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

02.02.2023

Bachelor of Culture and Arts, Industrial Design 23S, full-time studies, Lahti

Code	Name	1 y	2 y	3 y	4 y	ECTS total
MLTITEMU23S-1001 Common studies						**15**
AY00BU47	Developing professional competence 1	1				1
AY00BU48	Developing professional competence 2		1			1
AY00BU49	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
MLTITEMU23S-1002 Professional Core Competence						**90**
MLTITEMU23S-1003 Foundation Studies in Fine Arts						**15**
AM00CE41	Art History	5				5
AM00CF73	Color, Form and Composition	5				5
AM00BV66	Visual Design	5				5
MLTITEMU23S-1004 Basic Studies in Design						**30**
AM00BW57	Workshop license	5				5
AM00CR51	Visual Software Tools	5				5
AM00CH64	Presentation Methods	5				5
AM00CF02	Introduction to Design	5				5
AM00BW40	Ergonomics and Accessibility	5				5
AM00CF03	Basics of Service Design		5			5
MLTITEMU23S-1005 Basic Studies in Industrial Design						**15**
AM00CF04	Advanced Prototyping	5				5
AM00CM66	Working in CAD	5				5
AM00BW38	Structures and Materials		5			5
MLTITEMU23S-1006 Core Studies in Industrial Design						**20**
AM00CM43	CAD, 3D and visualization		5			5
AM00CF00	Usability, User Interfaces and Interaction Design		5			5
AM00CF06	VR/XR/AR for Design		5			5
AM00CE50	Marketing Communication and Branding		5			5
MLTITEMU23S-1007 Creative Professional						**10**

AM00CD93	A More Sustainable Life – International project	5			5
AM00CE55	Business Skills and Professional Practices		5		5
MLTITEMU23S-1008 Complementary Competence					**90**
MLTITEMU23S-1009 Studio 1					**20**
AM00CM60	Sustainable Design Studio	20			20
MLTITEMU23S-1010 Studio 2					**20**
AM00CM79	Product Design Studio		20		20
MLTITEMU23S-1011 Studio 3					**20**
AM00CM78	Product Development Studio		20		20
MLTITEMU23S-1012 Studio 4					**20**
AM00CM67	Intelligent Mobility Studio			20	20
AM00CM59	XR/AR Studio				0
AM00CM99	Game Design Studio				0
AM00CM90	Service Design Studio				0
AM00CR13	Assistant Project Coordinator				0
MLTITEMU23S-1013 International Student Exchange					**30**
MLTITEMU23S-1014 Elective Studies					**10**
AM00CM92	Studio Portfolio 1				0
AM00CM93	Studio Portfolio 2				0
AM00CM94	Studio Portfolio 3				0
AM00BV84	Research and Development in a Thesis Work				0
AM00CR12	Teaching and project assistant				0
MLTITEMU23S-1015 Studies completed at other universities					**0**
MLTITEMU23S-1016 Practical Training					**30**
HA00CD54	Practical Training	5	5		10
HA00BU51	Practical Training 2		5	5	10
HA00BU52	Practical Training 3		5	5	10
MLTITEMU23S-1017 Thesis					**15**
AO00BU53	Thesis Planning			5	5
AO00BU54	Thesis Research and Writing			5	5
AO00BU55	Thesis Publication			5	5

MLTITEMU23S-1001 Common studies: 15 ECTS

AY00BU47 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 careerpath 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

AY00BU48 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

AY00BU49 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 competenciesduring 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.

MLTITEMU23S-1002 Professional Core Competence: 90 ECTS

MLTITEMU23S-1003 Foundation Studies in Fine Arts: 15 ECTS

AM00CE41 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.

AM00CF73 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.

AM00BV66 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.

MLTITEMU23S-1004 Basic Studies in Design: 30 ECTS

AM00BW57 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.

AM00CR51 Visual Software 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.

AM00CH64 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.

AM00CF02 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.

AM00BW40 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

AM00CF03 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.

MLTITEMU23S-1005 Basic Studies in Industrial Design: 15 ECTS

AM00CF04 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.

AM00CM66 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.

AM00BW38 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

MLTITEMU23S-1006 Core Studies in Industrial Design: 20 ECTS

AM00CM43 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.

AM00CF00 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.

AM00CF06 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.

AM00CE50 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.

MLTITEMU23S-1007 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.

AM00CE55 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.

MLTITEMU23S-1008 Complementary Competence: 90 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.

MLTITEMU23S-1009 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.

MLTITEMU23S-1010 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 it's 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.

MLTITEMU23S-1011 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.

MLTITEMU23S-1012 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

Learning outcomes
The students is able to
- describe the roles of design, mechanics and narrative as tools when creating experiences to a player
- describe the stages of a game design process
- give examples of how game mechanics can be used in non-game applications
- know how to create a basic game concept or take part in a professional team's efforts in creating a game concept
- know how to document a game concept design in an industry standard way and communicate with the production stakeholders.

AM00CM90 Service Design Studio: 20 ECTS

Learning outcomes
Theme: Generating ideas
A student is able to
- utilize a user driven process in creation of new service ideas
- apply multicasting in creation of a user experience
- apply the principles of sustainability in service development

Theme: Creating a service concept
The student is able to
- utilize design process in creation of new service idea and in the development of a service concept
- model, test and present service ideas by prototyping
- evaluate an operability of a service concept and its ability to create value

Theme: Team working
The students are able to
- create contacts with working life representatives and advance working life based Service Design project
- develop their Service Design skills in a goal oriented way

AM00CR13 Assistant Project Coordinator: 20 ECTS

Learning outcomes

The student knows how to
- plan teamwork to achieve set goals
- utilize project management methods and tools
- produce reports and other stakeholder communications on project progress
- work with clients in a responsible role
- support the project-based learning of their peers
- analyze the working process and it's outcomes to produce new knowledge and learning.

MLTITEMU23S-1013 International Student Exchange: 30 ECTS

Courses included in the study module
Studies completed according to a separate Learning Agreement at an international partner university.

MLTITEMU23S-1014 Elective Studies: 10 ECTS

AM00CM92 Studio Portfolio 1: 2 ECTS

Learning outcomes
The students are able to
- document their work and competence in a visual way
- create a written describe assignments and their working process in a clear and concise way
- produce a visual portfolio.

AM00CM93 Studio Portfolio 2: 2 ECTS

Learning outcomes
The students are able to
- document their work methods and process both visually and textually
- situate their expertise and expression in the professional field
- produce a comprehensive visual portfolio of their work.

AM00CM94 Studio Portfolio 3: 1 ECTS

Learning outcomes
The students are able to
- report their work on a project to the client, project management or funder
- demonstrate, using citations, that they are familiar with practices in their field
- create a visual written project report.

AM00BV84 Research and Development in a Thesis Work: 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

- select and 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.

AM00CR12 Teaching and project assistant: 5 ECTS

Learning outcomes
The student is able to
- plan their own work based on a project plan or realization plan
- assist others in a team to achieve shared goals
- produce a report on their own work as a part of a project and review learning.

MLTITEMU23S-1015 Studies completed at other universities: 0 ECTS

Courses included in the study module
You can complete courses at other higher education institutions for example through CampusOnline or as an Open University student.

MLTITEMU23S-1016 Practical Training: 30 ECTS

HA00CD54 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

HA00BU51 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

HA00BU52 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

MLTITEMU23S-1017 Thesis: 15 ECTS

AO00BU53 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

AO00BU54 Thesis Research and Writing: 5 ECTS

Learning outcomes

The student is able to:

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

AO00BU55 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.