

MEET

**THE EÖTVÖS LORÁND UNIVERSITY (ELTE),
FACULTY OF INFORMATICS**

European Computer Science Summit 2020

Online, 26-28th October 2020



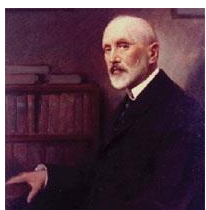
Eötvös Loránd University
Faculty of Informatics

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History

Eötvös Loránd University (ELTE), founded in 1635 and the longest continuously operating university of Hungary, serves the interests of high quality education and research, building upon the best European traditions. ELTE has been the leading university of the country - as evidenced by national and international higher education rankings - for many years.



With eight faculties, ELTE covers almost every field of science, including business and economics, education and psychology, humanities, informatics, legal and political sciences, natural sciences, and primary and pre-school education as well as special education.

Of the 30,000 students of our University, 3,000 are international students, arriving from all over the world.

ELTE became a Research University in 2010 and received the distinguished title of University of National Excellence in 2013.

ELTE Faculty of Informatics plays a leading role in the Hungarian computer science education offering degree programmes in computer science, cartography and geoinformatics, mechanical engineering, teaching informatics.

Rankings

Eötvös Loránd University, Faculty of Informatics is ranked amongst the best higher education institutions in the region and achieved outstanding result in rankings by subject. Strategic approach is to increase further the number of publications and staff.

- QS WUR by Subject 2020: 501-550
- THE WUR by subject 2020: 601+
- ARWU – Institutional Ranking: 601-700



Leadership and Contact



DEAN OF THE FACULTY

Zoltán Horváth PhD, professor,
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VICE-DEANS

Vice-dean for **Academic Affairs and Innovation**,
Tamás Kozsik PhD, associate professor, kto@elte.hu

Vice-dean for **Education**, **Anna Krebsz PhD**, associate professor, krebsz@inf.elte.hu

Vice-dean for **Educational Innovation**, **Márta Turcsányi-Szabó PhD**, associate professor, tszmarta@inf.elte.hu

Vice-dean for **International Affairs**, **José Jesús Reyes Nunez, PhD**, associate professor,
jesusreyes@caesar.elte.hu

Research Projects

International

- EIT Digital: ELTE Faculty of Informatics is the founding and leading HEI of EIT Digital Budapest Node since 2017 full member
 - Engineering Privacy and Security in Crowdsourcing Environments along all Components (2015): Deutsche Telekom, TU Berlin, Reply
 - FIDES - Federated Identity Management System (2015): FBK, Poste Italiane, Intellium, QKey, Reply SpA, Politecnico di Torino, Telecom Italia, TNO, Atos, DFKI, Eurodocs
 - eBIZ (2017,2018,2019): OTP Bank, OTP eBIZ, Deutsche Telekom, TU Berlin
 - OFION - Orchestration of financial services on-demand (2018): Atos, GFT
 - SkinCare with Degetel, France
 - Covid related: Don't Leave Us Behind, with Fifthingenium and Politecnico di Milano
- EIT Food
 - EIT Food COVID-19 Rapid Response Call for Innovation projects
- H2020:
 - H2020-MSCA-IF: Randomness principles in arithmetic structures
 - H2020-MSCA-ITN-2020: Innovative Training Network (ITN) in Digitalized Asset Management
 - H2020-ICT-48-2020: HumanE-AI-Net
 - H2020-SU-ICT-2018-2020: Cybersecurity Competence Network

National

- Thematic Excellence Programme
- KH-18: Martingales and Fourier analysis
- European Digital Innovation Hubs in Digital Europe Programme: HSAFE EDIH Programme
- 2019-1.3.1-KK: Software- and Data Intensive Services Competence Center
- 2020-1.1.2-PIACI KFI: Development of MOBOT automatic warehouse storage system based on machine vision, supported by artificial intelligence
- VEKOP-2.2.1-16: Development of dedicated brain PET / CT equipment for clinical research and routine diagnosis of neurological diseases
- EFOP 3.5.1.-16: Development of higher level dual trainings in the periphery of Western Hungary
- EFOP.3.6.1-16: Increasing the role of R & D & I in the higher education system through intelligent specialization in Sopron and Szombathely
- EFOP-3.6.1-16: Launch of Research Development and Education Activities on ELTE Szombathely Campus
- EFOP 3.6.2-16: Thematic research collaborations laying the foundations for innovative IT and infocommunication solutions
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- EFOP-3.6.3-16: Development of Talent Management and Researcher Replacement in the Field of Autonomous Vehicle Management Technologies – Interdisciplinary Informatics
- EFOP-3.6.3-VEKOP-16: Integrated Researcher Training Program in Disciplinary Fields of Informatics and Computer Scienced

Bilateral S&T co-operations:

- 2019-2.1.13-TÉT_IN: Designing Real-Time communication system to support education.
- 2019-2.1.13-TÉT_IN: Design and Implementation of secure and interoperable solutions for next-gen Internet of Things (IoT) applications.
- 2019-2.1.13-TÉT_IN: Learning multimodal embedding for Agriculture and IT service industry

Research Areas


- Artificial Intelligence and Machine Learning
- Applications in Human-Machine Interaction
- Autonomous Systems
- Computational number theory
- Computer networks
- Cybersecurity
- Data Science
- Harmonic Analysis and approximation theory with applications
- Information systems modelling and cognitive information systems
- Materials Science
- Mechanical engineering -Biomechanics
- Programming languages
- Software technology
- Unconventional models of computations



Education

Degree programs


Bachelor

- Computer Science, BSc, HU, EN 
- Mechanical Engineering, BSc, HU, EN
- Mechanical Eng. dual, BSc, HU
- Technical Management, Bsc, HU

One-tier (or undivided)

- Informatics teacher (5yr), HU

Master

- Mechanical Eng MSc, HU, EN
- Computer Science for Autonomous Systems, MSc, EN
- Computer Science, MSc, HU, EN 
 - Artificial Intelligence, EN
 - Autonomous Systems MSc, EN (EIT Digital)
 - Cyber Security, EN (EIT Digital)
 - Data Science, EN (EIT Digital)
 - Digital Manufacturing MSc, EN (EIT Digital)
 - Fintech MSc, EN (EIT Digital)
 - Information systems, HU
 - Modelling, HU
 - Software Technology HU, EN
- Cartography, MSc, HU, EN

Doctoral

- Doctoral School of Informatics, HU, EN
- Doctoral School of Cartography, HU, EN

Year	2018	2019	2020
Number of all students:	2776	3030	3247

- 66% increase in CS, BSc, EN; 300% incr. in CS,MSc,EN in 3 years
- Internship opportunity 240hrs or 560hrs at 100+ companies

Vocational training

CS, Software Development Specialization, 2 YR

Summer Schools

- EIT Digital Summer School, Machine Learning for Financial Data
- Carpathian Basin Summer University
- Central-European Functional Programming School (CEFP), vol. 8086. Springer 2015. (ISSN 0302-9743)

Supporting students

- Student Support Centre
 - learning methodology development courses
 - BSc, IP-18fPRETMKG, 2 ECTS
 - MSc, IPM-20fmiPREPG, 2 ECTS
 - counselling, life coaching, crisis intervention
- Neumann János Talent Development Association

Institutes, Departments, Centres

Institute for University - Industry Collaboration

- Department of Data Science and Technology (industrial department: Deutsche Telekom)
- Department of Artificial Intelligence (industrial department: BOSCH)
- EIT Digital Budapest Co-Location Centre
- Cooperation Center for IT Research and Education

Savaria Institute of Technology

Institute of Computer Science

- Dept. of Algorithms and its Applications
- Dept. of Information Systems
- Dept. of Computer Algebra
- Dept. of Numerical Analysis
- Dept. of Programming Theory and Software Technology
- Dept. of Programming Languages and Compilers
- Dept. of Media and Educational Technology

Institute of Cartography and Geoinformatics

Software and Data Intensive Services Competence Centre



Academic staff in numbers:

2017	2019	Academic title
10	10	Professor
38	40	Associate professor
46	50	Senior lecturer
33	34	Assistant lecturer
16	19	Engineering- technical teacher, master lecturer
1	2	Research professor
2	2	Senior research fellow
7	22	Research fellow, Assistant research fellow
153	179	Total

Jobs

Due to the large numbers of project, industrial, research, grant co-operation openings we are constantly looking for individuals both for PhD scholarships and job vacancies.

For further information on projects please contact the project directly or the Leadership of the faculty is happy to forward your request to research team.

International Co-operation

CEEPUS HU-0019 Network, Co-ordinator, ~70 mob/yr

- Ministers' Prize of Excellence 2004, 2007, 2019

EIT Digital

- Founding HEI of Budapest Node, full member since 2017

ERASMUS+

- European Universities CHARM-EU
- Erasmus+ Erasmus Mundus Common Master Educations: Intelligent field Robotic Systems (IFRoS)
- Erasmus+ Strategy Partnership 2020: Promoting Sustainability as a Fundamental Driver in Software Development Training and Education
- 85 Erasmus+ IIA

ELTE Faculty of Informatics with its wide-range of international co-operations and experience, is happy finding ways establishing joint education programs.

Third Mission

- Informatics for non-IT students, 11 courses 4-10 ECTS, in Hungarian
- T@T Lab, trainings, programs for elementary school children
- Bebras Challenge, International Challenge on Informatics and Computational Thinking, 12.000 participants in 2020

