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## **BME** in figures



1782 – Institutum Geometricum – Hydrotechnicum established by Emperor Joseph II
1860 – Hungarian replaces Latin
1925 – First women students enroll
1949 –Technical University of Budapest
2000 – Budapest University of Technology and Economics (BME)

- 70 departments
- 8 faculties
- 23,000 students, 1,500 international students (2017/18)
- 1,300 academic staff (800 with PhD/DLA)

## Faculties

Faculty of Civil Engineering (1782)

Faculty of Mechanical Engineering (1871)





Faculty of Chemical Technology and Biotechnology (1873)

Faculty of Electrical Engineering and Informatics (1949)



Faculty of Transportation Engineering and Vehicle Engineering (1951)



Faculty of Natural Sciences (1998)



Faculty of Economic and Social Sciences (1998)



## Nobel laureates graduated from BME



Dénes (Denise) GÁBOR (1900 – 1979) holography, in 1971

#### Jenő (Eugene) WIGNER (1902 – 1995) theoretical physics, in 1963



György (George) OLÁH (1927–2017) organic chemistry, in 1994

BME HOADH 1782 0 1782



## World famous alumni

Theodore von KÁRMÁN Aeronautics & Mathematics (1881–1963)



Leo SZILÁRD Physicist (1898–1964)



Donát BÁNKI carburator (1859 – 1922)



Ede TELLER Physicist (1908– 2004)



#### Károly ZIPERNOWSKY transformer (1853–1942)



## **Ernő RUBIK** (1944–)



## Mission

- Sound, practice-oriented BSc
- Innovational MSc
- PhD: Problem-driven, knowledge-oriented research
- World-class, research-based education
- Rigorous academic study & practical skills
- Tackle future challenges
- Symbiosis of science, innovation and technology
- Serving the society



## Education at BME

- Engineering education in general:
  - 7-8 semester BSc programs (210-240 credits)
  - 3-4 semester MSc programs (90-120 credits)
- PhD Programs in 13 doctoral schools (2+2 years)
- \* Full BSc, MSc and PhD curricula both in Hungarian and English
- Continuing Engineering Education, postgraduate courses, MBA, etc.





## Foreign students at BME



#### from 77 countries ca 45 % by Stipendium Hungaricum

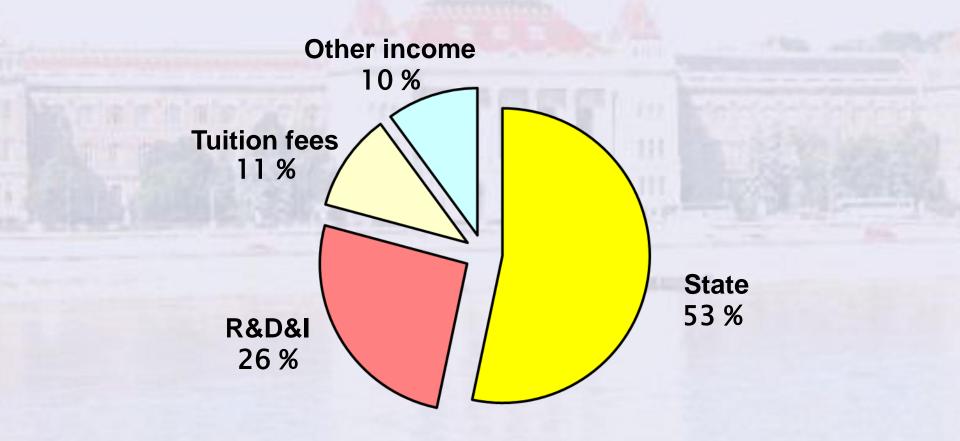


## Geographical distribution of foreign students





## Budget

















## **QS World Ranking**

- BME as an institution of Employability Rankings (301-500)
- QS main ranking (751-800)
  - Faculty of Mechanical Engineering (251-300)
  - Mathematics (251-300)
  - Material Sciences (251-300)
  - Electrical Engineering (251-300)

## Academic Ranking of World Universities - ARWU

- Faculty of Mechanical Engineering (201-300)
- Faculty of Natural Sciences Mathematics (201-300)
- Materials Sciences (301-400)
- Informatics (301-400)
- Chemical Engineering (401-500)
- Electrical Engineering (401-500)

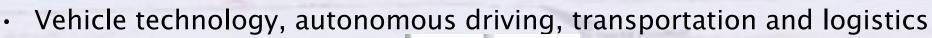
## International outreach (sel.)

- ATHENS (Advanced Technology Higher Education Network / Socrates) . 14 leading European universities
- AUF (Agence Universitaire de la Francophonie)
- CEEPUS (Central European Exchange Program for University Studies)
- CELSA (Central Europe Leuven Scientific Allience)
- CESAER (C. European Schools of Advanced Engineering Education and Res.)
- CRP (Conference of Rectors/Presidents of European Techn. Universities)
- Erasmus (1-2 semesters)
- EUA (European University Association)
- EAIE (European Association for International Education)
- SEFI (European Society for Engineering Education)
- T.I.M.E. Network of 54 leading universities of technology. Double diplomas, doctorate cooperation, summer schools etc.
- 4TU League (Regional cooperation of BME, CTU, SUT and TU Wien



## BME as a research university strategic priority research areas

- Artificial Intelligence, smart cities
- Biotechnology, health and environment protection
- Disaster prevention: modern engineering methods
- Intelligent environment and e-technologies
- Nanophysics, nanotechnology and materials science
- Sustainable energy

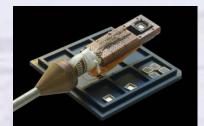












## **University-Industry Collaboration Center**

Path to successful innovation -

**Scope:** Integrated intelligent technologies in ICT, pharmaceutical industry, electric drives, energy sector





**RICHTER GEDEON** 

#### Tasks:

- Streamlining innovation
- •Efficient coordination of university and industrial R&D
- •New sources for funding R&D
- •New "digital ecosystem" for industrial processes

### Publications, culture and sport



Orchestra (est'd in 1896) and Choir



**Theatre SZKÉNÉ** 



Scientific journals (WoS)



Budapest University of Technology and Economics



Sport centre

# Palace of Arts

## **BME** today



#### Patented in USA, EU



#### Space programs

M asat -1

ttp://cubesat.bme.br





Commercial softwares

Castle

World Champion L. Cseh



Smart city



Kids' University





## Budapest – capital of Hungary

- Population: 1.8 million (2015) – 17% of Hungary
- Far the largest city of Hungary
- Aquicum and Limes in the Roman time
- Unification of Pest, Buda and Óbuda: 1873





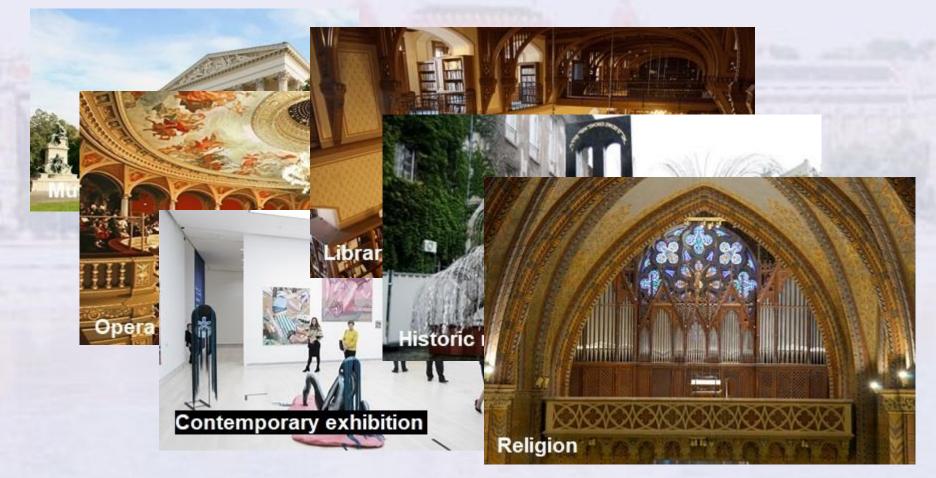
## Architecture

**Reflection of History** 





## Culture



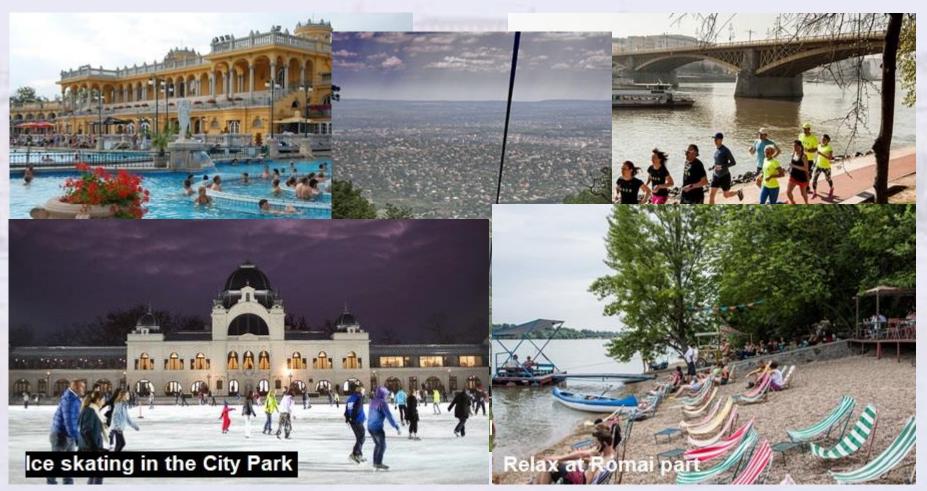


## **Center of Education**











#### Gastronomy

Tradition and Innovation









BME welcomes you in 2019! Save the dates: 13-14th of September! Main topic: Horizon Europe