

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

**Bachelor of Culture and Arts, Industrial Design 22S, full-time
studies, Lahti**

Code	Name	1 y	2 y	3 y	4 y	ECTS total
MLTIID22S-1001 Core Competences						15
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
MLTIID22S-1002 Professional Core Competences						100
MLTIID22S-1003 Working Life Language Skills						6
K200CE69	Finnish 1	3				3
K200CE70	Finnish 2		3			3
KS00BT59	Expert Communication Skills		4			4
KR00BU42	Swedish for Work, Spoken	1				1
KR00BU43	Swedish for Work, Written	1				1
MLTIID22S-1004 Foundation Studies in Fine Arts						15
AM00CN22	Color, Form and Composition	5				5
AM00CN23	Visual Design	5				5
AM00CN24	Art History	5				5
MLTIID22S-1005 Basic Studies in Design						30
AM00CN25	Introduction to Design	5				5
AM00CN26	Visual Design Tools	5				5
AM00CN27	Ergonomics and Accessibility	5				5
AM00CN28	Marketing Communication and Branding	5				5
AM00CN29	Working in CAD	5				5
AM00CN30	Basics of Service Design	5				5
MLTIID22S-1006 Basic Studies in Industrial Design						20
AM00CN31	Workshop License		5			5
AM00CN32	Presentation Methods		5			5
AM00CN33	Structures and Materials		5			5
AM00CN34	CAD, 3D and Visualization		5			5
MLTIID22S-1007 Core Studies in Industrial Design						19

AM00CN35	Usability, User Interfaces and Interaction Design	5			5
AM00CN36	Advanced Prototyping	5			5
AM00CN37	VR/XR/AR for Design		5		5
AM00CM29	Design for Manufacturing			4	4
MLTIID22S-1008 The Creative Professional					10
AM00CD93	A More Sustainable Life – International project	5			5
AM00CN38	Business Skills and Professional Practices		5		5
MLTIID22S-1009 Complementary Competences					80
MLTIID22S-1010 Studio 1					20
AM00CM60	Sustainable Design Studio	20			20
MLTIID22S-1011 Studio 2					20
AM00CM79	Product Design Studio		20		20
MLTIID22S-1012 Studio 3					20
AM00CM78	Product Development Studio		20		20
MLTIID22S-1013 International Student Exchange					20
MLTIID22S-1014 Studio 4					20
AM00CM67	Intelligent Mobility Studio			20	20
AM00CM59	XR/AR Studio				0
AM00CM99	Game Design Studio				0
AM00CM54	Branding Studio				0
MLTIID22S-1015 Practical Training					30
HA00CE76	Practical Training	5	5		10
HA00CE77	Practical Training 2		10		10
HA00CE78	Practical Training 3			10	10
MLTIID22S-1016 Thesis					15
AO00CE79	Thesis Planning			5	5
AO00CE80	Thesis Research and Writing			5	5
AO00CE81	Thesis Publication			5	5

MLTIID22S-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.

MLTIID22S-1002 Professional Core Competences: 100 ECTS

MLTIID22S-1003 Working Life Language Skills: 6 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.

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.

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.

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.

MLTIID22S-1004 Foundation Studies in Fine Arts: 15 ECTS

AM00CN22 Color, Form and Composition: 5 ECTS

Learning outcomes

Students are be able to

- use visual exercises to express colour theory and interrelations and also composition theory
- verbally describe the impressive, expressive and symbolic nature of colours and colour combinations, geometric forms and composition elements
- creatively apply the rules of colour interaction, forms and composition
- discuss the classical colour theories, composition theory and their application in fine arts and design.

AM00CN23 Visual Design: 5 ECTS

Learning outcomes

The student is able to

- present their work to peer audiences and evaluate them critically
- make use of various visual idea generation methods
- use personal observations and emotions as a starting point for creative thinking
- make connections between visual arts and other forms of visual culture
- analyse, interpret and explain contemporary visual culture.

AM00CN24 Art History: 5 ECTS

Learning outcomes

Students are able to

- describe the basics of Western visual arts, architecture and other visual culture, from prehistory to modern times
- use the research concepts of art history and visual culture
- view their professional field as part of artistic practice and the visual environment
- use their knowledge of phenomena in art history in their professional development and work.

MLTIID22S-1005 Basic Studies in Design: 30 ECTS

AM00CN25 Introduction to Design: 5 ECTS

Learning outcomes

The student is able to

- explain the term design and describe how design affects the development of everyday life, society and businesses
- make use of design thinking and some of the typical design process and methods for solving problems.

AM00CN26 Visual Design Tools: 5 ECTS

Learning outcomes

The student is able to

- use the basic terms and concepts of digital tools in discussion
- use the basic functions in typical digital tools of visual design in their field of study
- utilize visual design tools to carry out assignments
- find guides and information about the use of more advanced tools in design software.

AM00CN27 Ergonomics and Accessibility: 5 ECTS

Learning outcomes

The student is able to

- apply the basics of ergonomics in their design work
- apply the principles of accessibility and design-for-all in their design work

AM00CN28 Marketing Communication and Branding: 5 ECTS

Learning outcomes

The student is able to

- explain the concept, contents and characteristics of marketing thought
- use the methods of marketing communication and branding in their professional activity
- draw up a marketing plan
- select appropriate methods and channels for marketing communication and branding.

AM00CN29 Working in CAD: 5 ECTS

Learning outcomes

The student is able to

- perform basic workflows using industry standard CAD software and is able to use basic terminology of CAD work
- independently use CAD software as a design tool
- create work drawings using CAD software.

AM00CN30 Basics of Service Design: 5 ECTS

Learning outcomes

The student is able to

- use service design terminology, methods and processes in design work
- function as a member of a multidisciplinary team in a goal-oriented way
- apply design thinking to assignments and problem solving
- recognize the importance of foresight in service design
- produce visual presentations of services.

MLTIID22S-1006 Basic Studies in Industrial Design: 20 ECTS

AM00CN31 Workshop License: 5 ECTS

Learning outcomes

The student is able to

- use the workshops in a safe manner, follow rules and instructions and justify her/his actions with given instructions
- with guidance use the most common tools and devices as well as techniques in the workshop
- manufacture the given assignments under supervision.

AM00CN32 Presentation Methods: 5 ECTS

Learning outcomes

The student is able to

- create a visual presentation of a design
- facilitate discussion by drawing
- create finalized presentation materials and work drawings
- explain the possibilities and restrictions of both hand drawn and digital presentation methods.

AM00CN33 Structures and Materials: 5 ECTS

Learning outcomes

The student knows how to

- describe the basic principles of designing structures
- assess materials from the perspectives of durability, serviceability, aesthetics and product costs
- design functional structures and select appropriate materials for a design

AM00CN34 CAD, 3D and Visualization: 5 ECTS

Learning outcomes

The student is able to

- perform basic 3D-modelling and visualisation workflows using CAD software and is able to use the terminology of 3D-modelling
- apply previously learned CAD skills in more advanced CAD assignments and 3D-modelling
- compare different modelling techniques and formats.

MLTIID22S-1007 Core Studies in Industrial Design: 19 ECTS

AM00CN35 Usability, User Interfaces and Interaction Design: 5 ECTS

Learning outcomes

The students are able to

- use knowledge of usability psychology and best practices in their design work
- choose, design and implement interactivity in a context savvy way
- recognize common interaction styles and patterns in graphical user interfaces and platforms
- analyze interaction design and explain design choices orally, literally and visually
- utilize user information in design.

AM00CN36 Advanced Prototyping: 5 ECTS

Learning outcomes

Students are be able to

- compare and choose materials for a model
- demonstrate a command of three-dimensional sketching
- independently use appropriate modelling tools and equipment in an assignment.

AM00CN37 VR/XR/AR for Design: 5 ECTS

Learning outcomes

The students are able to

- define the concepts of VR (Virtual Reality), XR (eXtended Reality) and AR (Augmented Reality) and to discuss the application possibilities of these and other comparable technologies
- to design solutions in which XR/AR technologies and methods support user experience, learning, marketing communication or other customer needs.

AM00CM29 Design for Manufacturing: 4 ECTS

Learning outcomes

Students are able to

- Understand how manufacturing methods and material selection might affect the design process
- Describe manufacturing processes considering designed applications, users and economic impacts
- Define and differentiate diverse manufacturing processes in mass production of products
- Understand and explain the effect of material selection in a production process of a concept
- Define the key function of production tools on final product features
- Highlight key production prerequisites in transformation of design to a final product balancing aesthetic and functionality

MLTIID22S-1008 The Creative Professional: 10 ECTS

AM00CD93 A More Sustainable Life – International project: 5 ECTS

Learning outcomes

The student is able to

- work in her or his respective professional role within an international team

- communicate professionally in an international setting
- take the various aspects of sustainability into account in their professional work.

AM00CN38 Business Skills and Professional Practices: 5 ECTS

Learning outcomes

The student is able to

- identify entrepreneurial competence requirements and evaluate their personal competencies
- identify and assess opportunities and plan a business operation in the business environment of their chosen field
- identify common contract types, legislation and practices specific to their chosen field
- take into account copyright law and intellectual property rights in their work.

MLTIID22S-1009 Complementary Competences: 80 ECTS

Courses included in the study module

Each studio is a 20 credit course. First studio-course listed for each semester is the default choice in the student's programme. Alternative studio-course choices are also listed and can replace the default choice depending on the study path of the student. Please consult your tutor teacher about alternative studio-courses.

MLTIID22S-1010 Studio 1: 20 ECTS

AM00CM60 Sustainable Design Studio: 20 ECTS

Learning outcomes

This studio course includes the following parts and their respective learning goals:

Sustainable Design Theory (5 ECTS)

The student is able to

- describe the principles and opportunities of environmental and ethical thinking in design
- acquire information about product life cycles, materials, manufacturing methods, legislation and eco-efficient technologies and practices
- describe eco-efficient product development strategies.

Sustainable Design Workshop (15 ECTS)

The student is able to

- design products with consideration of life cycles, materials, manufacturing methods, legislation and eco-efficient technologies and practices
- use systemic thinking and understands the basics of innovation ecosystems
- use eco-efficient product development strategies.

MLTIID22S-1011 Studio 2: 20 ECTS

AM00CM79 Product Design Studio: 20 ECTS

Learning outcomes

The student is able to

- use industrial design and innovation methods in an appropriate way
- analyze an assignment and work towards its goals and limitations
- produce design solutions solving the assignment's challenges

- apply multiple product development processes and methods
- produce prototypes as a part of design work
- work as a part of a multidisciplinary team
- create necessary documentation and present the designed product for a client.

MLTIID22S-1012 Studio 3: 20 ECTS

AM00CM78 Product Development Studio: 20 ECTS

Learning outcomes

The student is able to

- understand different approaches to the product development process
- recognize the role of innovations and foresight as a part of the product development process
- design within the limitations of manufacturing and understands the relationship between design and production
- understand the basics of manufacturing supply chains and subcontracting

- use foresight and create innovations in the product development process
- apply mainstream materials and methods of manufacture in their design work
- work in their own professional role within a multidisciplinary team.

MLTIID22S-1013 International Student Exchange: 20 ECTS

Courses included in the study module

Studies completed according to a separate Learning Agreement at an international partner university.

MLTIID22S-1014 Studio 4: 20 ECTS

AM00CM67 Intelligent Mobility Studio: 20 ECTS

Learning outcomes

The student is able to

- design solutions for the needs of personal and public mobility
- present their concepts and designs both visually and by prototyping
- take a systemic approach to mobility solutions and design solutions that take sustainability and regulatory issues into account.

AM00CM59 XR/AR Studio: 20 ECTS

Learning outcomes

The student is able to

- define the concepts of XR (extended reality) and AR (augmented reality) and discuss the possibilities of these and related technologies
- design concepts where XR/AR technologies support user experience, learning, marketing or other client needs and requirements
- produce prototypes that allow the evaluation and further development of XR/AR concepts
- function in their professional role in a multidisciplinary design and production team.

AM00CM99 Game Design Studio: 20 ECTS

AM00CM54 Branding Studio: 20 ECTS

Learning outcomes

This studio course includes the following parts and their respective learning goals:

Visual Identity Design (10 ECTS)

The students are able to

- produce graphic symbols in accordance with brand goals and requirements
- explain the importance of the visual identity as a part of marketing communications
- create a visual identity concept in accordance with brand goals
- design appropriate and carefully crafted typography
- lead a process of redesigning a visual identity
- apply the design management approach in their work.

Branded Publications (5 ECTS)

The student is able to

- assess the link between the content, the focus group and the graphic design
- explain the difference between commercial and journalistic publications
- combine the brand image and brand goals in publications
- design a commercial brochure or product catalogue for different publishing environments
- schedule the working process.

Brand Management (5 ECTS)

The student is able to

- understands the significance of brand management in visual communication
- write a brand strategy, compose a brand manual and use them to create visual material
- develop existing brands
- compose and administer brand material libraries and knows how to use them
- understand and make use of the mechanisms of influencing.

MLTIID22S-1015 Practical Training: 30 ECTS

HA00CE76 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

HA00CE77 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

HA00CE78 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

MLTIID22S-1016 Thesis: 15 ECTS

AO00CE79 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.

AO00CE80 Thesis Research and Writing: 5 ECTS

Learning outcomes

The student is able to:

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

AO00CE81 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.