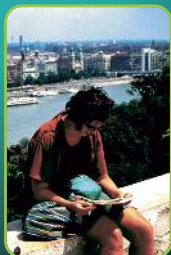


## Why to choose ELTE for specialization?



- You can join **strong research groups** involved in analysing complex systems used in social services, communication networks and in services provided by telecommunication software.
- 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



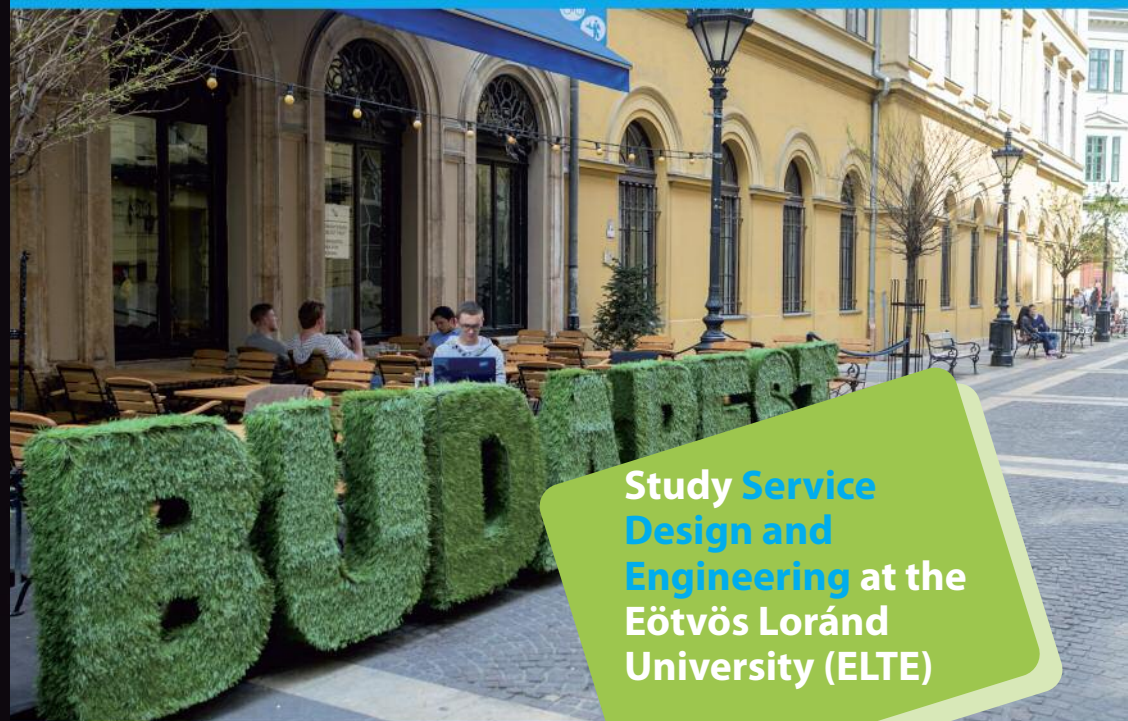
The **Central and Eastern European students** who are joining the EIT ICT Labs Master School have an additional resource for help. The **EIT ICT Labs X-Europe Consulting Office** located in **Budapest, Hungary**, has been created for them to bring the EIT ICT Labs MSC programmes to their attention, and 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](http://www.ictlabs.elte.hu) [www.facebook.com/X-Europe](https://www.facebook.com/X-Europe) or e-mail [xeurope@ictlabs.elte.hu](mailto:xeurope@ictlabs.elte.hu).

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



Study **Service Design and Engineering** at the **Eötvös Loránd University (ELTE)**



EIT ICT Labs  
**MASTER SCHOOL**  
[www.masterschool.eitictlabs.eu](http://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:



## Service Design and Engineering (SDE)

### When to choose this major?

- 1 You have to join this programme if you are interested in **digital, software intensive services** towards which the whole industry, software technology and engineering, and information systems are shifting from software products!
- 2 You wish to cope with novel **challenges and opportunities** that sensor networks, social computing, peer-to-peer interactions, mobile, location and context aware services, and more generally, **the merging of the real and virtual worlds** in all spheres of human life create.
- 3 You wish to use the **new advances in cloud computing** to deal with the current information overload and the growing demand for new service models.
- 4 You wish to work as a software engineer, software/information architect, systems engineer, business/service development manager, account manager, enterprise architect or consultant.
- 5 You wish to take up a management or leadership position at the international level.
- 6 You wish to have an advanced research career in the industry or in the academia.



### What are the goals of the programme?

- 1 Develop the multidisciplinary technical skills that are needed for the designing and building of digital, software intensive services based on service-oriented architectures.
- 2 Develop an understanding of and the ability to analyse the organizational settings and the user and business requirements in which the service-based systems are deployed and used.
- 3 Bridge the gap between Computer Science and Software Engineering, and between Information Technology and Information Systems.

### In what areas does SDE have an important role?

- Health and Wellbeing
- Smart Energy Systems
- Digital Cities of the Future
- Intelligent Mobility and Transport
- Smart Spaces

### Service Design and Engineering at ELTE

#### 1<sup>st</sup> year: Common base

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

#### Courses related to four main disciplines:

- Introduction to Services
- Complex Systems Architecture
- Information Systems
- Software Engineering and Development
- Electives

#### 2<sup>nd</sup> year: Specialization on Distributed Software Systems

It supports the design, analysis and development of complex distributed telecommunication services.

#### Courses:

- Development of Distributed Software
- Service-Oriented Integration
- Analysis of Distributed Systems and Process Structure
- Electives:

*Large-scale Projects for Analysis and Development of Complex Telecom Software*  
*Design of Distributed Systems*  
*Reverse Engineering of Complex Software Systems via Static Analysis*