

1 st semester fall 27 credits 25 h/week	Applied algebra and mathematical logic 4/0/0/e/4 BMETE90MX57	Languages and automata 3/0/0/m/4 BMEVISZMA04	Information theory 3/0/0/m/4 BMEVISZMA03	Engineering management 4/0/0/e/4 BMEVITMMB03	Project laboratory 1 0/0/5/m/5 BMEVI**ML00	Free elective 2/0/0/m/2 3x	DISCLAIMER: this roadmap is for information purposes only, without contractual value. Content is subject to change without notice. MINIMAL NUMBER OF APPLICANTS REQUIRED	Semester structure: registration (1 week) classes (14 weeks) - lectures - classroom practices - lab. practices - quizzes - midterms - homework assignments resits (1 week) - retakes of midterm(s) - late homework submission - early exams RESTRICTIONS APPLY exams (20 days) RESTRICTIONS APPLY
2 nd semester spring 31 credits 26 h/week	System optimization 4/0/0/e/4 BMEVISZMA02	Formal methods 3/0/0/m/4 BMEVIMIMA07	Main specialization subject 2/1/0/e/4 3x	Secondary specialization subject 2/1/0/e/4	Project laboratory 2 0/0/5/m/5 BMEVI**ML01	Mandatory human & economic science elective 2/0/0/m/2 BMEGT****		
3 rd semester fall 30 credits 21 h/week	Main specialization subject 2/1/0/e/4 2x	Main specialization laboratory 0/0/3/m/4	Secondary specialization subject 2/1/0/e/4	MSc DiplomaThesis Design 1 0/5/0/m/10 BMEVI**MT00	Mandatory human & economic science elective 2/0/0/m/2 2x BMEGT****	THESIS DEFENSE SESSION Organized during the last exam period. Includes presentation of thesis work, discussion, oral exam in two subjects. Conditions for admission apply.		
4 th semester spring 32 credits 19 h/week	Main specialization laboratory 0/0/3/m/4	Secondary specialization subject 2/1/0/e/4	Secondary specialization lab. 0/0/3/m/4	MSc DiplomaThesis Design 2 0/10/0/m/20 BMEVI**MT01	Free elective (for Smart City secondary specialization) 2/0/0/m/2			



Main specialization	APPLIED INFORMATICS	SW development methods & paradigms 2/1/0/e/4 BMEVIAUMA00	Distributed systems & domain-specific modeling 2/1/0/e/4 BMEVIAUMA01	Service oriented system integration 2/1/0/e/4 BMEVIIIIMA04	Business intelligence 2/1/0/e/4 BMEVIAUMA02	Software and systems verification 2/1/0/e/4 BMEVIMIMA01	Distributed systems laboratory 0/0/3/m/4 BMEVIAUMA03	Business intelligence laboratory 0/0/3/m/4 BMEVIAUMB00
	INTERNET ARCHITECTURES AND SERVICES	Internet ecosystem and its evolution 2/1/0/e/4 BMEVITMMA00	Agile network service development 2/1/0/e/4 BMEVITMMA01	Cloud networking 2/1/0/e/4 BMEVITMMA02	Modeling seminar for engineers 2/1/0/e/4 BMEVITMMA03	Internet services and applications 2/1/0/e/4 BMEVITMMA04	Infocommunication services laboratory 1 0/0/3/m/4 BMEVIHIMA04	Infocommunication services laboratory 2 0/0/3/m/4 BMEVITMMB00

REMARK
The datasheet of some specialization subjects may include prerequisites. Especially in the case of laboratories that are followed by and based on the knowledge of specialization subjects.

REMARKS:
Project lab. and MSc thesis topics must be related to the main or secondary specialization. One subject in the common subjects block and two subjects from the advanced mathematics block are determined by the main specialization. Subjects from remaining specialization blocks can be selected as free electives.

Secondary specialization	SMART CITY		CLOUD AND PARALLEL SYSTEMS	
	Sensor networks and applications 2/1/0/e/4 BMEVITMMA09	Intelligent traffic systems 2/1/0/e/4 BMEVITMMA10	Cloud computing 2/1/0/m/4 BMEVIIIIMA05	High performance parallel computing 2/1/0/e/4 BMEVIIIIMA06
	Human-Computer Interaction 2/1/0/e/4 BMEVITMMA11	Smart city laboratory 0/0/2/m/2 BMEVITMMB04	GPGPU applications 2/1/0/e/4 BMEVIIIIMB01	Parallel programming laboratory 0/0/3/m/4 BMEVIIIIMB02

SUBJECT LEGEND

weekly contact hours
- lectures/
- classroom practices/
- laboratory practices

number of similar subjects OR specialization blocks

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
- Secondary specialization studies
- Main specialization studies
- Economics & humanities
- Free electives
- Common courses

PRE-REQUISITES
Project Laboratory 1., Project Laboratory 2., Diploma Thesis Design 1., Diploma Thesis Design 2. can only be taken one after the other having completed the credits of the previous subject .

The prerequisite of the admission of Diploma Thesis Design 2

- Completing 84 credits according to the study plan
- Completing the credits of the following subjects
 - Applied algebra and mathematical logic (BMETE90MX57)
 - System optimization (BMEVISZMA02)
 - Languages and automata (BMEVISZMA04)
 - Information theory (BMEVISZMA03)
 - Formal methods (BMEVIMIMA07)
 - Diploma Thesis Design 1 (BMEVI**MT00)