

1 <sup>st</sup> semester 30 credits 29 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/4 BMEVISZAA02	Digital design 1 3/1/1/e/5 BMEVIAA01	Basics of programming 1 2/2/2/m/7 BMEVHIAA01	Mandatory human & economic science elective 2/0/0/m/2 BMEGT*****	Becoming an engineer 2/0/0/m/2 BMEGT52A400	 <p><b>Semester structure:</b></p> <ul style="list-style-type: none"> <li>registration (1w)</li> <li>classes (14w) <ul style="list-style-type: none"> <li>lectures</li> <li>classroom practices</li> <li>lab. practices</li> <li>quizzes</li> <li>midterms</li> <li>homework assignments</li> </ul> </li> <li>resits (1w) <ul style="list-style-type: none"> <li>midterm retakes</li> <li>late homework submission</li> <li>early exams</li> </ul> </li> <li>EXAMS (20d) <ul style="list-style-type: none"> <li>RESTRICTIONS APPLY</li> </ul> </li> </ul>	
2 <sup>nd</sup> semester 30 credits 29 h/week	Mathematics A2 4/2/0/m/6 BMETE90AX26	Physics 2 3/1/0/e/4 BMETE11AX22	Signals and systems 1 4/2/0/e/6 BMEVHVA00	Digital design 2 4/1/0/e/5 BMEVIAA02	Basics of programming 2 2/2/2/m/7 BMEVIAUA00	Mandatory human & economic science elective 2/0/0/m/2 BMEGT*****			
3 <sup>rd</sup> semester 30 credits 30 h/week	Mathematics A3 2/2/0/e/4 BMETE90AX09	Mathematics A4 2/2/0/e/4 BMETE90AX51	Electronics technology and materials 4/0/2/m/6 BMEVIETAB00	Signals and systems 2 3/3/0/e/6 BMEVHVA01	Electrotechnics 4/0/1/m/5 BMEVIEAB00	Electronics 1 3/2/0/e/5 BMEVHIA02	Mathematics A1 Mathematics A2 Comprehensive exam		
4 <sup>th</sup> semester 30 credits 30 h/week	Informatics 1 4/1/0/m/5 BMEVHIA04	Informatics 2 4/0/1/e/5 BMEVIAUB01	Measurement technology 3/2/0/m/5 BMEVIMIA01	Specialization prerequisite subject 3/a/b/e/5 3x	<p><b>DISCLAIMER:</b> this document is for information purposes only and has no contractual value. Its content is subject to change without notice.</p>				
5 <sup>th</sup> semester 33 credits 31 h/week	Introduction to electromagnetic fields 3/1/0/e/4 BMEVHVC03	Laboratory 1 0/0/4/m/5 BMEVIMIA05	Electronics 2 4/1/0/m/5 BMEVIAUC05	Study specialization subject 3/1/0/e/4 3x					Design laboratory 0/0/2/m/3
6 <sup>th</sup> semester 30 credits 27 h/week	Specialization prerequisite subject 3/a/b/e/5	Laboratory 2 0/0/3/m/4 BMEVIMIA07	Free elective 2/0/0/e/2	Study specialization subject 3/1/0/e/4	Study specialization laboratory 0/0/3/m/4	Project laboratory 0/0/4/m/5	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	Mandatory human & economic science elective 2/0/0/m/2 BMEGT***** 2x	BSc thesis work 0/10/0/m/15	<p><b>THESIS DEFENSE SESSION</b> Organized during the last exam period in front of a committee. Includes presentation of thesis work, its discussion and oral exam in one or two subjects. Conditions for admission to the thesis defense session apply (see regulations).</p>					

**Study specialization block**  
Topics of the Design lab., Project lab., and BSc thesis work subjects must be related the study specialization block.

**Enrollment conditions:**

- at least 120 credits completed
- all courses of the first three semesters are completed

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

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

Embedded and ambient systems 3/1/0/e/4 BMEVIMIA06	Industrial control 3/1/0/e/4 BMEVIA03	Microcontroller based systems 3/1/0/e/4 BMEVIAUC06	Embedded operating systems and client apps. 3/1/0/e/4 BMEVIAUC07	Embedded and control systems lab. 0/0/3/m/4
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**INFOCOMMUNIATION SYSTEMS** (prerequisite course: Infocommunication, BMEVITAB03)

High Frequency System Techniques 3/1/0/e/4 BMEVHVC04	Network Technologies and Applications 3/1/0/e/4 BMEVITAC05	Mobile Comm. Systems 3/1/0/e/4 BMEVHIC04	Space Technology 3/1/0/e/4 BMEVHVC05	Radio Systems and Applications lab. 0/0/3/m/4 BMEVHVC06
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**SUBJECT LEGEND**

**weekly contact hours**

- lectures/
- classroom practices/
- laboratory practices

**number of similar subjects OR study specialization block** (if applicable)

**Subject title**  
3/1/1/m/5  
BMECode

**credit value** according to ECTS – 1 credit represents 30 work hours

**requirement**  
m – mid-semester mark  
e – exam

**subject code** as in the Neptun course management system

**SUBJECT TYPES**

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