Faculty introduction to

BSc students

Faculty of Electrical Engineering and Informatics

Budapest University of Technology and Economics

Dr. Eszter Udvary

associate professor

BSc and MSc English program director

Highlights

1. Introduction to the faculty
2. Degree programs
3. Q&A

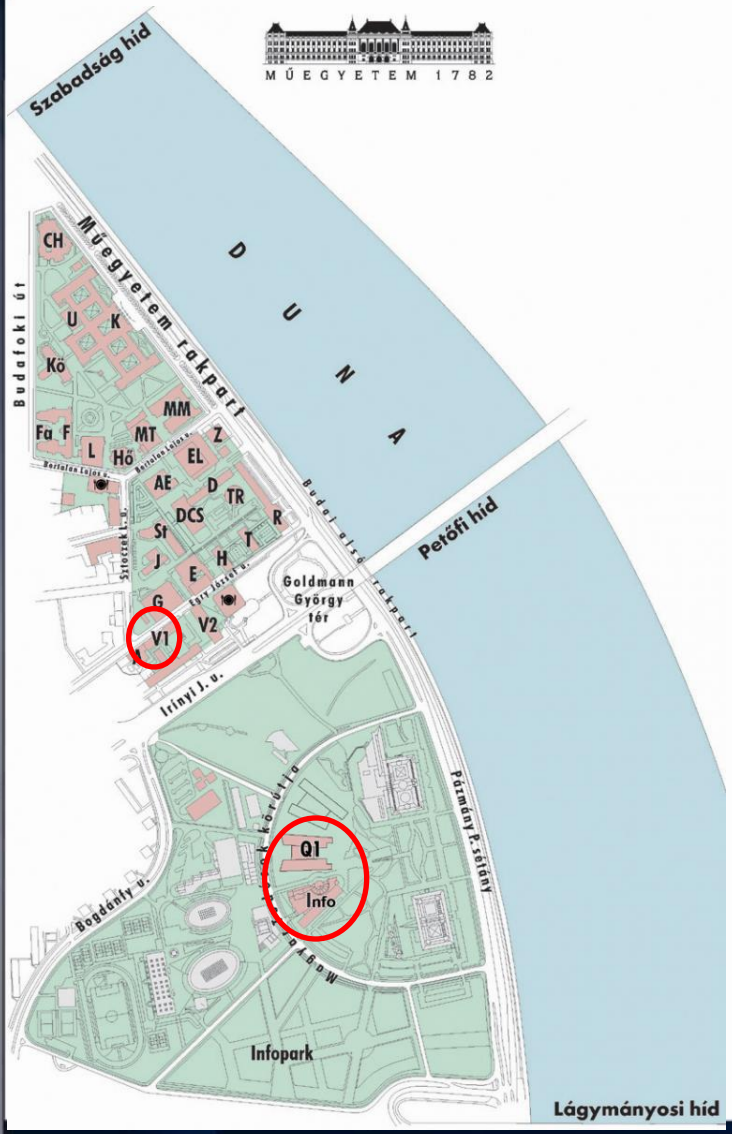
Faculties of the BME

- **Faculty of Civil Engineering (1782)**
- **Faculty of Mechanical Engineering (1871)**
- **Faculty of Architecture (1873)**
- **Faculty of Chemical Engineering (1873)**
- **Faculty of Electrical Engineering and Informatics (1949)**
- **Faculty of Transportation Engineering (1951)**
- **Faculty of Natural Sciences (1987)**
- **Faculty of Economic and Social Sciences (1998)**

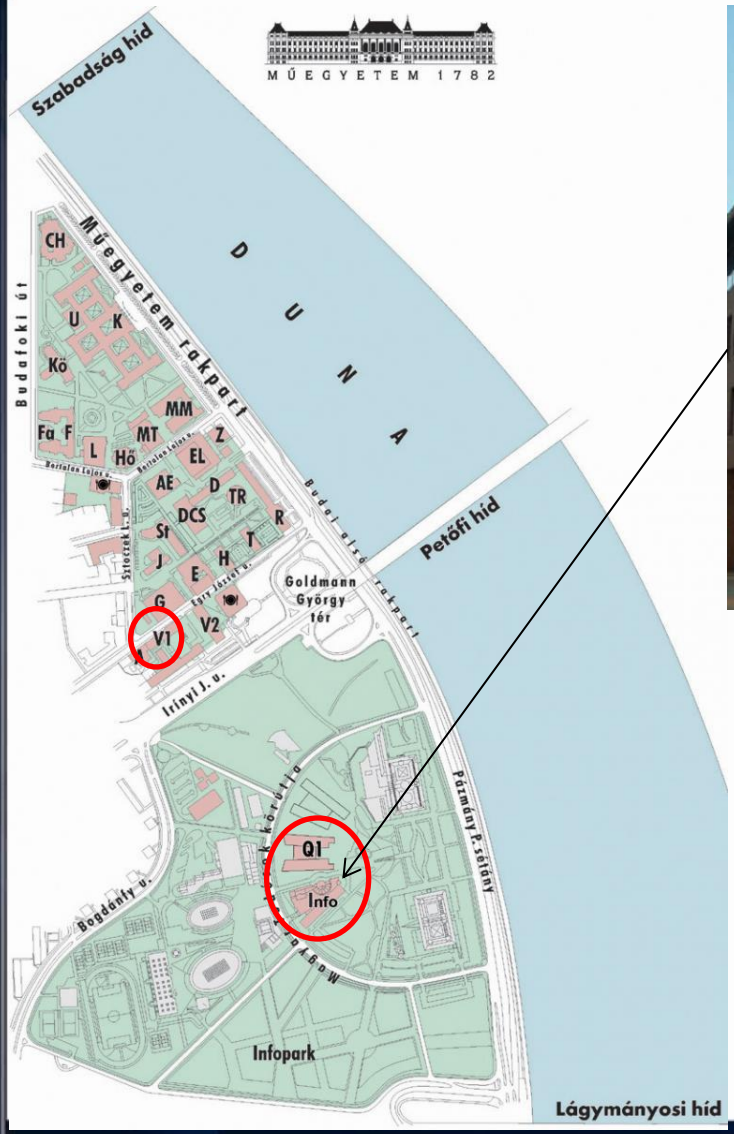
Departments at the faculty

- Department of Automation and Applied Informatics
- Department of Broadband Infocommunications and Electromagnetic Theory
- Department of Computer Science and Information Theory
- Department of Control Engineering and Information Technology
- Department of Electric Power Engineering
- Department of Electron Devices
- Department of Electronics Technology
- Department of Measurement and Information Systems
- Department of Networked Systems and Services
- Department of Telecommunications and Media Informatics

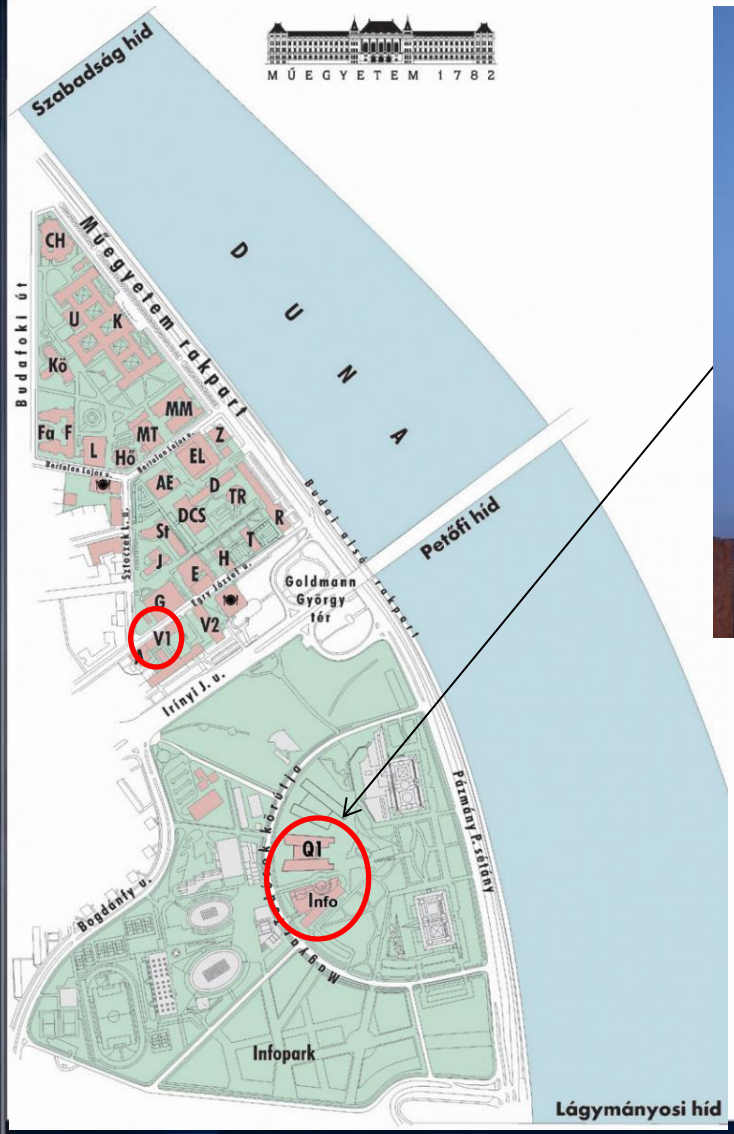
Faculty buildings



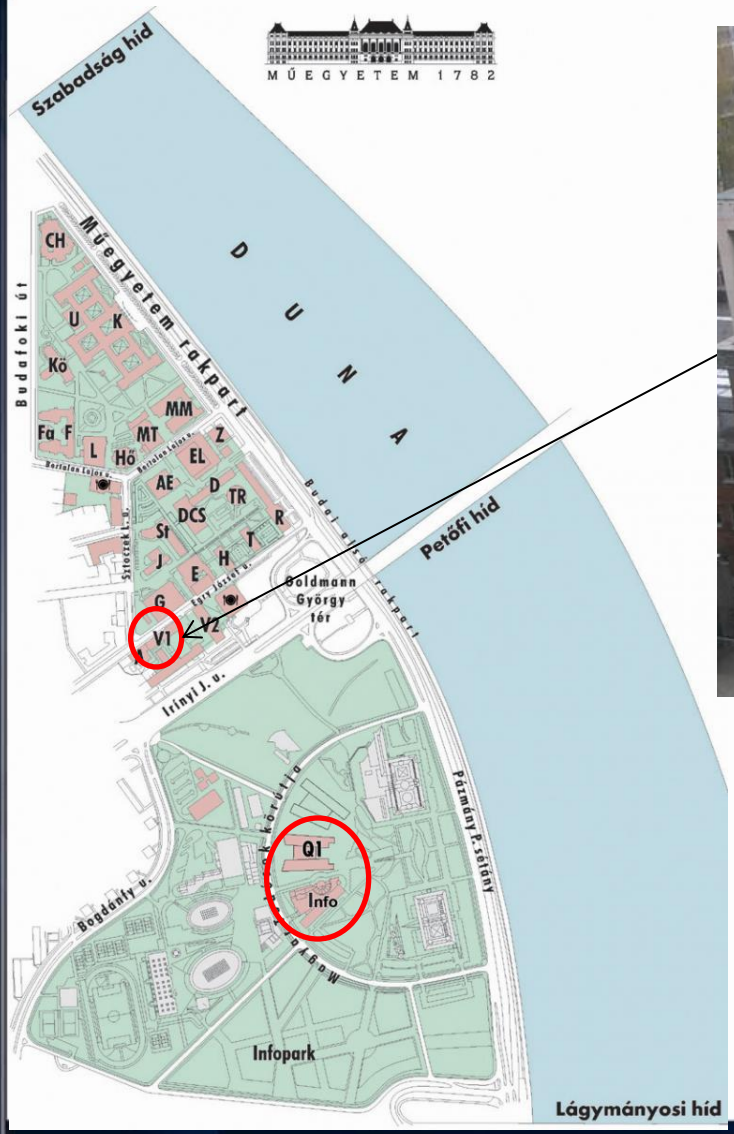
Faculty buildings: I



Faculty buildings: Q



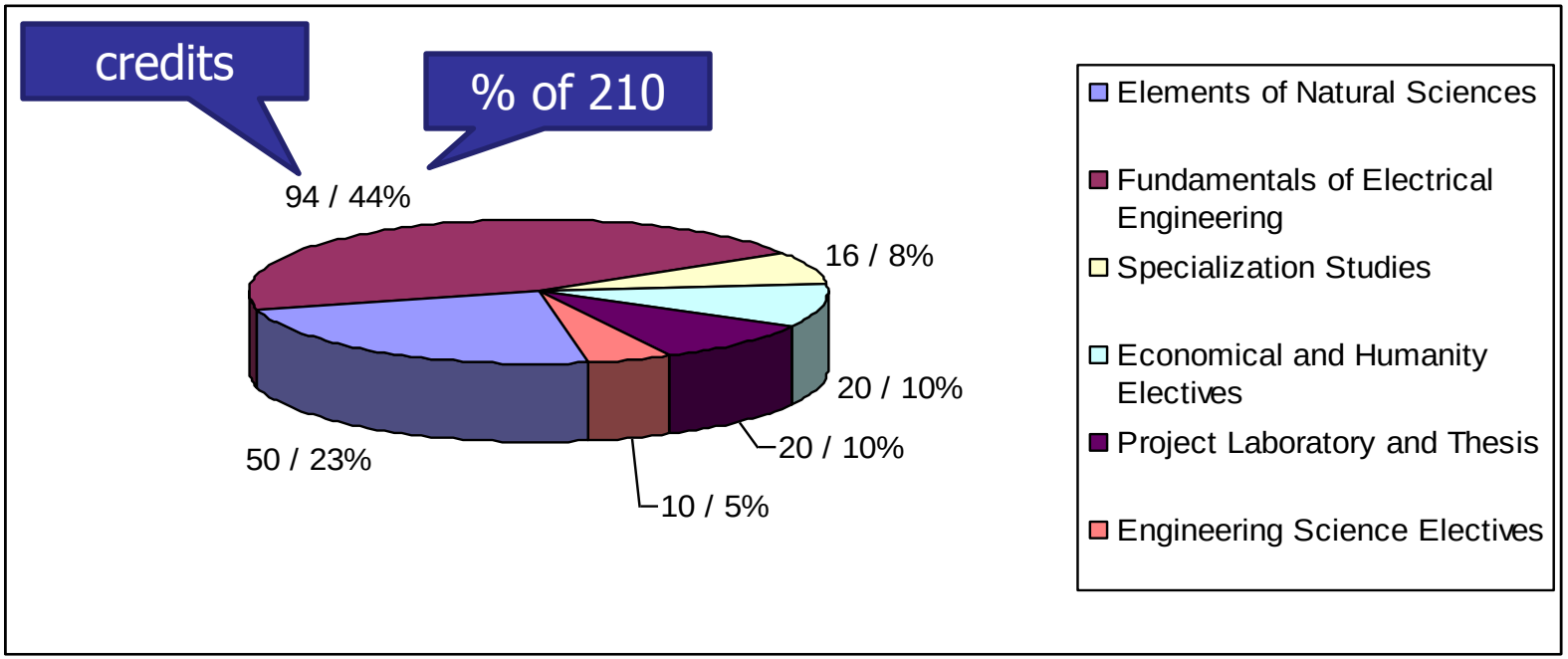
Faculty buildings: V1



Degree programs in English

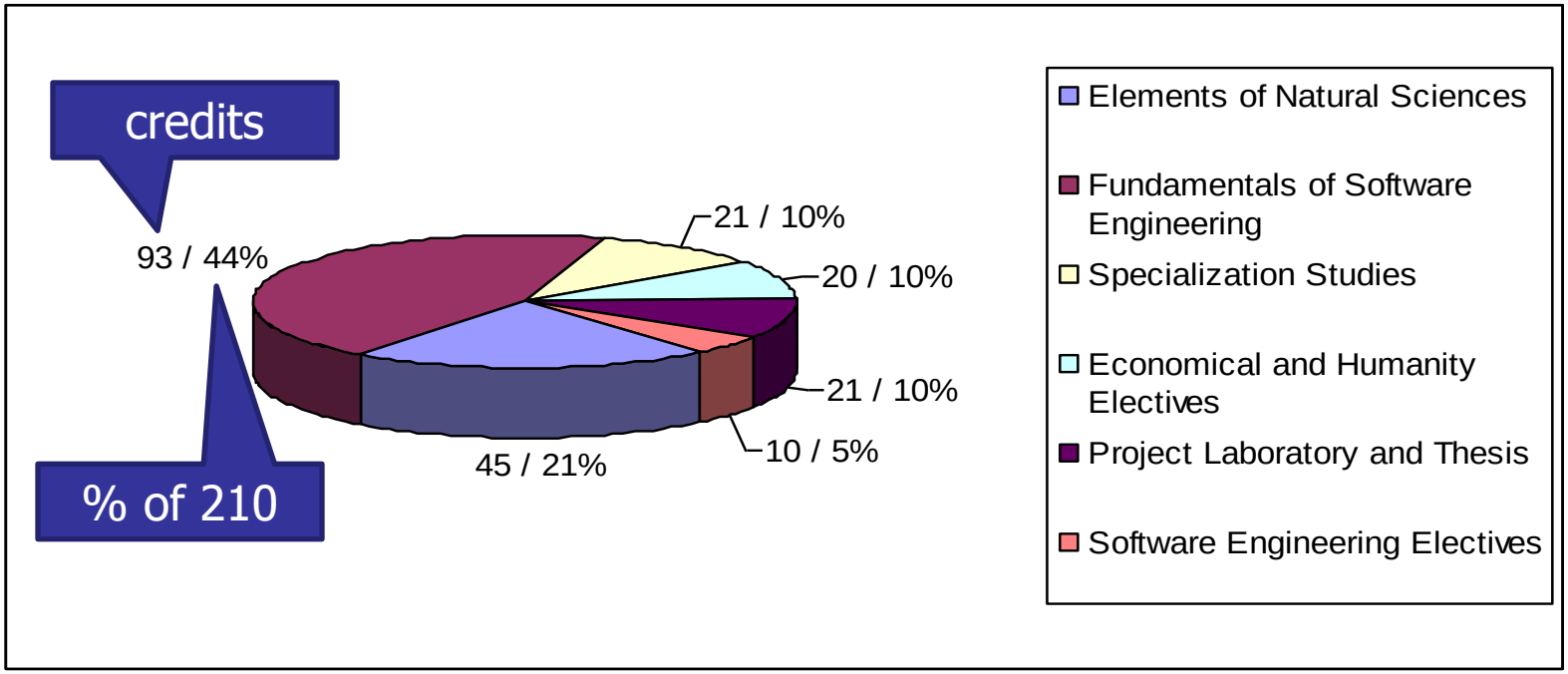
- Electrical Engineering (BSc) – 7 semesters
- Computer Engineering (BSc) – 7 semesters
- Electrical Engineering (MSc) – 4 semesters
- Computer Engineering (MSc) – 4 semesters
- Electrical Engineering (PhD) – 8 semesters
- Computer Engineering (PhD) – 8 semesters

Curriculum - Electrical Engineering (BSc)



- 7 semesters, 210 credits (ECTS)
- Three study specialization blocks:
  - Embedded and Controller Systems
  - Infocommunication Systems
  - Sustainable Electric Energetics

Curriculum - Computer Engineering (BSc)



- 7 semesters, 210 credits (ECTS)
- Two study specialization blocks:
  - Infocommunications
  - Software Engineering

European Credit Transfer and Accumulation System (ECTS)

- It helps students to move between countries and to have their academic qualifications and study periods abroad recognised
- It enhances the flexibility of study programmes for students
- ECTS credits represent learning based on defined learning outcomes and their associated workload.
- 1 credit ≈ 30 workhours

Workload

- 1 semester = 20 weeks
  - 1 week registration period
  - 14 weeks study period
  - 1 week recap period
  - 4 weeks exam period
- 900 workhours / semester
  - 30 credits / semester
  - 30 workhours / credits
- 45 workhours / week (5 days)
  => **9 hours / day => full time study**
- 25-30 contact hours / week

Subjects

Subject Type	Mid-term Assessments	End of the study period	Exam period
Exam	Mid-semester test Mid-semester exam Homework	Signature	Exam
Mid-semester mark	Mid-semester test Mid-semester exam Homework Laboratory course	Grade (based on the mid-semester results)	-

- Subjects – with few exceptions – are only announced once a year, either in the spring or in the fall semester!
- Please handle the subject based on neptun ID (NOT title)

Courses

type	Attendance requirement	note
Theory	Max. 70%	If it is in the subject description
Practice	70%	
Laboratory	100%	Attendance is compulsory
exam	-	a course without contact hours - comprehensive exam - If you have signature, but you did not get grade => you have to repeate the examination in the next exam period

BME expects students to attend the lectures

Contacts

- For issues related to the administration of your studies you always have to turn Ms. Margit Nagy (Electrical Engineering) or Ms. Violetta Máté (Computer Engineering)
  - location: building R, ground floor
  - phone: +36-1- 463-1111 / ext. 4609
  - e-mail: nagy.margit@kth.bme.hu and mate.violetta@kth.bme.hu
- For issues related to your studies, scholarship, and personal life, you should turn to the international ccordinator in the first place (e-mail: english_program_info@vik-dh.bme.hu)
- The program director of BSc and MSc studies is Ms. Eszter Udvary (e-mail: udvary@hvt.bme.hu)

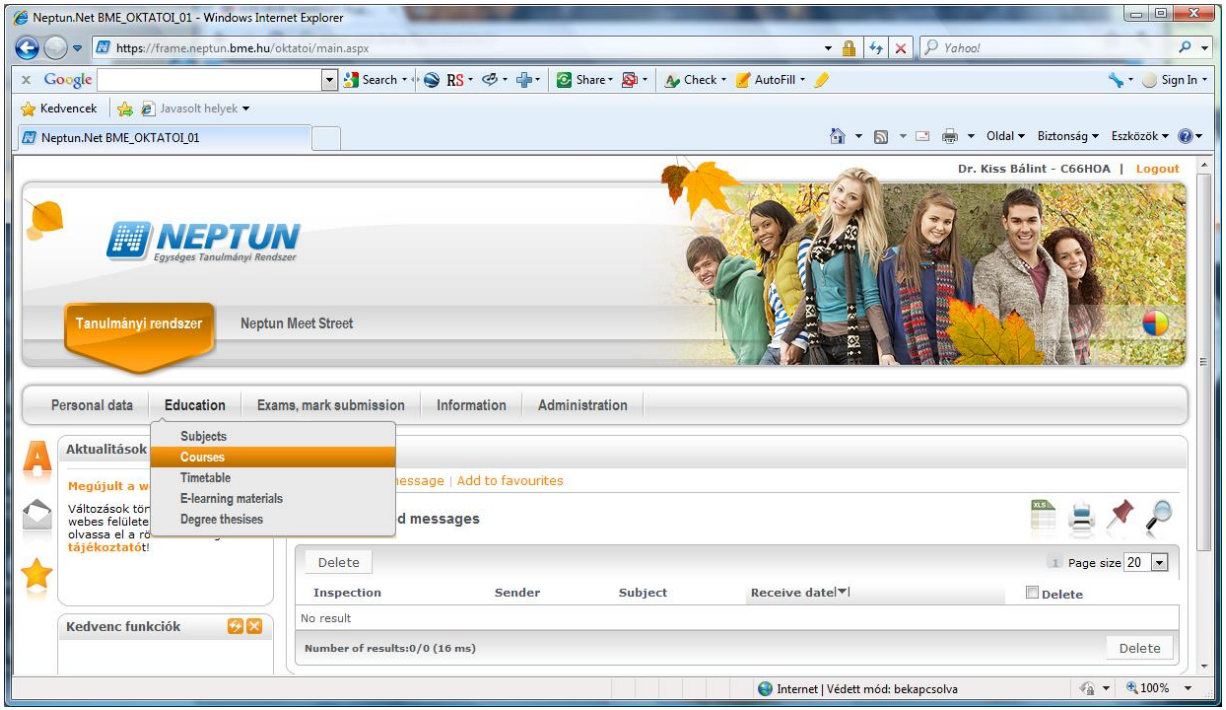
Basic rule of administration

It is strictly forbidden to bypass the chain of hierarchy detailed above and to directly communicate to the rector/dean or any other university personnel without notifying the persons listed above. The violation of this rule will entail disciplinary measures !!!

When you contact anyone…

- Please explain
  - Your name and your Neptun ID
  - Your program (BSc/MSc/PhD, Electrical Engineering/Computer Engineering)
  - Your semester
  - Details of your problem
    - Who, what subject, when, why, what did happen…
  - Print screen (if you have problem with Neptun or other electronic system)

On-line study system in English



- you must use the electronic study system NEPTUN to handle all of your administration (https://frame.neptun.bme.hu/hallgatoi/login.aspx)
- All information can be found at the website vik.bme.hu/en

Webpage – vik.bme.hu/en

Nem biztonságos | vik.bme.hu/en/message/

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MŰEGYETEM 1782

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS

Faculty of Electrical Engineering and Informatics

„Energy of Networks"

DEAN'S MESSAGE
DEPARTMENTS
RESEARCH
SCIENTOMETRIC DATA
EDUCATION
FOR CURRENT STUDENTS
CONTACT

edu Belépés

DEAN'S MESSAGE

The Faculty of Electrical Engineering and Informatics (VIK) of Budapest University of Technology and Economics (BME) carries on the traditions of the above 230 year old University. The proof thereof is the recognition of our degrees all around the world as well as the involvement and appreciation of our professors and researchers in the international scientific scene and organisations.

Almost all multinational electronics and IT corporations well-known in Asia have established R&D laboratories and centres attached to various departments of the faculty – *Ericsson, Morgan Stanley, Nokia, Siemens, Samsung, Huawei, HP, IBM*, just to name a few – where students can get hands-on information on the expectations of the partner companies.

The 2001 January issue of Nature published an article with the title "*The 20th century was created in Budapest*".

It shows that Budapest irrevocably became part of history that determined the advancement of natural sciences in the last century. Many of the illustrious scientists either studied or taught at the University.

This constitutes such a responsibility for current education that – *inter alia* – resulted in a prominent place in the Webometrics ranking of universities.

Ancient Romans had a pertinent term "genius loci", meaning the spirit of the place.

Join us to create the 21st century here, in the middle of Europe, Hungary, Budapest, a liveable and safe city with a colourful multicultural spirit, spicy dishes and Asian roots still retained in music providing an academic student experience and community that will live and accompany no matter the graduates of the University pursue their

SEARCH

SEARCH

For Current Students

BUDAPEST UNIVERSITY OF TECHNOLOGY AND ECONOMICS
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Weekly schedule of classes
Subject descriptions
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Human & economic science elective
Mid-term exams, timetable

PROJECT SUBJECTS

Project laboratory and thesis topics · Project laboratory requirements
Thesis portal
BSc Thesis regulations · BSc final comprehensive exam
MSC thesis regulations

PROGRAM DESCRIPTIONS

BSc Electrical Engineering

- Program description, simplified roadmap, prerequisites

BSc Computer Engineering

- Program description, simplified roadmap, prerequisites

SEARCH

SEARCH

B.SC. PROGRAMS (CURRENT)

Electrical Engineering (program description, simplified roadmap, prerequisites)

Computer Engineering (program description, simplified roadmap, prerequisites)

work.

Main training areas (210 credits)

Natural science fundamentals	40-50 credits
Economics and humanities	14-30 credits
Professional core material	70-105 credits
Specific professional knowledge	min. 40 credits
Free electives	min. 10 credits

BSc Electrical Engineering curriculum

1st semester

Credits	Course code	Course name	Contact hours L	S	Lab	Requirement
6	BMETE90AX00	Mathematics A1	4	2		exam
4	BMETE11AX21	Physics 1	3	1		exam
5	BMEVISZAA05	Foundation of computer science	2	2		exam
6	BMEVIIIAA04	Digital design 1	3	1	1	exam
7	BMEVIHIAA01	Basics of programming 1	2	2	2	mid-semester mark
3	BMEGT63EE11*	English for Electrical Engineering and Informatics 1.		4		mid-semester mark

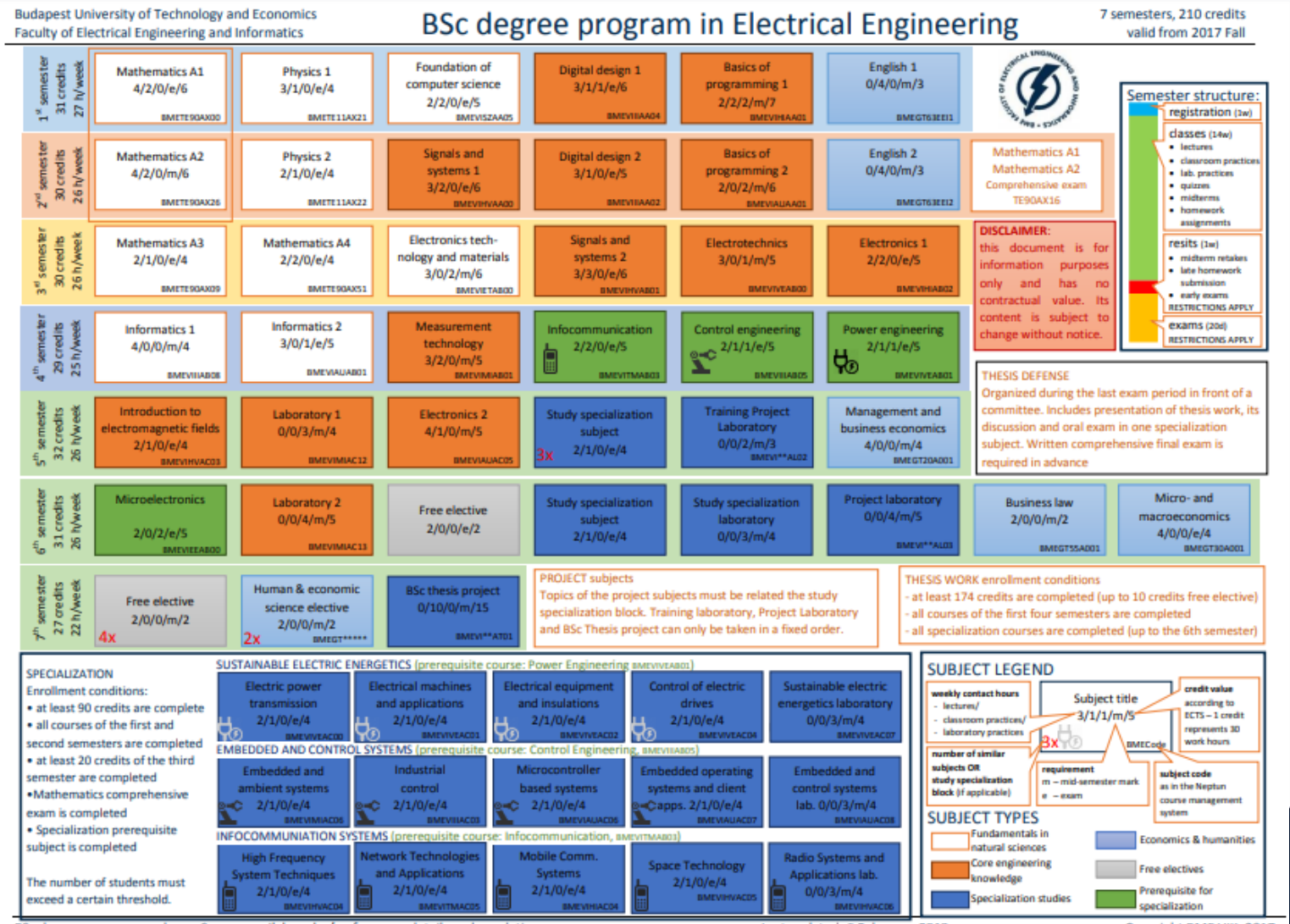
2nd semester

Credits	Course code	Course name	Contact hours L	S	Lab	Requirement
6	BMETE90AX26	Mathematics A2	4	2		mid-semester mark
4	BMETE11AX22	Physics 1	3	1		exam
6	BMEVIHVAA00	Signals and systems 1	3	2		exam
5	BMEVIIIAA02	Digital design 2	3	1		exam
6	BMEVIAUAA01	Basics of programming 2	2		2	mid-semester mark

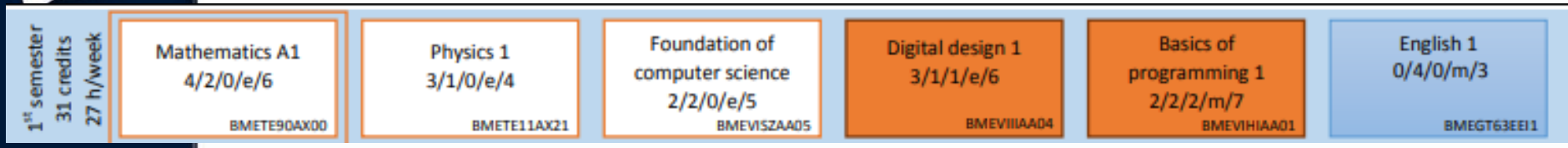
B.SC. PROGRAMS (CURRENT)

Electrical Engineering (program description, simplified roadmap, prerequisites)

Computer Engineering (program description, simplified roadmap, prerequisites)



Electrical Engineering

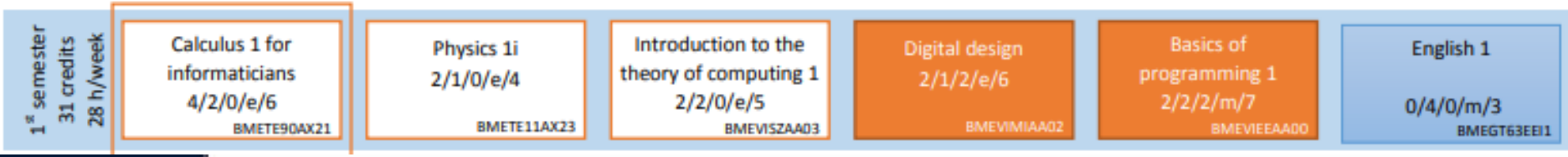


Mandatory course list!

- TE90AX00 Mathematics A1 => „VIK” courses! **EN0-VIK and EN1-VIK**
- TE11AX21 Physics 1
- VISZAA05 Foundation of computer science
- VIIIAA04 Digital design 1
- **VIHIAA01** Basics of programming 1
- GT63EEI1 English for Electrical Engineering and Informatics 1 => you are already registered

Please register based on the neptun ID of the subject!

Computer Engineering



Mandatory course list!

- TE90AX21 Calculus 1 for informaticians
- TE11AX23 Physics 1i
- VISZAA03 Introduction to the theory of computing 1
- VIMIAA02 Digital design
- **VIEEAA00** Basics of programming 1
- GT63EEI1 English for Electrical Engineering and Informatics 1 => you are already registered

Please register based on the neptun ID of the subject!

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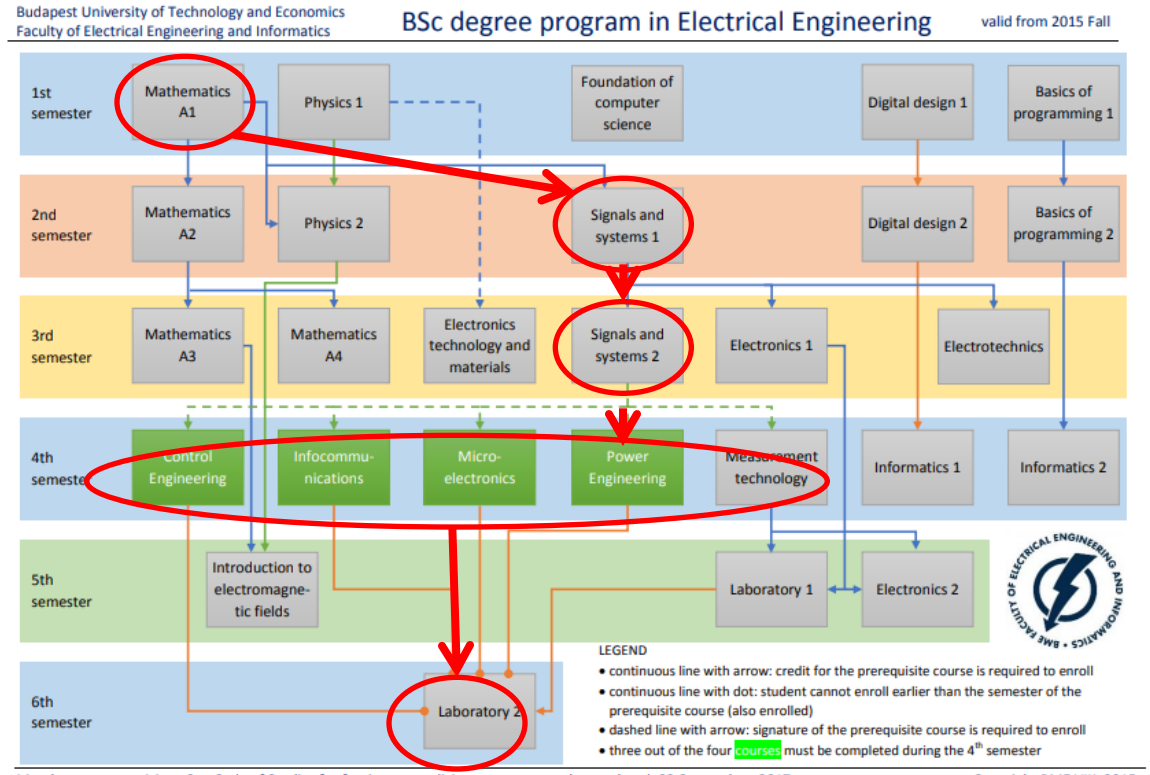

Prerequisites: to make sure that each course provides you with knowledge which have sound foundations established by previous courses

B.SC. PROGRAMS (CURRENT)

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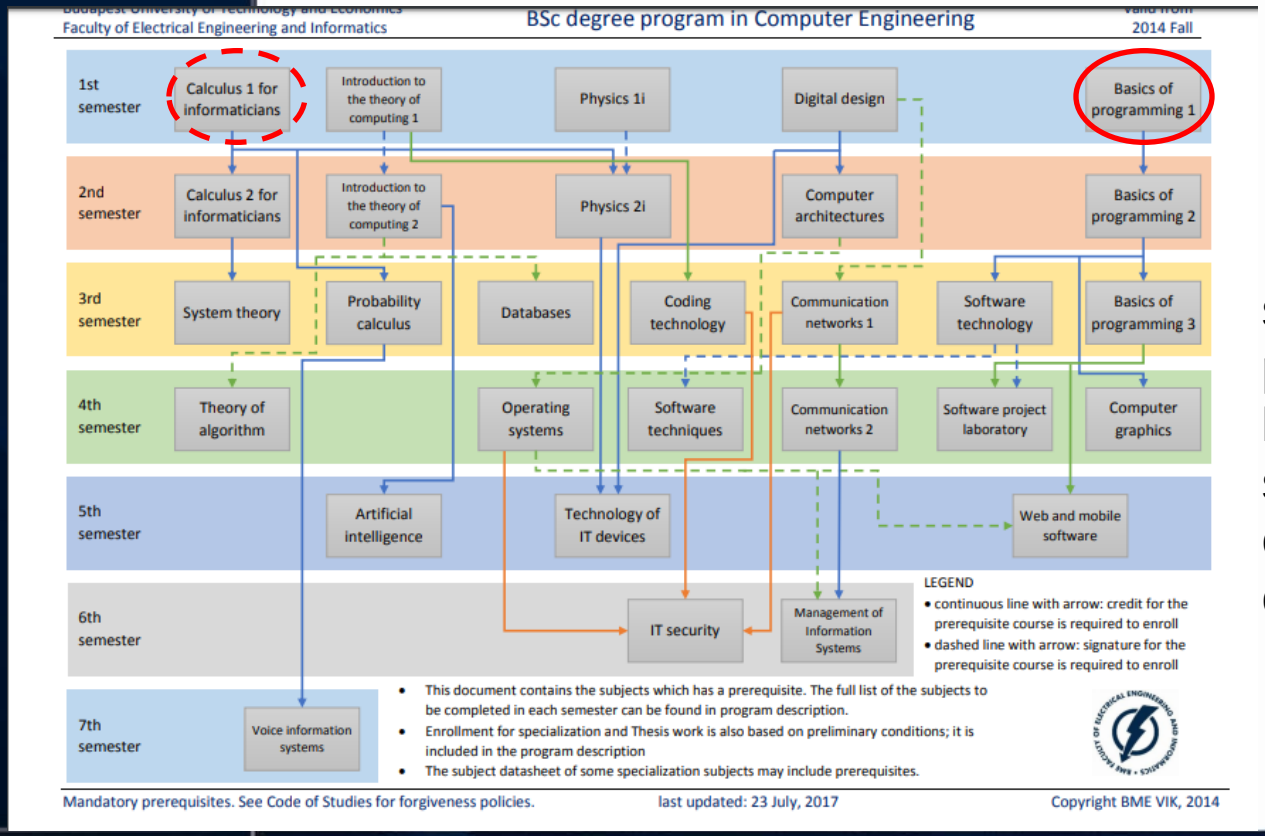
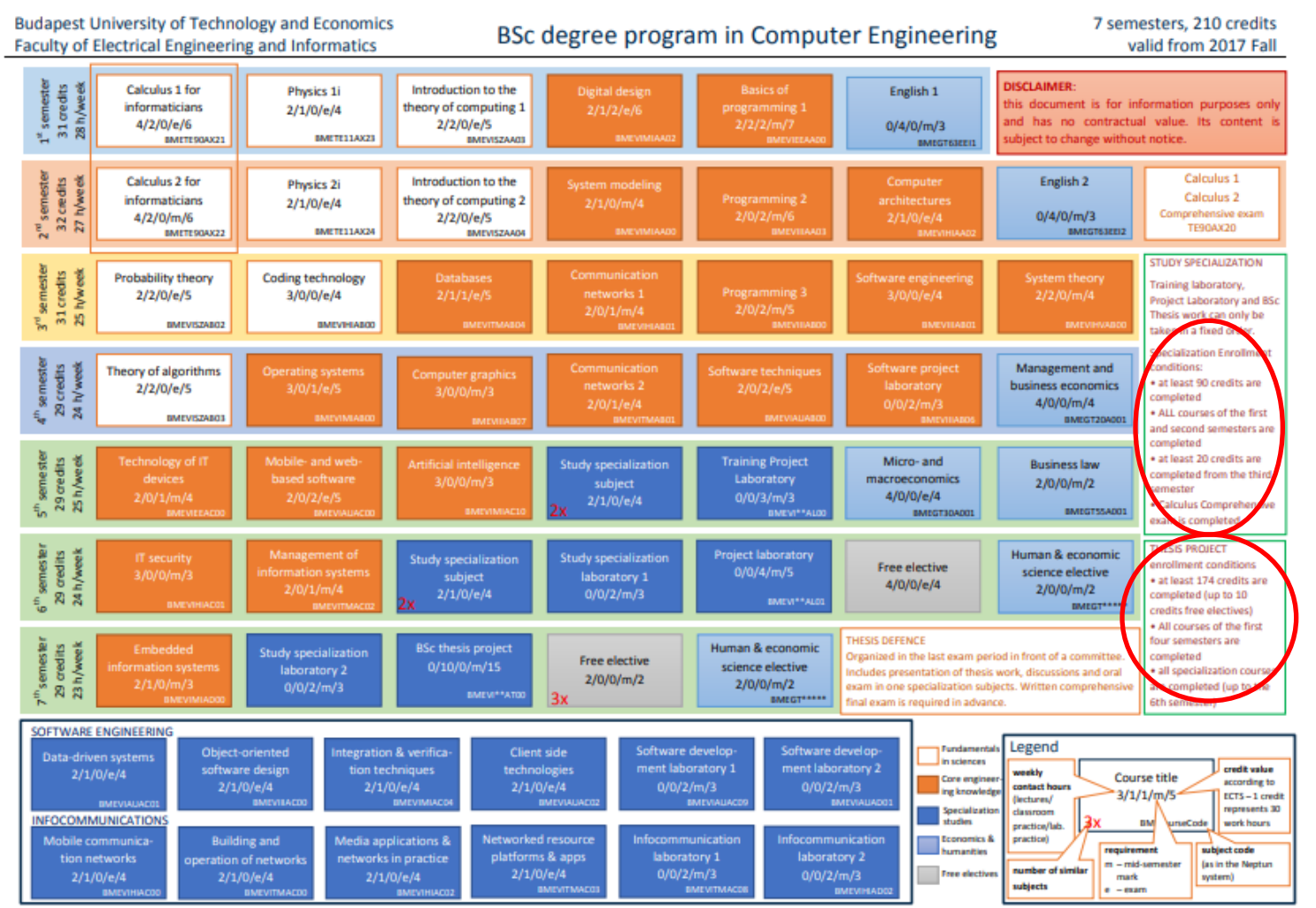


Prerequisites: to make sure that each course provides you with knowledge which have sound foundations established by previous courses

BSc - Milestones

- Conditions for admission to the study specialization block
- Conditions for admission to the thesis defense session



Specializations

- Specializations start every fall semester
- The selection of specialization is always at the end of the 4th semester
- The number of students must exceed a certain threshold
- The decision on the type of specialization and the placement of students depends on the number and the results of applying students
- Not all specializations start every year

General informations

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BSc Electrical Engineering

Academic Calendar

ACADEMIC CALENDAR for 2019/2020 BME Faculty of Electrical Engineering and Informatics (VIK)	
Autumn semester	
Registration period	2 – 6 September 2019
Study period	9 September – 13 December 2019
Grace period to fulfil course requirements	16 – 20 December 2019
Exam period	2 – 29 January 2020
Final exam period	2 – 31 January 2020
Graduation ceremony for international students	TBD (early February)
days off *(no classes, tests or exams):*	
University Sports Day	12 September 2019 (Thu)
Faculty Days (Schönherz Cup)	30 September – 1 October 2019 (Mon-Tue)
National holiday (commemoration of the Revolution of 1956)	23 October 2019 (Wed)
National holiday (All Saints' Day)	1 November 2019 (Fri)
Students' Scientific Conference ("TDK")	12 November 2019 (Tue)
Open Day for secondary-school students	29 November 2019 (Fri)
Winter holidays (incl. Christmas & New Year's Eve)	23 December 2019 – 1 January 2020
make-up Saturdays *(for national, non-holiday days off):*	
regular classes *with even-week Friday schedule*	7 December 2019
extra day of grace period (for in-class test retakes)	14 December 2019

Weekly schedule

2019/2020 1ST SEMESTER

Electrical Engineering BSc 1st Semester

Electrical Engineering BSc 3rd Semester

Electrical Engineering BSc 5th Semester Infocommunications Syst Spec

							All		E403
							All		E404
Monday	08:15	10:00		BMEGT63EEI1	H8Cs16_VI1	Practice	All	Sikiné Kozma Katalin	E401
Monday	08:15	10:00		BMEGT63EEI1	H8Cs16_VI2	Practice	All	Dr. Kiszely Zoltán, Sakamoto Liliane Mayum	E402
Monday	10:15	12:00	Calculus 1 for Informaticians	BMETE90AX21	EN0	Theory	All	Nagy Ilona, Stubnya Gusztávné dr.	QBF13
Monday	12:15	14:00	Digital Design	BMEVIMIAA02	LA	Labor	All	Dr. Pálfi Vilmos	IE226
Monday	14:15	16:00	Physics 1i	BMETE11AX23	IT0	Theory	All	Dobos Gábor, Dr. Hárs György	IB026
Monday	14:15	16:00	Physics 1i	BMETE11AX23	IE0	Theory	All	Dobos Gábor, Dr. Hárs György	IB026
Tuesday	08:15	10:00	Calculus 1 for Informaticians	BMETE90AX21	EN0	Theory	All	Nagy Ilona, Stubnya Gusztávné dr.	QBF13
Tuesday	10:15	12:00	Digital Design	BMEVIMIAA02	EA	Theory	All	Dr. Pálfi Vilmos, Dr. Fehér Béla	IE224
Tuesday	13:15	14:00	Digital Design	BMEVIMIAA02	GA	Practice	All	Dr. Pálfi Vilmos	IE226
Tuesday	15:15	16:00	Physics 1i	BMETE11AX23	IE1	Practice	All	Dobos Gábor, Dr. Hárs György	IB026
Tuesday	15:15	16:00	Physics 1i	BMETE11AX23	IT1	Practice	All	Dobos Gábor, Dr. Hárs György	IB026
Tuesday	18:15	20:00	Midterm Test	BMEVIDHZH00	VIMI BSc 1. félév	Theory	All		
Wednesday	08:15	10:00	Basics of Programming 1	BMEVIEEAA00	AE	Theory	All	Dr. Horváth Gábor, Kohári Zsolt	IB026
Wednesday	08:15	10:00	Basics of Programming 1	BMEVIHIAA01	EA	Theory	All	Dr. Horváth Gábor, Kohári Zsolt	IB026
Wednesday	12:15	14:00	Calculus 1 for Informaticians	BMETE90AX21	EN1	Practice	All	Nagy Ilona, Stubnya	QBF10

These documents are for information purposes only!

Subject description

Subjects

List filter: All units in EE ▼ | Subjects with data sheet in English ▼ | BSc ▼

Listed: 107 subjects

Code	Name	Department	Credits
VIAUA008	Electromechanics	AUT	4 credits
VIAUA116	Basics of Programming 2	AUT	4 credits
VIAUA203	Informatics 2	AUT	5 credits
VIAUA218	Software Techniques	AUT	4 credits

angol nyelvű adatlap

Foundation of Computer Science

A tantárgy neve magyarul / Name of the subject in Hungarian: A számítástudomány alapjai

Last updated: 2017. június 22.

Budapest University of Technology and Economics
Faculty of Electrical Engineering and Informatics

Electrical Engineering
BSc

Course ID	Semester	Assessment	Credit	Tantárgyfélév
VISZAA05		2/2/0/v	5	

3. Course coordinator and department

Dr. Katona Gyula, Számítástudományi és Információelméleti Tanszék

Web page of the course

http://www.cs.bme.hu/sza

4. Instructors

Dr. Attila Sali, associate professor, Department of Computer Science and Information Theory

6. Pre-requisites

- Title
- Lecturers
- Pre-requisites
- Objectives
- Synopsis
- Assessment
- Recaps
- …

Your life is changed
Be careful

- New city, new country, new classmates, without family…
- You have to manage your life (accommodation, residence permit, offices, living cost, …)
- Secondary school => university
  - Difficult subject, hard assessments
  - There is no continuous monitoring
  - misunderstood freedom

    If you do not start learning at the beginning

    ⇒ You will have too much tasks at the end of the semester

    ⇒ You can not fulfil the subjects

    ⇒ You can not register for further subjects in the next semester (because of the pre-requisits)

    ⇒ …

Focus on your study!

- There is no way to grant exemptions from the
  - pre-requisite rules
  - conditions for admission to the BSc specializations
  - conditions for admission to thesis defense session
- The number of credit points to be accumulated, the grade point average to achieve, the number of recaps are controlled. Failing to satisfy those rules, you are dismissed from your studies.
  - twice the programme duration
  - min. 20 credits / the latest 3 active semesters
  - BSc: cumulated GPA of min. 2.25 at the end of the 4th active semester
  - max. 6 exams/subject
- Plagiarism and cheating: zero tolerance!
  - At least fail of the subject in the given semester (both copying and copied students)

Tuition fee

- If you have no scholarship…

	For non-EU citizens	For EU citizens
BSc program	3200EUR/semester	2250EUR/semester

- Stipendium Hungaricum Scholarship
  - max. 2 semesters extension
  - min. 36 credits / the latest 2 active semesters (decision of the Tempus foundation)
- Delay in the study program
  - Time, money, etc.
  - Residence permit…

Student life ⇔ Study

Thank you for your attention !