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

BSc degree program in Electrical Engineering

7 semesters, 210 credits
valid from 2022 Fall

1st semester — 31 credits — 27 h/week

- Mathematics A1a Calculus — 4/2/0/e/6 — BMETE90AX00
- Physics 1 — 3/1/0/e/4 — BMETE11AX21
- Foundation of computer science — 3/2/0/e/5 — BMEVISZAA07
- Digital design 1 — 3/1/1/e/6 — BMEVIIIAA04
- Basics of programming 1 — 2/2/2/m/7 — BMEVIHIAA01
- English for Electrical Engineering and Informatics — 0/4/0/m/4 — BMEGT60Z950
- University Experience 1. (not mandatory) — 0/0/2/s/0 — BMEVI

2nd semester — 30 credits — 26 h/week

- Mathematics A2 Vector Functions — 4/2/0/m/6 — BMETE90AX59
- Physics 2 — 2/1/0/e/4 — BMETE11AX22
- Materials in Electronics — 2/0/0/m/2 — BMEVIETAA01
- Digital design 2 — 2/1/1/e/6 — BMEVIIIAA05
- Basics of programming 2 — 2/0/2/m/6 — BMEVIAUAA01
- Signals and systems 1 — 3/3/0/e/6 — BMEVIHVAA03
- University Experience 2. (not mandatory) — 0/0/2/s/0 — BMEVI

3rd semester — 30 credits — 26 h/week

- Mathematics A3 for Electrical Engineers — 2/1/0/e/4 — BMETE90AX09
- Mathematics A4 Probability Theory — 2/2/0/e/4 — BMETE90AX58
- Electronics technology — 2/0/2/m/4 — BMEVIETAB01
- Microelectronics — 2/0/2/e/5 — BMEVIEEAB01
- Electrotechnics — 3/0/1/v/5 — BMEVIVEAB02
- Signals and systems 2 — 3/3/0/e/6 — BMEVIHVAB02

4th semester — 29 credits — 25 h/week

- Informatics 1 — 4/0/0/m/5 — BMEVIIIAB09
- Electronics 1 — 2/2/0/e/5 — BMEVIHIAB03
- Measurement technology — 3/2/1/e/6 — BMEVIMIAB02
- Infocommunication — 3/2/0/e/6 — BMEVITMAB05
- Control engineering — 2/1/1/e/5 — BMEVIIIAB10
- Power engineering — 2/1/1/m/4 — BMEVIVEAB01

5th semester — 32 credits — 26 h/week

- Informatics 2 — 3/0/1/m/5 — BMEVIAUAC10
- Electronics 2 — 4/1/0/e/5 — BMEVIAUAC11
- Laboratory 1 — 0/0/4/m/5 — BMEVIMIAC14
- Study specialization subject — 2/1/0/e/4 — 3x

PROJECT subjects
Topics of the project subjects must be related the study specialization block. Project Laboratory and BSc Thesis project can only be taken in a fixed order.

6th semester — 31 credits — 26 h/week

- Introduction to electromagnetic fields — 2/2/0/e/5 — BMEVIHVAC07
- Laboratory 2 — 0/0/4/m/5 — BMEVIMIAC15
- Study specialization laboratory — 0/0/3/m/4
- Project laboratory — 0/0/4/m/5 — BMEVI**AL03
- Free elective — 2/0/0/e/2 — 2x
- Business law — 2/0/0/m/2 — BMEGT55A001
- Micro- and macroeconomics — 4/0/0/e/4 — BMEGT30A001

Summer internship
6 weeks/s/0
BMEVI****

7th semester — 27 credits — 22 h/week

- BSc thesis project — 0/10/0/m/15 — BMEVI**AT01
- Free elective — 2/0/0/m/2 — 4x
- Management and business economics — 4/0/0/m/4 — BMEGT20A001
- Human & economic science elective — 2/0/0/m/2 — BMEGT***** — 2x

THESIS WORK enrollment conditions
- 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

RESTRICTIONS APPLY

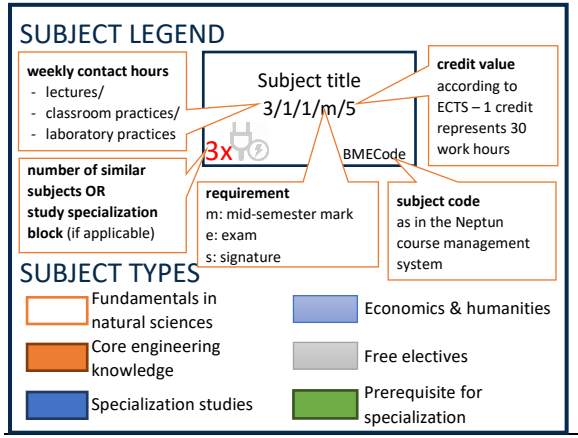
- exams (20d)

RESTRICTIONS APPLY

DISCLAIMER:
this document is for information purposes only and has no contractual value. Its content is subject to change without notice.

THESIS DEFENSE
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

SUBJECT LEGEND



SUBJECT TYPES

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