# Curriculum at LAB University of Applied Sciences 2024-2025

## Bachelor of Business Administration, Business Information Technology 24S, fulltime studies, Lahti

Code	Name	1 y	2 y	3 у	4 y	ECTS total
LLTIIT24S-100	1 CORE COMPETENCE	8	-			164
LLTIIT24S-100	02 Common Studies	3		-		15
AY00BU33	Developing professional competence 1	1				1
AY00BU34	Developing professional competence 2		1			1
AY00BU35	Developing professional competence 3			1		1
A300CE13	Orientation to Sustainability Thinking	2				2
KE00BT61	English for Work	4				4
KR00BU42	Swedish for Work, Spoken	1				1
KR00BU43	Swedish for Work, Written	1				1
KS00BT59	Expert Communication Skills	4				4
LLTIIT24S-100	3 Professional Core Competence					104
LLTIIT24S-100	04 Business studies			_		14
AY00CT09	Effective marketing 1	2				2
AY00CT10	Effective marketing 2	3				3
AL00CD64	Financial Accounting	5				5
AL00CD69	Entrepreneurship, Transforming Innovations into Sustainable Business	4				4
LLTIIT24S-100	5 Information systems in business organisation	2		-	-	15
AL00CB42	Business Processes and Information Systems		5			5
AL00CB43	Information System Design		5			5
AL00CB44	Designing a Digital Service		5			5
LLTIIT24S-100	06 Website development	3		-	-	15
AL00CB45	Static Websites	5				5
AL00CB46	Web Publishing and Usability	5				5
AL00CB47	Website Development Project	5				5
LLTIIT24S-100	07 Application development					15
AL00CB48	Introduction to Programming	4				4
AL00CB49	Introduction to Programming Logic	2				2
AL00CB50	Software Development Process	4				4
AL00CB51	Iterative Application Project	5				5

LLTIIT24S-100	08 Software development		1			15
AL00CB52	Object-oriented Programming		5			5
AL00CM21	Databases		5			5
AL00CB54	Agile Application Development Project		5			5
LLTIIT24S-10	09 Dynamic web development					15
AL00CB55	Browser-side Technologies		5			5
AL00CB56	Three-tier Architecture Technologies		5			5
AL00CB57	Dynamic Website Development Project		5			5
LLTIIT24S-10 <sup>2</sup>	0 Development of IT expertise		-			15
AL00CB58	Utilising Data in Business	5				5
AL00CD68	Anticipating Future Trends and Innovation Process			5		5
AL00CD71	Research and Development			5		5
LLTIIT24S-10 <sup>2</sup>	1 Practical Training					30
HA00CD56	Practical Training		10			10
HA00BU37	Practical Training 2			10		10
HA00BU38	Practical Training 3			10		10
LLTIIT24S-101	12 Thesis					15
AO00BU39	Thesis Planning			5		5
AO00BU40	Thesis Project			5		5
AO00BU41	Thesis Report				5	5
LLTIIT24S-10 <sup>2</sup>	13 COMPLEMENTARY COMPETENCE					46
LLTIIT24S-101	14 IT project					15
AL00CB61	Project Communication and Reporting			5		5
AL00CB62	Real-Life IT Project and Practices			10		10
LLTIIT24S-10 <sup>2</sup>	15 Online business					15
AL00CB63	Online Business		5			5
AL00CB64	Online Store Solutions		5			5
AL00CB65	Setting up and Developing an Online Store		5			5
LLTIIT24S-10 <sup>2</sup>	16 Software business	3		-		15
AL00CB66	Software Business			5		5
AL00CB67	Software Productization			5		5
AL00CB68	Software Business Environment			5		5
LLTIIT24S-10 <sup>2</sup>	7 Other studies in LAB (i.e. Language and communicatio	on)				0
LLTIIT24S-10 <sup>2</sup>	8 Other University Level Studies					0
I I TIIT249-10 <sup>,</sup>	9 Exchange studies					0

## LLTIIT24S-1001 CORE COMPETENCE: 164 ECTS

## LLTIIT24S-1002 Common Studies: 15 ECTS

## AY00BU33 Developing professional competence 1: 1 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

## AY00BU34 Developing professional competence 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

## AY00BU35 Developing professional competence 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

Pass-Fail

## **KE00BT61 English for Work: 4 ECTS**

#### Learning outcomes Proficiency level: B2

The student is able to

- communicate clearly and effectively in different generic and field-specific workplace situations both orally and in writing

- find, evaluate and use information effectively

- function collaboratively in international working environments.

## 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.

## LLTIIT24S-1003 Professional Core Competence: 104 ECTS

### LLTIIT24S-1004 Business studies: 14 ECTS

### AY00CT09 Effective marketing 1: 2 ECTS

#### Learning outcomes

The student is able to

- understand the importance of marketing in a company's business
- identify customer-oriented business.
- determine the key concepts of marketing and customer-oriented business

## AY00CT10 Effective marketing 2: 3 ECTS

#### Learning outcomes

- The student is able to
- identify the phases of a marketing and sales process
- understand the importance of brand building and its role in business
- become aware of the segmentation process and its benefits
- understand the key concepts of digital marketing
- recognize customer needs and understand their significance for the success of a company

## AL00CD64 Financial Accounting: 5 ECTS

#### Learning outcomes

The student is able to

- take care of the accounting of a small company and draw up the financial statements
- understand the principles of VAT

- recognise how product costs are formed and apply this knowledge in the analysis of company profitability

## AL00CD69 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

## LLTIIT24S-1005 Information systems in business organisation: 15 ECTS

## AL00CB42 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.

## AL00CB43 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

## AL00CB44 Designing a 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

## LLTIIT24S-1006 Website development: 15 ECTS

### AL00CB45 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

## AL00CB46 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

## AL00CB47 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

## LLTIIT24S-1007 Application development: 15 ECTS

## AL00CB48 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

## AL00CB49 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

## AL00CB50 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

## AL00CB51 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

## LLTIIT24S-1008 Software development: 15 ECTS

## AL00CB52 Object-oriented Programming: 5 ECTS

#### Learning outcomes

Student is able to

- explain the key concepts of object oriented programming
- design and implement applications with object oriented language
- apply efficiently a modern software development environment
- design a maintainable software architecture
- design unit test

### AL00CM21 Databases: 5 ECTS

#### Learning outcomes

Student

- knows relational database's key terms and actions

- understands the relational data model principles
- can model Entity Relationship diagram and can build a relational database based on an ER model
- knows the services offered by a Database Management System
- can use Structured Query Language (SQL) for operations in a database

## AL00CB54 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

## LLTIIT24S-1009 Dynamic web development: 15 ECTS

### AL00CB55 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

### AL00CB56 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 and application based on server-client principles
- install and maintain a three-tier architecture application

### AL00CB57 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

## LLTIIT24S-1010 Development of IT expertise: 15 ECTS

### AL00CB58 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.

## AL00CD68 Anticipating Future Trends and Innovation Process: 5 ECTS

#### Learning outcomes

The student is able to

- anticipate the changes in their own operational environment

- utilise the futures research materials produced by national and international societies in their own field of studies

- use the terminology and methods of futures research in the research and development of their own field

## AL00CD71 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

## LLTIIT24S-1011 Practical Training: 30 ECTS

## HA00CD56 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 int the work done in practical training

## HA00BU37 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 int the work done in practical training

## HA00BU38 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 int the work done in practical training

## LLTIIT24S-1012 Thesis: 15 ECTS

## AO00BU39 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.

## AO00BU40 Thesis Project: 5 ECTS

#### Learning outcomes

The student is able to:

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

## AO00BU41 Thesis Report: 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.

## LLTIIT24S-1013 COMPLEMENTARY COMPETENCE: 46 ECTS

### LLTIIT24S-1014 IT project: 15 ECTS

## AL00CB61 Project Communication and Reporting: 5 ECTS

#### Learning outcomes

The student is able to

- communicate effectively and distribute information in project meetings
- produce concise professional project documentation
- prepare and give engaging professional presentations
- communicate with various project stakeholders

## AL00CB62 Real-Life IT Project and Practices: 10 ECTS

#### Learning outcomes

The student is able to

- take responsibility over different roles in an IT project
- -apply existing and new professional technical skills and knowledge in solving the given problem
- act responsibly as a member of a project group
- apply different methods and practical tools in project preparation and management
- create project documentation and take care of version control

## LLTIIT24S-1015 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

### LLTIIT24S-1016 Software business: 15 ECTS

### AL00CB66 Software Business: 5 ECTS

Learning outcomes The student is able to

- form a business plan for a software product
- recognize the unique aspects of software business
- communicate their ideas regarding software business to stakeholders

## AL00CB67 Software Productization: 5 ECTS

#### Learning outcomes

- The student is able to
- form a plan for software product management
- analyse the cost structure and lifecycle of a software product
- choose appropriate sales, marketing and distribution channels for a software product

#### AL00CB68 Software Business Environment: 5 ECTS

#### Learning outcomes

The student is able to

- recognise the unique features of software business
- assess the role of networks and internationalisation in software business
- analyse funding models used in software business

## LLTIIT24S-1017 Other studies in LAB (i.e. Language and communication): 0 ECTS

### LLTIIT24S-1018 Other University Level Studies: 0 ECTS

#### LLTIIT24S-1019 Exchange studies: 0 ECTS