eit Digital
MASTER SCHOOL

Tomorrow's Digital Innovators and Entrepreneurs

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EIT Digital Master School

Our Master School offers two-year, European postgraduate programmes in computer science and information technology, with a focus on innovation and entrepreneurship. The Master School is delivered by leading European universities, partners of EIT Digital.

European mobility

Master School students follow a scheme where they study one year at an 'entry' university and one year at an 'exit' university in two of EIT Digital's hot spots around Europe. Upon completion, graduates receive degrees from the two universities and a certificate awarded by the European Institute of Innovation and Technology.

Universities involved

On the Master School website the Trackfinder visualises the options for combining different technical programmes and specialisms. It allows matching of interests to the Master School Technical Programmes. Choose one university for the entry year and a second university in a different country for the exit year.

The programme structure

The first year starts with basic courses to lay the foundation for the chosen technical programme focus. At the same time hot topics in business and management will be covered. During the second semester a design project is combined with business development exercises. These teach how to turn technology into business and how to present a convincing business plan. In addition, some elective courses may be taken. In between the first and second year, a summer school will address business opportunities within a socially relevant theme. The second year offers a specialisation and a graduation project. The graduation project includes an internship at a company or a research institute and will result in a Masters thesis with a strong innovation and entrepreneurship dimension.

"Not just an education but a pan-European ecosystem and a life changing experience"

Career prospects

The EIT Digital Master School offers an ideal combination of technology and business. It is not just an education but a pan-European ecosystem and a life changing experience. Learning how to turn technology into business is a ticket to a successful career. Graduates will be prepared for entrepreneurial employment in established companies and innovative knowledge institutes. They will also be ready to create their own business.

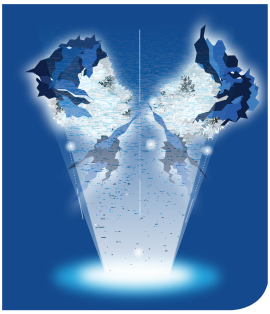
Cloud Computing and Services

The programme in Cloud Computing includes electronic commerce, mobile services, online social networks, web services, and knowledge discovery. What these applications have in common is that information sources and controls are **decentralised** over the network and provided by one or several computing centres that offer different cloud computing service models like **Infrastructure, Platform, and Software as a Service**. Cloud Computing and Services provides students with a system of knowledge in formal foundations, technological platforms and practical skills in implementing cloud-based applications.

Data Science

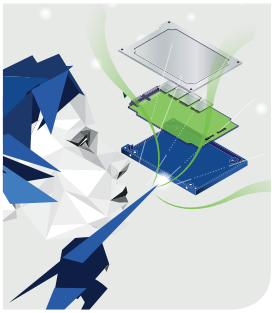
Data abounds: social media, manufacturing systems, medical devices, and countless other sources generate petabytes of data on a daily basis. With this wealth of data, we are at a point in history where we can conduct detailed analyses to detect, discover, and, ultimately, better understand the world around us. In this programme, students learn about **scalable data** collection techniques, data analysis methods, and a suite of tools and technologies that address **data capture, processing, storage, transfer, analysis, and visualisation**.

Digital Media Technology



The media industry is a large, global market that includes publications, TV, radio, film and music, interactive and digital media, the gaming industry and advertising, as well as a large and versatile supply chain industry. Digital Media Technology focuses on enabling technologies for digital media systems, including technologies for analysing media, generating **interactive media**, processing and coding, optimising wired and wireless transfer, and distributing digital **3D contents**. Graduates of the Digital Media Technology programme will be both specialists and innovators who are able to shape future digital media technology.

Embedded Systems



Embedded Systems focuses on enabling technologies and design methodologies for computer systems. These computer systems are embedded as integral parts of larger systems designed for **specific control functions** of devices with various electronic and mechanical components. More than 98 percent of the world's processors are located in embedded systems. In satellites, robots, cars, aeroplanes, mobile telephones, radio transceivers, elevators and washing machines. They form an integral part of the **Internet of Things**.

Human Computer Interaction and Design

The programme focuses on study, design, development and evaluation of novel user interfaces and interactive systems which take into account **human cognitive and sensory-motor responses** and how these influence both technological and business requirements. The programme is interdisciplinary with courses on design and evaluation of interactive systems and a strong emphasis on **user-centred design techniques**. It is important to understand human responses to and consequences of using information technology as a tool for solving work-related tasks and in product development.

Internet Technology and Architecture

Internet Technology and Architecture focuses on **advanced networking** technologies and architectures for the design and management of modern, **distributed computer systems and networks**. Internet Technology and Architecture provides students with both theoretical concepts and practical tools that will develop critical thinking in assessing entrepreneurship opportunities and devising appropriate strategies to turn ideas into profitable business ventures.

Security and Privacy

Security and Privacy focuses on the design, development and evaluation of secure computer systems, which are also capable of ensuring privacy. The course teaches a **constructive security approach** to the very complex and challenging field of **information assurance**. Students learn concepts and technologies used for achieving confidentiality, integrity, authenticity, and privacy for information processed across networks. Topics include core network security principles, traffic filtering, traffic analysis, cryptography, tunnelling and encapsulation, public infrastructure, remote authentication protocols, and virtual private networks.

Software and Service Architectures

Every day, we depend on digital services when reading news, listening to music, keeping in touch with friends, shopping or booking tickets. **Digital services** changed our lives as individuals, societies and economies. This programme includes **advanced software design** and the analysis, design, development and operation of digital services. Students learn how to create and evaluate different types of service designs and how to combine both the technological and business-related elements.

Innovation & Entrepreneurship

Entrepreneurial skills are considered a core competency of top talent in any organisation. Best-in-class engineers and researchers combine excellence in science and technology with outstanding entrepreneurial behaviour. Therefore, four course modules of Innovation and Entrepreneurship are offered at all universities. The basic courses build fundamental knowledge of innovation and entrepreneurship matters. Business Development Lab courses and thematic Summer Schools provide hands-on experience of innovation and new business development. Why? Simple! We want our graduates to set the bar for breakthrough innovation in new products and services, to become the digital transformation agents in companies of any size.

Scholarships

Both standard and excellence scholarships for the Master School are available. Check the website for more information.

Online and Blended Learning

In parallel with campus based delivery programmes, it will be possible to take the first semester of some of them online. This ambitious programme of blended learning will, in the future, lead to students having the option of accessing any of the campus based programmes half way through the first year, via an alternative online entry mechanism.

Contact information

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