eit Digital
MASTER SCHOOL

Tomorrow's Digital Innovators and Entrepreneurs

masterschool.eitdigital.eu

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's programmes are 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 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 specialisations. 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 Master's 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.

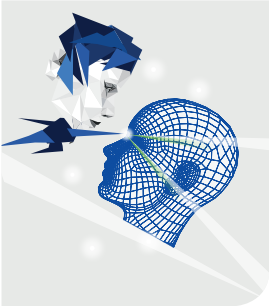
Cloud and Network Infrastuctures

Cloud and Network Infrastuctures provides a comprehensive **view on network and cloud computing**. Students will learn to master network management, operation, and design on the one hand and cloud service and deployment models, implementation strategies, and application design on the other. The programme also focuses on **future directions** of cloud computing, for example, in the fields of **edge and fog computing** as well as **blockchains** and **distributed ledger applications** respectively.

Data Science

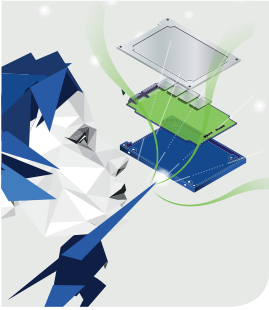
Data abounds: social media, manufacturing systems, medical devices, and countless other sources generate petabytes of data on a daily basis. With this wealth of data, we are at a point in history where we can conduct detailed analyses to detect, discover, and, ultimately, better understand the world 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**.

Visual Computing and Communication



Visual Computing and Communication focuses on the acquisition, processing, analysis, transmission, and rendering of **visual information**, including aspects of learning and decision making. This is a perfect programme for candidates who are fascinated by the algorithms and services that handle visual information in today's digital society. Students can be active in the areas of **image processing** and communication, **image analysis**, computer vision, **computer graphics, augmented reality**, visualisation, visual analytics, and web-based and network applications. They are equipped to create products and services for our ocular-centric world.

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.

Cyber Security

Cyber Security focuses on the study of the design, development and evaluation of secure computer systems, which are also capable of ensuring privacy for future ICT systems. Students learn about the future directions of the field including **blockchain technologies, crypto-currencies, practical (ethical) hacking,** and **quantum cryptography**. The programme provides an understanding of the concepts and technologies for achieving confidentiality, integrity, authenticity, and privacy protection for information processed across networks.

Autonomous Systems

Autonomous Systems combines Computer Science and Electronic Engineering to focus on **self-driving cars, robotics and artificial intelligence**. Students learn the latest theoretical knowledge and know how to apply their skills in practical real-life problems. Typical application areas of autonomous systems include autonomous vehicles, intelligent robots, industrial IoT and autonomous software systems.

Find out more at

masterschool.eitdigital.eu

Email: masterschool@eitdigital.eu

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.

Contact information

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EIT Digital is supported by the EIT,
a body of the European Union