices
  - quizzes
  - midterms
  - homework assignments
- resits (1w)
  - midterm retakes
  - late homework submission
  - early exams
- exams (20d)
  - RESTRICTIONS APPLY

**SPECIALIZATION**

Enrollment conditions:

- at least 90 credits are complete
- all courses of the first and second semesters are completed
- at least 20 credits of the third semester are completed
- Mathematics comprehensive exam is completed
- Specialization prerequisite subject is completed

The number of students must exceed a certain threshold.

**SUSTAINABLE ELECTRIC ENERGETICS** (prerequisite course: Power Engineering, BMEVIEAB01)

Electric power transmission 2/1/0/e/4 BMEVIEAC00	Electrical machines and applications 2/1/0/e/4 BMEVIEAC01	Electrical equipment and insulations 2/1/0/e/4 BMEVIEAC02	Control of electric drives 2/1/0/e/4 BMEVIEAC04	Sustainable electric energetics laboratory 0/0/3/m/4 BMEVIEAC07
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**EMBEDDED AND CONTROL SYSTEMS** (prerequisite course: Control Engineering, BMEVIA05)

Embedded and ambient systems 2/1/0/e/4 BMEVIMAC06	Industrial control 2/1/0/e/4 BMEVIA03	Microcontroller based systems 2/1/0/e/4 BMEVIAUC06	Embedded operating systems and client apps. 2/1/0/e/4 BMEVIAUC07	Embedded and control systems lab. 0/0/3/m/4 BMEVIAUC08
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**INFOCOMMUNIIATION SYSTEMS** (prerequisite course: Infocommunication, BMEVITAB03)

High Frequency System Techniques 2/1/0/e/4 BMEVHAC04	Network Technologies and Applications 2/1/0/e/4 BMEVITAC05	Mobile Comm. Systems 2/1/0/e/4 BMEVHAC04	Space Technology 2/1/0/e/4 BMEVHAC05	Radio Systems and Applications lab. 0/0/3/m/4 BMEVHAC06
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**SUBJECT LEGEND**

- weekly contact hours
  - lectures/
  - classroom practices/
  - laboratory practices
- number of similar subjects OR study specialization block (if applicable)
- requirement: m – mid-semester mark, e – exam
- subject code as in the Neptun course management system
- credit value according to ECTS – 1 credit represents 30 work hours

**SUBJECT TYPES**

- Fundamentals in natural sciences
- Core engineering knowledge
- Specialization studies
- Economics & humanities
- Free electives
- Prerequisite for specialization