

**Curriculum at LAB University of Applied Sciences  
2023-2024**

**Bachelor of Business Administration, Business Information  
Technology 23K, full-time studies, Lahti**

Code	Name	1 y	2 y	3 y	4 y	ECTS total
<b>LLTIBIT23K-1001 Core Competences</b>						<b>15</b>
AY00CE71	Developing Professional Competences 1	3				3
AY00CE72	Developing Professional Competences 2		1			1
AY00CE73	Developing Professional Competences 3			1		1
A300CE13	Orientation to Sustainability Thinking	2				2
KE00CE74	Intercultural Awareness	3				3
KE00CE75	English for Professional Communication	5				5
<b>LLTIBIT23K-1002 Professional Core Competences</b>						<b>104</b>
<b>LLTIBIT23K-1003 Business Studies</b>						<b>14</b>
AL00CE37	Customer Relations and Marketing	5				5
AL00CE39	Logistics and Supply Chain Management	5				5
AL00CE40	Entrepreneurship, Transforming Innovations into Sustainable Business	4				4
<b>LLTIBIT23K-1004 Information Systems in Business</b>						<b>15</b>
AL00CO05	Business Processes and Information Systems		5			5
AL00CO06	Information System Design		5			5
AL00CO07	Designing Digital Service		5			5
<b>LLTIBIT23K-1005 Website Development</b>						<b>15</b>
AL00CO08	Static Websites	5				5
AL00CO09	Web Publishing and Usability	5				5
AL00CO10	Website Development Project	5				5
<b>LLTIBIT23K-1006 Application Development</b>						<b>15</b>
AL00CO11	Introduction to Programming	4				4
AL00CO12	Introduction to Programming Logic	2				2
AL00CO13	Software Development Process	4				4
AL00CO14	Iterative Application Project	5				5
<b>LLTIBIT23K-1007 Software Development</b>						<b>15</b>
AL00CO15	Object-oriented Programming		5			5
AL00CO16	Data Storages		5			5
AL00CO17	Agile Application Development Project		5			5
<b>LLTIBIT23K-1008 Dynamic Web Development</b>						<b>15</b>

AL00CO18	Browser-side Technologies		5			5
AL00CO19	Three-tier Architecture Technologies		5			5
AL00CO20	Dynamic Website Development Project		5			5
<b>LLTIBIT23K-1009 Development of IT Expertise</b>						<b>15</b>
AL00CO21	Utilising Data in Business	5				5
AL00CE26	Anticipating Future Trends and Innovation Management			5		5
AL00CE27	Research and Development			5		5
<b>LLTIBIT23K-1010 Complementary Competences</b>						<b>46</b>
<b>LLTIBIT23K-1011 Business Related Language Studies</b>						<b>11</b>
K200CE69	Finnish 1	3				3
K200CE70	Finnish 2	3				3
KR00BU42	Swedish for Work, Spoken	1				1
KR00BU43	Swedish for Work, Written	1				1
KS00BT59	Expert Communication Skills	4				4
AL00CE30	Presentation and Promotion Skills					0
<b>LLTIBIT23K-1012 Online business</b>						<b>15</b>
AL00CB63	Online Business		5			5
AL00CB64	Online Store Solutions		5			5
AL00CB65	Setting up and Developing an Online Store		5			5
<b>LLTIBIT23K-1013 Business Related Studies</b>						<b>15</b>
AL00CE29	Digital Tools					0
AL00CE31	Business Mathematics					0
AL00CE33	International Business Law					0
AL00CE34	Global Business Environment and Opportunities					0
AL00CE35	Profitability and Budgeting					0
AL00CE36	Financial Accounting					0
AL00CE38	Management and Leadership					0
<b>LLTIBIT23K-1014 Other Studies in LAB (i.e. Language and communication)</b>						<b>0</b>
AL00CQ06	International Intensive Week					0
<b>LLTIBIT23K-1015 Other University Level Studies</b>						<b>0</b>
<b>LLTIBIT23K-1016 Exchange Studies</b>						<b>0</b>
<b>LLTIBIT23K-1017 Practical Training</b>						<b>30</b>
HA00CE59	Practical Training			10		10
HA00CE60	Practical Training 2			10		10
HA00CE61	Practical Training 3			10		10
<b>LLTIBIT23K-1018 Thesis</b>						<b>15</b>
AO00CE62	Thesis planning			5		5
AO00CE63	Thesis Research and Writing				5	5
AO00CE64	Thesis Publication				5	5

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## **LLTIBIT23K-1001 Core Competences: 15 ECTS**

### **AY00CE71 Developing Professional Competences 1: 3 ECTS**

#### **Learning outcomes**

The student is able to

- plan their own learning and cooperate in situations related to their own field of studies
- recognize their own competence and the needs to develop them further and to plan their career path observing them
- act as a group member
- operate in the learning environments of LAB University of Applied Sciences
- picture their own field of studies and its future skills
- give feedback on tuition and services and thus participate in the development of education

### **AY00CE72 Developing Professional Competences 2: 1 ECTS**

#### **Learning outcomes**

The student is able to

- utilize various learning opportunities in curriculum
- recognize and aim their own competences to be in level with the future career requirements
- create a study plan that supports the future career goal
- give feedback on tuition and services and thus participate in the development of education

### **AY00CE73 Developing Professional Competences 3: 1 ECTS**

#### **Learning outcomes**

The student is able to

- identify themselves as a learner and develop their own learning skills
- evaluate innovative or alternative future competences required in their own field
- recognize and aim their own competences to be in level with the future career requirements
- masters the professional concepts of their own field and is able to point out their competencies during job recruitment processes
- give feedback on tuition and services and thus participate in the development of education

### **A300CE13 Orientation to Sustainability Thinking: 2 ECTS**

#### **Learning outcomes**

Identify and define central concepts and frameworks related to sustainability. Recognize the interconnectedness of economic, social and environmental sustainability issues. Understand and develop own individual role in driving sustainability.

#### **Evaluation criterias**

Level 1

Pass-Fail

**KE00CE74 Intercultural Awareness: 3 ECTS****Learning outcomes**

Students are able to

- understand cultural similarities and differences
- work effectively with international partners
- analyze business and work life cultures including Finland using different cultural frameworks
- understand culture adaptation and adjustment.

**KE00CE75 English for Professional Communication: 5 ECTS****Learning outcomes**

Proficiency level: B2

The student is able to

- identify the characteristics of academic texts and to apply academic conventions to their writing
- demonstrate critical thinking and find, evaluate and use information effectively
- communicate clearly and effectively in different generic and field-specific workplace situations both orally and in writing
- function collaboratively in contemporary working environments in English.

**LLTIBIT23K-1002 Professional Core Competences: 104 ECTS****LLTIBIT23K-1003 Business Studies: 14 ECTS****AL00CE37 Customer Relations and Marketing: 5 ECTS****Learning outcomes**

The student is able to

- determine the key concepts of marketing and customer-oriented business
- identify the phases of a marketing and sales process
- recognise customer needs and understand their significance for the success of a company

**AL00CE39 Logistics and Supply Chain Management: 5 ECTS****Learning outcomes**

Student is able to

- use basic concepts of logistics and supply chain management.
- the principles of value chain formation.
- identify the impact of logistics and supply chains on the company's profitability and competitiveness.
- describe the importance of customer orientation and stakeholder cooperation throughout the supply chain.

**AL00CE40 Entrepreneurship, Transforming Innovations into Sustainable**

**Business: 4 ECTS****Learning outcomes**

Student is able to

- understand entrepreneurship through personal development
- find and utilize different customer oriented business opportunities
- evaluate profitability of business idea
- develop business models

**LLTIBIT23K-1004 Information Systems in Business: 15 ECTS****AL00CO05 Business Processes and Information Systems: 5 ECTS****Learning outcomes**

The student knows:

- How to model business processes, information flows and data warehouses using formal notations methods.
- The business process IT-systems: supply chain and network systems (SCM), enterprise resource planning (ERP) and customer relationship management (CRM) systems, as well as competence management (CM) and other management systems (DSS, MIS).
- The importance of quality control in business processes and information systems.

**AL00CO06 Information System Design: 5 ECTS****Learning outcomes**

Student is able to

- design information systems to support business functions
- form a requirement specification for an information system
- model an information system with applicable methods
- utilise basic usability principles in design
- take legal concerns into account in their work regarding information systems

**AL00CO07 Designing Digital Service: 5 ECTS****Learning outcomes**

Student is able to

- ideate and plan a digital service using user driven methods
- utilize co-creation methods
- visualize a digital service
- analyze a meaning of a digital service in business
- know the affecting regulation eg GDPR for a planning of a digital service

**LLTIBIT23K-1005 Website Development: 15 ECTS****AL00CO08 Static Websites: 5 ECTS****Learning outcomes**

The student is able to

- create an HTML site that uses CSS and effectively edit an existing site
- identify needs for static and dynamic content
- use the built-in tools of the web browser to study the structure of the dynamic content and the view of the browser
- describe the principle of server / client architecture

### **AL00CO09 Web Publishing and Usability: 5 ECTS**

#### **Learning outcomes**

The student is able to

- install and maintain content management and publishing systems and their add-ons securely
- use publishing systems to publish content
- identify needs and make choices between different publishing systems
- take into account usability and accessibility when designing the website

### **AL00CO10 Website Development Project: 5 ECTS**

#### **Learning outcomes**

The student is able to

- use teamwork software in a variety of ways
- implement the website together with the other members of the team
- prepare the requirements specification, project plan, implementation plan, test plan and maintenance documentation for the website
- carry out the agreed tasks in accordance with the project plan
- install a simple web server securely

### **LLTIBIT23K-1006 Application Development: 15 ECTS**

### **AL00CO11 Introduction to Programming: 4 ECTS**

#### **Learning outcomes**

Student is able to

- apply a modern software development environment (SDE)
- apply the basic structures of programming
- implement an interactive and modular application

### **AL00CO12 Introduction to Programming Logic: 2 ECTS**

#### **Learning outcomes**

Student is able to

- convert numbers from one number system to another
- perform basic arithmetic operations with binary numbers
- construct and simplify compound propositions

### **AL00CO13 Software Development Process: 4 ECTS**

**Learning outcomes**

The student is able to

- describe the work steps of software development processes
- describe the features of modern and commonly used software development processes
- use tools that support software development processes

**AL00CO14 Iterative Application Project: 5 ECTS****Learning outcomes**

Student is able to

- define, implement and report an iterative project
- act in different roles of a software development project
- implement a HTML user interface following the design
- implement the business logic of a web application
- programmatically parse required data from a structured data set

**LLTIBIT23K-1007 Software Development: 15 ECTS****AL00CO15 Object-oriented Programming: 5 ECTS****Learning outcomes**

Student is able to

- apply the basic concepts of the object-oriented paradigm and object-oriented programming
- create applications using object-oriented language
- design class structure of an object-oriented application
- design, implement, run and report unit tests

**AL00CO16 Data Storages: 5 ECTS****Learning outcomes**

Student is able to

- form queries using SQL
- apply the basic principles of normalization
- maintain databases
- describe the principles of database transactions
- explain the importance of information security in data storage
- describe alternative data storage types

**AL00CO17 Agile Application Development Project: 5 ECTS****Learning outcomes**

Student is able to

- collect and apply information to implement a software development project
- analyze client needs and write corresponding project requirements
- design and implement a software project that uses data storages
- apply agile methods on a practical project
- act alone and as a project group member to fulfill the project goals

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**LLTIBIT23K-1008 Dynamic Web Development: 15 ECTS****AL00CO18 Browser-side Technologies: 5 ECTS****Learning outcomes**

The student is able to

- present www content dynamically with JavaScript and its extensions
- form a dynamic one page application using JavaScript frameworks and libraries
- install an application server and maintain it securely
- publish information and host applications on a server

**AL00CO19 Three-tier Architecture Technologies: 5 ECTS****Learning outcomes**

The student is able to

- recognize the opportunities and limitations presented by application frameworks
- apply commonly used design patterns
- design and implement an application based on server-client principles
- install and maintain a three-tier architecture application

**AL00CO20 Dynamic Website Development Project: 5 ECTS****Learning outcomes**

The student is able to

- plan and apply working methods to a team to ensure effectiveness
- divide a project into meaningful parts and estimate the time requirements
- implement their part of an application and documentation on the project
- choose a process model applicable to the project and apply it

**LLTIBIT23K-1009 Development of IT Expertise: 15 ECTS****AL00CO21 Utilising Data in Business: 5 ECTS****Learning outcomes**

The student knows:

- How to define the organization's internal and external data flows and sources of information in business value creation.
- The life cycle of the data and the steps involved, production, transfer, utilization, reliability level, and validity period.
- Common methods and tools to collect and process the data.
- The appropriate visualization methods.

**AL00CE26 Anticipating Future Trends and Innovation Management: 5 ECTS****Learning outcomes**



Student is able to

- link foresight and innovation into the strategic management of an organization in a changing operating environment
- search, structure, create and utilize foresight information
- innovate and create new solutions with agile development methods

### **AL00CE27 Research and Development: 5 ECTS**

#### **Learning outcomes**

The student is able to

- obtain, utilise and assess R&D-related information and their sources critically
- follow the rules of ethical principles applied in all research activities
- use the most typical research and development methods of their own field
- write a scientific report and is familiar with the requirements for language and style and how to document the sources

### **LLTIBIT23K-1010 Complementary Competences: 46 ECTS**

### **LLTIBIT23K-1011 Business Related Language Studies: 11 ECTS**

### **K200CE69 Finnish 1: 3 ECTS**

#### **Learning outcomes**

The student is able to

- identify and use the course vocabulary and phrases for common everyday situations
- tell about oneself and understand basic questions
- read and write simple sentences related to the course topics.

Proficiency level: A1

### **K200CE70 Finnish 2: 3 ECTS**

#### **Learning outcomes**

The student is able to

- communicate in most common everyday situations
- understand slowly and clearly spoken Finnish when the topic and the vocabulary are familiar
- understand and write a simple message or text
- use the basic vocabulary and some grammatical structures of Finnish.

Proficiency level: A1

### **KR00BU42 Swedish for Work, Spoken: 1 ECTS**

#### **Learning outcomes**

The student is able to

- convey and validate arguments
- use vital field-specific vocabulary

- communicate essential matters about their education, work experience and tasks
- present their field-specific operational environment
- communicate in various working life situations in Swedish.

The student completes the Public Administration Language Test in Swedish.

### **KR00BU43 Swedish for Work, Written: 1 ECTS**

#### **Learning outcomes**

The student is able to

- use vital field-specific vocabulary
- communicate essential matters about their education, work experience and tasks
- understand and produce various short texts related to studies and working life
- acquire information on their field in Swedish
- use online dictionaries.

The student completes the Public Administration Language Test in Swedish.

### **KS00BT59 Expert Communication Skills: 4 ECTS**

#### **Learning outcomes**

Proficiency level: C2

The student masters Finnish language as a mother tongue in all professional spoken and written communication situations.

### **AL00CE30 Presentation and Promotion Skills: 5 ECTS**

#### **Learning outcomes**

Proficiency level: B2

A student is able to

- prepare materials for and deliver presentations confidently and effectively in front of an audience
- perform in other public speaking situations at work
- promote business and personal brands
- manage personal branding and networking through various media.

### **LLTIBIT23K-1012 Online business: 15 ECTS**

### **AL00CB63 Online Business: 5 ECTS**

#### **Learning outcomes**

The student is able to

- evaluate online business models as part of a company's business strategy
- recognise the resource needs of online business
- plan and describe a customer-oriented service process utilising a web store

**AL00CB64 Online Store Solutions: 5 ECTS****Learning outcomes**

The student is able to

- choose the most suitable online store solution and components for a company's operating environment
- recognise the services used in online store solutions and their interfaces
- name the factors affecting the cost effectiveness of an online store

**AL00CB65 Setting up and Developing an Online Store: 5 ECTS****Learning outcomes**

The student is able to

- set up an online store suitable for a company's business
- add services to an online store to support business
- apply methods affecting an online store's cost effectiveness

**LLTIBIT23K-1013 : 15 ECTS****AL00CE29 Digital Tools: 5 ECTS****Learning outcomes**

The student is able to

- utilise essential office applications in their studies
- utilise cloud services as part of team work
- function in an online learning environment

**AL00CE31 Business Mathematics: 4 ECTS****Learning outcomes**

Student is able to

- understand common mathematical methods used in real business life and when to use them.
- practice critical thinking and handles the problem solving skills.
- find and utilise up to date information.
- find confidence by gaining routine of calculation.

**AL00CE33 International Business Law: 4 ECTS****Learning outcomes**

The student is able to

- structure the legal regulations in the international business

**AL00CE34 Global Business Environment and Opportunities: 4 ECTS****Learning outcomes**

Understanding the changing global business environment and its effects on international business

operations and trade.

After completing the course student is able

- to explain the concepts of internationalization and globalization
- to identify and describe features of global business
- to analyse and interpret the changing global business environment and economics as well as their effects on business

### **AL00CE35 Profitability and Budgeting: 5 ECTS**

#### **Learning outcomes**

The student is able to

- produce cost-volume-profit analyses
- identify cost drivers and apply cost data in price setting
- draw up budgets and define the budgeting process

### **AL00CE36 Financial Accounting: 5 ECTS**

#### **Learning outcomes**

The student is able to

- record business transactions into bookkeeping in a small company and draw up its profit/loss account and balance sheet
- calculate the amount of VAT payables
- analyze company's profitability, solidity and liquidity through financial ratios

### **AL00CE38 Management and Leadership: 5 ECTS**

#### **Learning outcomes**

To learn and become acquainted with the managerial principles, models and tasks in an organisation as well as features of successful leadership.

### **LLTIBIT23K-1014 Other Studies in LAB (i.e. Language and communication): 0 ECTS**

### **AL00CQ06 International Intensive Week: 5 ECTS**

#### **Learning outcomes**

This is an international intensive week primarily aimed at business students.

### **LLTIBIT23K-1015 Other University Level Studies: 0 ECTS**

### **LLTIBIT23K-1016 Exchange Studies: 0 ECTS**

### **LLTIBIT23K-1017 Practical Training: 30 ECTS**

## **HA00CE59 Practical Training: 10 ECTS**

### **Learning outcomes**

The student is able to

- describe work-related phenomena and use related concepts
- act in a productive way, following the practices of the workplace and the ethical principles of the profession
- use the techniques, work methods, models and processes that they have learnt
- act in a customer-oriented way in interactive situations in the workplace and in the cooperation network
- evaluate and develop their own competence in the work done in practical training

## **HA00CE60 Practical Training 2: 10 ECTS**

### **Learning outcomes**

The student is able to

- describe work-related phenomena and use related concepts
- act in a productive way, following the practices of the workplace and the ethical principles of the profession
- use the techniques, work methods, models and processes that they have learnt
- act in a customer-oriented way in interactive situations in the workplace and in the cooperation network
- evaluate and develop their own competence in the work done in practical training

## **HA00CE61 Practical Training 3: 10 ECTS**

### **Learning outcomes**

The student is able to

- describe work-related phenomena and use related concepts
- act in a productive way, following the practices of the workplace and the ethical principles of the profession
- use the techniques, work methods, models and processes that they have learnt
- act in a customer-oriented way in interactive situations in the workplace and in the cooperation network
- evaluate and develop their own competence in the work done in practical training

## **LLTIBIT23K-1018 Thesis: 15 ECTS**

## **AO00CE62 Thesis planning: 5 ECTS**

### **Learning outcomes**

The student is able to:

- describe the objectives and core contents of their thesis
- plan and describe the stages of the thesis process
- take into account the possible research permit and copyright issues.

## **AO00CE63 Thesis Research and Writing: 5 ECTS**

**Learning outcomes**

The student is able to:

- implement the thesis on the basis of an approved thesis plan.

**AO00CE64 Thesis Publication: 5 ECTS**

**Learning outcomes**

The student is able to:

- present the results or output of their thesis
- report on their thesis in writing in accordance with the thesis guidelines of LAB University of Applied Sciences
- write a maturity test.