

## CURRICULUM

### **Bachelor of Business Administration, Degree Programme in Business Information Technology**

Business Information Technology is a growing field with an increasing demand for applications and services. The rapidly developing technology constantly creates possibilities for developing new business models. The development work requires very good professional competences and challenges experts to continually update and renew their skills and competences. The degree in Business Information Technology at Karelia University of Applied Sciences offers you an up-to-date and diverse basis for work tasks in the ICT field as well as for developing your skills and competences. Studies relate to real work projects using modern learning environments. As a student of Business IT you have the opportunity to build networks with ICT companies and other experts of the field.

## **Degree**

Degree title Bachelor of Business Administration

Extent 210 cr / 3.5 yrs

## **Typical tasks for graduates**

With a Bachelor of Business Administration from the Business IT Degree Programme you have the competence to work in tasks requiring expertise in Software Engineering, Application Development and Services. You can participate, for example, in developing applications, e-Business and online services or game industry. In your studies you will develop skills and competences to work as an Enterprise Application Expert, Programmer, Software Developer, System Administrator, Project Manager, IT Support, Game Logic Programmer, Game Scripter, Artificial Intelligence Programmer or Graphics Programmer. You have also the opportunity to gain entrepreneurial competences.

## **Implementation of Studies**

The BBA studies are implemented using multimodal online-learning. Online studies develop your skills to work in modern, distributed and virtual expert organisations. The studies allow flexibility regarding the time and place of study (e.g. the recordings of the lectures, development environments are available also from outside of school). Part of the studies are organised together with the Information Technology Degree Programme. Your working environments are modern, and various development platforms and technologies are utilized in the courses.

The project studies in particular engage you with authentic development tasks. During your studies you work in different projects both within your degree programme and with local companies. In projects you will not only develop your professional competences but also your interaction and team work skills.

## Structure and Content of Studies

Your degree programme contains common core and complementary studies enhancing your key and specialised competences. In the Degree Programme in Business IT the extent of common core studies is 165 cr and complementary studies 45 cr. The common core studies contain 54 cr of project studies, 30 cr of practical training (i.e. work placement) and 15 cr for the thesis. The thesis process is divided into three 5-credit courses. Each course can be completed at different stages of studies. However, the thesis plan needs to be accepted before the implementation phase.

Project studies are a significant part of your studies. With the help of projects teaching can be flexibly adjusted to the new demands and challenges of the fast developing ICT-field. Project studies contribute to deepening your knowledge in gaming development, web application development or e-business projects. A project organisation comprises students acting in different roles. Teachers ensure by customised teaching that the project members have sufficient skills and knowledge before starting a project. Projects are large entities in which proceeding takes place in stages and are managed with agile methods and add to your credit points. Projects are evaluated by unified criteria to ensure balanced grading in order to support your professional development.

The complementary studies mostly contain modules of 15 credits. During complementary studies you can deepen your knowledge in the following units that will take place in the 2<sup>nd</sup>-4<sup>th</sup> year of your studies:

- E-Business and Services
  - E-Business
  - Enterprise Resource Planning and Customer Relations Management Applications
  - Data Management and Information Security
- Software Engineering
  - Software Development
  - Design and Usability
  - Software Architectures

Additionally, you can take complementary courses from the common Karelia UAS selection:

- Management and Leadership
- Business Competence and Entrepreneurship
- Customer-Oriented Marketing
- Financial Administration and Taxation in Practice
- Geoinformatics
- Expertise pertaining to Russia
- Developing Competence in Ageing

- Innovation and Productisation
- International Studies 1
- International Studies 2
- Optional language studies (Spanish, Chinese, French German, Russian)
- Refresher courses in languages and mathematics (3-9 cr)
- Training programme of Joensuu Sports Academy (3-15 cr)
- Participation in peer tutoring and student union activities (3-15 cr)

The complementary studies take place in the autumn and spring terms of the second study year, in the spring term of the third study year and the autumn term of the fourth study year. You can take some complementary study modules also as summer courses. The Sports Academy Training, Student Union and Tutor Activities as well as the optional language studies can spread over several semesters. If the studies mentioned above do not match with your professional objectives, you can discuss other alternatives with your teacher tutor or counsellor.

# BUSINESS INFORMATION TECHNOLOGY

Bachelor of Business Administration | 210 cr / 3,5 years



Information Systems Competence | ICT-infrastructure Competence | ICT-development Competence | Business Competence | Ethical Competence | Internationalisation Competence | Learning Skills | Innovation Competence | Work Community Competence

4 <sup>th</sup> year		ICT PROJECT DEVELOPER	
Thesis	15 cr		
Career Planning and Development	1 cr		
Complementary Studies	15 cr		
3 <sup>rd</sup> year		ICT PROJECT LEADER	
Practical Training (Work Placement)	30 cr	A Commissioned ICT Project	13 cr
		ICT Deployment Project	13 cr
		Corporate Communication	2 cr
		Career Planning and Development	1 cr
2 <sup>nd</sup> year		ICT PROJECT EXPERT	
ICT Trainer Skills	2 cr	ICT Design Project	6 cr
Sociala kontakter	3 cr	Expert Communication	2 cr
Agile Development Project	10 cr	Svenska för IT-branschen	3 cr
Complementary Studies	15 cr	Professional English	3 cr
		Career Planning and Development	1 cr
		Complementary Studies	15 cr
1 <sup>st</sup> year		ICT PROJECT PARTICIPANT	
Career Planning and Development	2 cr	ICT Business	5 cr
Introduction to Information Technology	5 cr	Object-Oriented Programming	5 cr
Operating Systems and Development Environments	5 cr	SQL and Database Management Systems	5 cr
Introduction to Programming	5 cr	Software Engineering	3 cr
Programming Techniques	5 cr	Project Management and Quality Assurance	6 cr
Reporting and Written Communication	2 cr	User Interface Design	3 cr
English Communication Skills	3 cr	Essential ICT English 1	3 cr
Database Management	3 cr		

## Competence Requirements

Competence Area	Description of the competence Bachelor of Business Administration (UAS)
Information Systems Competence	<ul style="list-style-type: none"> <li>- understands information systems as a whole and their customer-oriented production, procurement and implementation as well as the principles of data management from the development perspective</li> <li>- is able to define, design, program and test usable software, database services and interface taking into account data security</li> <li>- is able to document and interpret documents, for example, in maintaining applications</li> <li>- is able to plan and implement a training</li> </ul>
ICT-infrastructure competence	<ul style="list-style-type: none"> <li>- is able to select the application services and development environments required in a project</li> <li>- is able to take information security issues into account when making decisions concerning ICT infrastructure</li> </ul>
ICT-development competence	<ul style="list-style-type: none"> <li>- understands the nature of ICT development and the entity of development work in an organisation</li> <li>- is able to work in distributed development and production environments</li> <li>- is able to design and change his/her work environment between local and distributed development and production environments according to the needs of the development work</li> <li>- understands the increased role of sharing knowledge in remote work projects</li> <li>- understands the meaning of goal-oriented and responsible actions for the success of a project</li> <li>- is able to utilise appropriate tools supporting distributed and local development environments</li> <li>- is able to recognize and manage risks in ICT development work</li> <li>- is able to apply his/her knowledge and skills in an ICT field and to analyse, evaluate and develop operations in this field</li> </ul>
Business Competence	<ul style="list-style-type: none"> <li>- understands the central processes and functions of a business</li> <li>- understands the role of ICT in an organisation and its role in developing business operations</li> <li>- is able to develop business processes and look for support for solutions in Information Technology</li> <li>- understands the significance of agreements, offers, licences and intellectual property rights in his/her work</li> </ul>
Ethical Competence	<ul style="list-style-type: none"> <li>- is able to assume responsibility for one's own actions and their consequences</li> <li>- is able to work according to the code of professional ethics of one's field</li> <li>- is able to take different parties into account</li> <li>- is able to apply the principles of equality</li> <li>- is able to apply the principles of sustainable development</li> </ul>

Innovation Competence	<ul style="list-style-type: none"> <li>- is able to solve problems and develop working methods innovatively</li> <li>- is able to work in projects</li> <li>- is able to carry out research and development projects and to apply existing knowledge and methods of one's field</li> <li>- is able to find customer-oriented, sustainable and profitable solutions</li> </ul>
Internationalisation Competence	<ul style="list-style-type: none"> <li>- has the language competence necessary for the work in the field and its development</li> <li>- is able to cooperate with people from different cultural backgrounds</li> <li>- is able to take into account the opportunities and effects of internationalisation at work</li> </ul>
Learning Skills	<ul style="list-style-type: none"> <li>- is able to assess and develop one's competences and learning methods</li> <li>- is able to retrieve/ search, process and analyse information critically</li> <li>- can assume responsibility for team learning and knowledge</li> </ul>
Work Community Competence	<ul style="list-style-type: none"> <li>- is able to function as a member of a work community and contribute to its work well-being</li> <li>- is able to function in various communication and interaction situations at work</li> <li>- is able to use information and communication technology in the tasks of one's field</li> <li>- is able to create business contacts and to work in professional networks</li> <li>- is able to make decisions in new and unforeseeable situations</li> <li>- is able to supervise others as well as to work independently in expert tasks</li> <li>- has entrepreneurial abilities</li> </ul>