

# Business Information Systems

**You will learn skills related to designing, implementing and testing of digital products and services. In addition, you will learn how to work in different roles in various software projects during the year.**

ICT sector is ever growing. Digitalization of goods and services is changing our society rapidly. Studying business information systems will provide you with versatile ICT knowledge and skills that help you to work in an expert role in any business or organization that focuses on utilization or implementation of digital products and services. Examples of these are games, web-sites, web-shops and services, social media applications, mobile services and IoT-technology based services.

The study year will consist of four modules:

- Digital products and services (Autumn)
- eBusiness Project (Autumn)
- Mobile Services (Spring)
- Mobile Project (Spring)

In order to participate in the modules you should have the basic knowledge of the following: programming, front-end technologies (HTML, CSS, JavaScript) and databases. Basic knowledge on PHP or other similar backend scripting language is recommend as well.



*"Learning for your lifetime - that is how I can describe my study time in Oulu. As part of my double degree programme I could enjoy studying one year abroad at the Oamk. By individual working tasks, I could develop my hard skills in my study field, which I could prove while working together with international students in projects. Studying at the Oamk means a good practise for your future working life since one big focus is on training you to work together, and learning to communicate with your team members to achieve best results. Besides the educational aspect, I could even more profit from experiencing a new way of life in a different environment. I met new friends from all over the world, had the chance to explore the beautiful nature of northern Europe - and definitely learnt for my lifetime."*

Larissa Sepperer,  
Neu-Ulm University of Applied Sciences

# Business Information Systems

*The Autumn period focuses on designing and implementing digital products and services. The first module is theory-based and topics include search engine optimization, marketing, and technologies for building commercial web applications. In the following project you will apply this knowledge in an actual eBusiness case. The Spring period focuses on mobile devices and how to design products and services for them.*

## Digital products and services, 15 credits

IT00BN26-3003

The student manages the commercial mathematics and revenue logic related to digital products and services and understands the basics of digital marketing. The student knows how to build and maintain eCommerce, and knows how to use eCommerce platforms. The student recognizes the immaterial property rights and licenses and is able to compare the protection given by them and the purpose of use for the copyright holder. The student understands the business possibilities created by new technologies, and is able to write and implement a marketing plan for a digital product or service. The student is able to take advantage of the internet visibility in digital marketing.

Content:

- Business potential created by new technologies
- Digital marketing
- Commercial mathematics
- eCommerce
- Immaterial rights and licenses
- Web application architecture, selected web application framework

## eBusiness Project, 15 credits

IT00BN27-3003

The student is able to work in typical work environments for the information processing field and in the professional networks familiarizes with business information systems and processes. He/she masters the professional language and is able to use and create documentation in English. Project work utilizes open data. The aim of the project is to create a new business that is visualized using of videos and animation. The application is implemented using programming tools. The student is able to design and implement a web application on a selected web application framework. The student is able to work in the development team. The student is able to use version management. The student is able to use project management tools. The student can utilize social media for sales and marketing. The student documents his/her competence and work contribution in a portfolio. The student is able to evaluate and develop his/her learning skills.

Content:

- English language: working in a multicultural project
- Content creation: images, videos, social media
- Web application architectures: Development of web application. Version management. Project management
- Project: planning and implementation, application
- Portfolio: document own contribution, project outcome.

## Mobile services, 12 credits

IT00BN28-3002

The student understands the business potential of mobile services. He/she is able to plan an user-oriented mobile service which takes advantage of the features of the mobile device in question. The student knows the design principles for a cross-platform web application. The student understands the characteristics of mobile devices and mobile user interfaces. The student can use the software framework in the implementation of a mobile service.

Content:

- User-oriented design: usability, user experience
- Mobile services: characteristics of mobile devices, cross-platform web application
- Software frameworks
- Programming a mobile service

## Mobile project, 15 credits

IT00BN30-3002

The student is able to implement an user-oriented mobile service which takes advantage of the features of the mobile device in question. The student understands various testing methods and is able to plan and carry out the testing in a mobile project. The student deepens and diversifies his/her project skills. The student shows his/her competence and work contribution by making a study portfolio.

Content

- User experience: user-oriented contextual inquiry, user interface design.
- Testing: Testing methods, planning and implementation.
- Project: planning and implementation.
- Portfolio: document own contribution, project outcome

*In addition to the four modules presented above you are recommended to study the basics of the Finnish language (3 credits). You will also have an option to select few 3-5 credit courses on various topics of business information systems*