

**Curriculum at LAB University of Applied Sciences
2022-2023**

**Bachelor of Business Administration, Business Information
Technology 22S, full-time studies, Lappeenranta**

Code	Name	1 y	2 y	3 y	4 y	ECTS total
LLPRIT22S-1001 Common studies						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
LLPRIT22S-1002 Professional Core Competence						104
LLPRIT22S-1003 Software development fundamentals						15
AL00CM17	Basics of Programming	5				5
AL00CM18	Software Engineering	5				5
AL00CM19	Web Technologies	5				5
LLPRIT22S-1004 Object oriented software development						15
AL00CM20	Basics of Object Oriented Programming	5				5
AL00CM21	Databases	5				5
AL00CM22	Project Work 1		5			5
LLPRIT22S-1005 Full stack development						15
AL00CM23	Front-End Tools		5			5
AL00CM24	Back-End Tools		5			5
AL00CM25	Software Development Automation			5		5
LLPRIT22S-1006 Mobile application development						16
AL00CM26	Android and Java Programming		5			5
AL00CM27	Mobile Application Development			5		5
AL00CM28	Project Work 2			6		6
LLPRIT22S-1007 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
LLPRIT22S-1008 Business Studies						28

AL00CD61	Customer Relations and Marketing	5				5
AL00CD64	Financial Accounting	5				5
AL00CD66	Business Mathematics	4				4
AL00CD67	Profitability and Budgeting		5			5
AL00CD69	Entrepreneurship, Transforming Innovations into Sustainable Business	4				4
AL00CD75	Digital Tools	5				5
LLPRIT22S-1009 Complementary Competence						46
LLPRIT22S-1010 Business Intelligence						15
AL00CJ76	RPA and AI					0
AL00CJ77	Data Management and Data Platforms					0
AL00CJ78	Data Analytics					0
LLPRIT22S-1011 Online business						15
AL00CB63	Online Business					0
AL00CB64	Online Store Solutions					0
AL00CB65	Setting up and Developing an Online Store					0
LLPRIT22S-1012 Other studies in LAB (i.e. Language and communication)						0
AY00CC26	LAB@key					0
AY00CC41	QuantiLAB					0
AY00CC40	QualiLAB					0
LA00BR31	Working in a Project - DuuniExpo					0
AY00CA99	Working in a Project					0
AY00CC65	Leadership training in Military Service					0
AY00CG55	Developing Your Learning Skills					0
LLPRIT22S-1013 Other University Level Studies						0
LLPRIT22S-1014 Exchange studies						0
LLPRIT22S-1015 Practical Training						30
HA00CD56	Practical Training		10			10
HA00BU37	Practical Training 2			10		10
HA00BU38	Practical Training 3			10		10
LLPRIT22S-1016 Thesis						15
AO00BU39	Thesis Planning			5		5
AO00BU40	Thesis Project			5		5
AO00BU41	Thesis Report				5	5

LLPRIT22S-1001 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

Level 1

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.

LLPRIT22S-1002 Professional Core Competence: 104 ECTS

LLPRIT22S-1003 Software development fundamentals: 15 ECTS

AL00CM17 Basics of Programming: 5 ECTS

Learning outcomes

Student is able to

- design and implement simple computer programs
- create modular applications using suitable data structures and algorithms
- analyze program code written by others

AL00CM18 Software Engineering: 5 ECTS

Learning outcomes

The student is able to

- understand the principles of software project development and management
- explain at a general level the main steps involved in the professional software development process
- to work in a software project as a stakeholder - either as an expert within the vendor organization or as a customer representative

AL00CM19 Web Technologies: 5 ECTS

Learning outcomes

The student is able to

- Understand the principles of web pages and applications and their architectures
- understand the core web technologies and the concepts of front-end development
- understand responsive web design
- utilize external css and javascript libraries in front-end development

LLPRIT22S-1004 Object oriented software development: 15 ECTS

AL00CM20 Basics of Object Oriented Programming: 5 ECTS

Learning outcomes

The student is able to

- implement the basic object-oriented programming principles independently
- use the principles of object-oriented design in any object-oriented languages
- knows the basics of object description language, Unified Modeling language (UML)

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

AL00CM22 Project Work 1: 5 ECTS

Learning outcomes

The student is able to

- design and implement an information technology project
- carry out a project in co-operation with a business or organization

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- handle project management tasks in every phase of project management life cycle

LLPRIT22S-1005 Full stack development: 15 ECTS

AL00CM23 Front-End Tools: 5 ECTS

Learning outcomes

The student is able to

- design and implement web applications that adapts to different screen sizes using common web development technologies and frameworks
- understand how to specify and use back-end services in the front-end
- utilize modern application frameworks and libraries when building easy to maintain, user-friendly and scalable solutions

AL00CM24 Back-End Tools: 5 ECTS

Learning outcomes

The student

- knows the basics of .NET software architecture
- knows ASP.NET technology and can apply it
- can build applications using Visual Studio
- can use SQL Server in .NET applications
- can apply design patterns when implementing applications
- can implement web services
- can implement a simple application based on components
- can document the implemented application

AL00CM25 Software Development Automation: 5 ECTS

Learning outcomes

The student is able to

- understand the main DevOps principles and practices
- apply the devops methods in testing, deployment and maintenance
- find the right DevOps tools for the purpose

LLPRIT22S-1006 Mobile application development: 16 ECTS

AL00CM26 Android and Java Programming: 5 ECTS

Learning outcomes

The student is able to

- implement simple applications on Android mobile platform
- use major components related to Android application development

AL00CM27 Mobile Application Development: 5 ECTS

Learning outcomes

The student is able to

- implement simple applications on different mobile platforms

AL00CM28 Project Work 2: 6 ECTS**Learning outcomes**

The student is able to

- design and manage a multi person project
- use the substance knowledge of his/her studies in a project
- work professionally as a member of the project team
- document and report the work done in a project

LLPRIT22S-1007 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

LLPRIT22S-1008 Business Studies: 28 ECTS

AL00CD61 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

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

AL00CD66 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.

AL00CD67 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

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

AL00CD75 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

LLPRIT22S-1009 Complementary Competence: 46 ECTS**LLPRIT22S-1010 Business Intelligence: 15 ECTS****AL00CJ76 RPA and AI: 5 ECTS****Learning outcomes**

The student is able to

- understand RPA and AI concepts, and its value proposition
- is able to identify potential automation examples and draw up a plan for an implementation
- use RPA and AI tools

AL00CJ77 Data Management and Data Platforms: 5 ECTS**Learning outcomes**

The student is able to

- find solutions to business data management, data storages and data sharing in various platforms
- work in the process to model an Entity Relationship diagram
- use data management system services and understands their purpose of use
- master relational database concepts and design
- use basic Structural Query Language, SQL commands
- create a simple relational database based on specified requirements
- data warehousing technologies, usage and restrictions
- data preparation (preprocessing) for analysis, Extract, Transform, Load (ETL) process to integrate data from multiple sources

AL00CJ78 Data Analytics: 5 ECTS**Learning outcomes**

The student is able to

- assess the relevance and accuracy of the data
- identify the possibilities of utilizing data analytics and AI in business
- utilize methods and tools of predictive analytics and AI in forecasting

LLPRIT22S-1011 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

LLPRIT22S-1012 Other studies in LAB (i.e. Language and communication): 0 ECTS**AY00CC26 LAB@key: 1 ECTS****Learning outcomes**

Student is able to

- use diverse digital tools and learning environments
- evaluate own professional development

AY00CC41 QuantiLAB: 3 ECTS**Learning outcomes**

Student is able to

- acquire, utilise and evaluate information related to her/his thesis
- follow ethical principles related to research integrity
- use quantitative research methods in her/his thesis
- report about research findings in her/his thesis according to academic reporting principles

AY00CC40 QualiLAB: 3 ECTS**Learning outcomes**

Student is able to

- acquire, utilise and evaluate information related to her/his thesis
- follow ethical principles related to research integrity
- use qualitative research methods in her/his thesis
- report about research findings in her/his thesis according to academic reporting principles

LA00BR31 Working in a Project - DuuniExpo: 5 ECTS

Learning outcomes

For 1.-2. year students learning outcomes for early study phase are applied, and for 3.-4. year students learning outcomes for the graduation phase.

Early-skill stage/learning outcomes:

The student is able to:

- use the concepts related to the project topic and theme and shows familiar with the paternity-related project data base
- describe the rationale, needs and criteria for project activities
- work in projects in accordance with the administration
- apply professional methods and working practices related to the project topic
- operate safely, ethically and customer-oriented project
- action required by the project in interactive situations
- operate safely, ethically and customer-oriented project

Graduation competence/learning outcomes:

The student is able to:

- use the concepts related to the project in a coherent and justify their actions on the basis of the knowledge base
- find starting points, needs and criteria for project activities
- to act purposefully, to assess the activity and make suggestions for improvement
- applied to the project a variety of different techniques, methods and ways of working
- operate safely, ethically and customer-oriented
- to act responsibly and in a target group and as otherwise required by the project in interactive situations

AY00CA99 Working in a Project: 5 ECTS

Learning outcomes

For 1.-2. year students learning outcomes for early study phase are applied, and for 3.-4. year students learning outcomes for the graduation phase.

Early-skill stage/learning outcomes:

The student is able to:

- use the concepts related to the project topic and theme and shows familiar with the paternity-related project data base
- describe the rationale, needs and criteria for project activities
- work in projects in accordance with the administration
- apply professional methods and working practices related to the project topic
- operate safely, ethically and customer-oriented project
- action required by the project in interactive situations
- operate safely, ethically and customer-oriented project

Graduation competence/learning outcomes:

The student is able to:

- use the concepts related to the project in a coherent and justify their actions on the basis of the knowledge base
- find starting points, needs and criteria for project activities
- to act purposefully, to assess the activity and make suggestions for improvement
- applied to the project a variety of different techniques, methods and ways of working
- operate safely, ethically and customer-oriented
- to act responsibly and in a target group and as otherwise required by the project in interactive situations

AY00CC65 Leadership training in Military Service: 5 ECTS

Learning outcomes

Leadership skills in military service.

AY00CG55 Developing Your Learning Skills: 3 ECTS

Learning outcomes

Student knows

- his/her metaskills related to learning
- his/her strengths and weaknesses
- how to find tools to improve his/her learning skills

LLPRIT22S-1013 Other University Level Studies: 0 ECTS

LLPRIT22S-1014 Exchange studies: 0 ECTS

LLPRIT22S-1015 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 in 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 into 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 into the work done in practical training

LLPRIT22S-1016 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.