

Why to choose Budapest for specialization?



- You can work on **large-scale innovative projects** initiated by industrial partners, i.e. Ericsson Hungary, Nokia Siemens Network, Telecom Hungary, Cisco and ELTE-Soft.
- You can experience the lively atmosphere of the **InfoPark**, where the university is co-located with the industrial partners.
- You can enjoy the unique urban culture and vivid nightlife of Budapest with its world famous ruin pubs and exclusive spas.

The **X•Europe** Consulting Office



The **Central and Eastern European students** who are joining the EIT ICT Labs Master School have an additional resource for help. The **EIT ICT Labs X-Europe Consulting Office** located in **Budapest**, Hungary, has been created for them to bring the EIT ICT Labs MSC programmes to their attention, and to help them gain access to the programme of their choice. The X-Europe team uses region specific knowledge in accessing the students, and provides them with up-to-date information as and when required by them, both face-to-face and online:

- technical information on the programmes, including the curricula and the internships
- practical information on the application requirements, application deadlines and available scholarships
- assistance with preparing the application materials, with a particular emphasis on writing the motivation letters.



To learn more about the EIT ICT Labs Master School, the Budapest X-Europe team and its Consulting Office, visit www.ictlabs.elte.hu
www.facebook.com/X-Europe
or e-mail xeurope@ictlabs.elte.hu.

Do a Master's Programme in Information and Communication Technologies in Budapest

Study **Security and Privacy** at the **Eötvös Loránd University (ELTE)**



EIT ICT Labs
MASTER SCHOOL
www.masterschool.eitictlabs.eu

What is the background of the EIT ICT Labs Master School?

- ICT Labs is the European Union's, and more specifically, the EIT's (European Institute of Innovation and Technology) [Knowledge and Innovation Community focused on Information and Communication Technology \(ICT\)](#). The community emerged from the recognition that the best results (products) in the field of ICT can only be achieved through the close collaboration of experts representing three sectors: education, research and industry.
- [EIT ICT Labs](#) has recently set up its [Master School](#). The objective behind it is twofold. On the one hand, it aims to provide the students with a sound [technical knowledge](#); on the other hand, it aims to stimulate an [entrepreneurial mindset](#) and develop valuable [business skills](#). The students are expected to use their technical knowledge to generate breakthrough innovations on the global markets.
- The [EIT ICT Labs Master School](#) now offers a two-year programme in which students can choose two universities in two different European countries to build a curriculum of their choice. There are [seven technical majors available](#), from which the students choose one based on their skills and interests.

Why to choose EIT ICT Labs Master School?

- 1 A 2-year programme at [2 different universities](#) from [8 countries](#)
- 2 [19 top universities](#) across Europe to choose from
- 3 [7 MSc programmes](#) in the most innovative research fields in ICT
- 4 High level technical education combined with an [Innovation & Entrepreneurship minor](#)
- 5 Research and work experience at [leading industrial partners](#)
- 6 [Double degrees](#) and an [Innovation and Entrepreneurship EIT ICT Labs Certificate](#)

The structure of the Technical Majors and of the Innovation & Entrepreneurship Minor:

The Technical Majors (90 ECTS) consist of three parts:



The Innovation & Entrepreneurship Minor (30 ECTS) consists of four parts:



Security and Privacy (S&P)

When to choose this major?

- 1 You have to join this programme if you are interested in the very complex and challenging field of [information assurance](#).
- 2 You wish to study the design, development and evaluation of [secure computer systems](#) which are ideal for ensuring [privacy for future ICT systems](#).
- 3 You wish to improve your knowledge of [core network security principles, traffic filtering, traffic analysis, cryptography, tunnelling and encapsulation, public-key infrastructure, remote-authentication protocols and virtual private networks](#).
- 4 You wish to work for a company that provides product services, such as telecom companies, financial institutes, software and hardware vendors.
- 5 You wish to start your own company, providing product or technology development, business development or consultancy services.
- 6 You wish to have an advanced research career in the industry or in the academia.

What are the goals of the programme?

- 1 To develop an understanding of the concepts and technologies for achieving confidentiality, integrity, authenticity, and privacy protection for information processed across networks.
- 2 To develop competences in communication, knowledge integration, open innovation and technology management valuable both in business and technology.



In what areas does S&P have an important role?

- Future Media and Content Delivery
- Smart Spaces
- Smart Energy Systems
- Intelligent Mobility and Transportation Systems
- Digital Cities
- Health and Wellbeing
- ICT-Mediated Human Activity

The structure of the Security and Privacy major

1st year: Common base

It develops a common background and prepares the students for all the technical specializations offered in the programme.

2nd year: Specialization on Advanced Cryptography

It focuses on the general ideas, techniques and methods of Applied Cryptography, and gives a solid theoretical background in security in a wider context.

Courses related to five main disciplines:

- Network Security
- Software OS/Security
- Information Security Management
- Cryptography
- Privacy
- Electives

Courses:

- Applied Cryptography Project Seminar
- Cryptographic Protocols
- Cryptography and its Applications
- Economics of Security and Privacy
- Electives: Applied Cryptography Project Seminar