

Curriculum at Lahti University of Applied Sciences 2016-2017

Degree Program in Design 16S Jewellery Design

The degree programme in Design, major in Jewellery Design, educates design professionals in traditional goldsmithing skills, as well as computer-aided jewellery design and manufacturing competencies. The programme emphasises expression, creativity, strong cultural values, and an understanding of applied arts. The studies focus on the design of production structures and material knowledge.

Code	Name	1 y	2 y	3 y	4 y	ECTS total
MIKOMU16-1000	CORE COMPETENCIES					210
MIKOMU16-1001	BASIC STUDIES					60
MIKOMU16-1002	Introduction to design					15
05MUJOHMUOP	Introduction to design studies	5				5
05MUMUDITOI	Designer's digital environments	6				6
05MUMUTEOKÄ	Design theory and concepts	4				4
MIKOMU16-1003	Artistic basis of design					15
05MUTAHI	Art history	5				5
05MUVIMU	Visual design	7				7
05MUVÄRI	Colour	3				3
MIKOMU16-1004	Design process					30
05MUMUPIIR	Design drawing	5				5
MI00AY98	Structure and material studies	6				6
05MUORIPAJA	Workshop orientation	3				3
05MUJALOTP1	Precious metals and basic manufacturing techniques 1	4				4
05MUJALOTP2	Precious metals and basic manufacturing techniques 2	5				5
MI00AX89	Swedish language, written skills	1,5				1,5
MI00AX90	Swedish language, oral skills	1,5				1,5
MI00AZ48	Design process 1	4				4
MIKOMU16-1005	PROFESSIONAL STUDIES					105
MIKOMU16-1006	User-centred design					14
05MUKÄYTMU	User-centred design		5			5
05MUKÄYTTKM	User-centred research and development methods		2			2
05MUELÄVÄ1	Life drawing I		3			3
MI00AW67	Professional communication		3			3
MI00AW69	Information literacy		1			1
MIKOMU16-1007	Eco-efficient design					14
05MUYMPTEMU	Eco-efficient design					0

05MUTIESUVA	Computer-aided design and manufacturing		4		4
05MUSYVTT	Advanced manufacturing techniques		5		5
MIKOMU16-1008 Designer's presentation					16
05MUMUPORTF	Designer's portfolio		6		6
05MUPIMA	Drawing and painting		3		3
MI00AW71	Business English basics		3		3
05MUKORUAS	Jewellery and accessories		4		4
MIKOMU16-1009 Advanced design process					16
05MUMALTYÖ	Modelling as a tool		5		5
05MUPLAST1	Sculpture I		3		3
05MUMUOHIST	History of design		3		3
MI00AZ51	Design process 2		5		5
MIKOMU16-1010 Product development and the designer					15
05MULUOVAYR	Entrepreneurship in the creative industry			3	3
05MUTUOKPR	Product development project			7	7
05MUMATYHD	Material combinations			5	5
MIKOMU16-1011 Professional profile					15
05MUMUIDEN	Designer identity				5 5
05MUTUTU	Futures research				5 5
MI00AZ53	Strategic design				5 5
MIKOMU16-1013 Advanced professional studies					15
05MUKORUGEM	Jewellery designer's gemmology				5 5
05MUTKMOPIT	Research and development methods				3 3
MI00BA39	Supporting major studies				7 7
MIKOMU16-1015 PROFESSIONAL PRACTICE					30
05MUERIH	Specialisation practice				15 15
05MUTEH	Professional practice				15 15
MIKOMU16-1016 THESIS					15
05MUOPN	Thesis				15 15
MIKOMU16-1017 COMPLEMENTARY COMPETENCIES					30
MIKOMU16-1018 OTHER PROFESSIONAL STUDIES					15
05MUKOPIVÄ	Coating and dyeing jewellery materials				5 5
05MUTAOKO	Forging techniques in jewellery design				5 5
05MUGAETS	Galvanisation and etching techniques				5 5
MIKOMU16-1019 ELECTIVE STUDIES					15

MIKOMU16-1000 CORE COMPETENCIES: 210 ECTS

MIKOMU16-1001 BASIC STUDIES: 60 ECTS

MIKOMU16-1002 Introduction to design: 15 ECTS

Learning outcomes of the study module

Students

- know how to use the concepts of design, and explain the job description of a designer
- have basic skills in using the working methods, tools and equipment of a designer
- know how work interactively as a member of a team
- know how to set study objectives
- know how to observe their environment in a conscious and goal-oriented manner

Courses included in the study module

Introduction to design studies 5 ECTS

Design theory and concepts 4 ECTS

Designer's digital environments 6 ECTS

05MUJOHMUOP Introduction to design studies: 5 ECTS

Learning outcomes

Students

- know how to study according to the principles and operational environment of the degree programme
- know how to describe the professional studies of a designer, and the fields within design
- know how to describe the parts and flow of the design process
- know how to generate ideas and solve problems together with other design students
- know how to recognise the role of communal interaction in the design process

05MUMUDITOI Designer's digital environments: 6 ECTS

Learning outcomes

Students

- know how to use the basic digital equipment and information systems of the institute
- know how to use information networks for storing and sharing materials
- know how to use digital image equipment and scanners for information-gathering, note-making, observation and documentation
- know how to use data projectors and laser printers
- know how to use a pressure-sensitive graphics tablet with image-editing and drawing programs
- know how to create presentation materials according to the design principles of commercial graphics
- know how to create electronic or printed presentation materials using presentation graphics, image-editing, vector graphics and desktop publishing programs

05MUMUTEOKÄ Design theory and concepts: 4 ECTS

Learning outcomes

Students

- are familiar with the theoretical basis and starting points of design
- know how to use the basic concepts of design
- know how to work according to the theoretical starting points
- know how to test the theories of design in practice

MIKOMU16-1003 Artistic basis of design: 15 ECTS

Learning outcomes of the study module

Students

- know how to verbally describe and explain the history of visual arts and phenomena in contemporary art
- know how to discuss the theory of visual arts
- know how to use visual skills of image layout, composition and spatial representation
- know how to describe theories of colour and how to apply them as part of design practice
- know how to convey interpretations of their observations using various media
- know how to use art concepts in various situations in which images are interpreted and assessed

Courses included in the study module

Visual design 7 ECTS

Colour 3 ECTS

Art history 5 ECTS

05MUTAH1 Art history: 5 ECTS

Learning outcomes

Students

- know how to describe the basics of Western visual arts, architecture and other visual culture, from prehistory to modern times
- know how to use the research concepts of art history and visual culture, and how to make use of research
- know how to view their professional field as part of artistic practice and the visual environment
- know how to use their knowledge of phenomena in art history in the assignments in their major subject

05MUVIMU Visual design: 7 ECTS

Learning outcomes

Students

- know how to work creatively and independently in the design and communication process
- know how to apply their broader visual-artistic education and skills in a versatile manner
- know how to present their work to peer audiences and evaluate them critically
- know how to make use of various visual idea generation methods
- know how to use their observations and emotions as a starting point for creative thinking
- know how to make connections between visual arts and other visual culture
- know how to analyse, interpret and explain today's visual culture

05MUVÄRI Colour: 3 ECTS

Learning outcomes

Students

- know how to verbally describe the historical foundations of modern colour theory and aesthetics
- know how to present the totality and relativity of colour observation using visual exercises
- know how to verbally describe the impressionistic, expressive and symbolic quality of colour and colour combinations, and how to apply this competence to visual exercises
- know how to creatively apply the laws of colour interaction
- know how to discuss classical colour theory and its applications in art and design

MIKOMU16-1004 Design process: 30 ECTS

Learning outcomes of the study module

Students

- know how to work according to the basic principles of design processes
- know how to work according to the basic principles of graphic design
- know how to assess the importance of the manufacturing process in the design process
- know how to define the key materials and their uses
- know how to use various idea-generation techniques and problem-solving skills
- have the oral and written skills in Swedish to be able to communicate about issues in their own professional field
- know how to use presentation techniques as part of the design process
- know how to be able to systematically document their work and understand the importance of a portfolio

05MUMUPIIR Design drawing: 5 ECTS

Learning outcomes

Students

- know how to create freehand images of their ideas and designs
- know how to create and interpret technical drawings
- know how to communicate design ideas using sketches

MI00AY98 Structure and material studies: 6 ECTS

Learning outcomes

Students

- know how to describe the chemical differences between precious and base metals
- know how to describe the acids and chemicals commonly used in the precious metals industry
- know how to work according to job safety guidelines and how to handle chemicals safely
- know how to create structures that are typical of precious metal products, and how to describe the properties of solders of varying hardness
- know how to alloy and melt precious metals

- know how to work the raw material to achieve the required shape and size
- know how to work different precious metals
- know how to prepare chemical solutions of different strengths and how to describe their use and storage regulations

05MUORIPAJA Workshop orientation: 3 ECTS

Learning outcomes

Students

- know how to use the basic hand tools needed in goldsmithing
- know how to explain the importance of job safety and how to use protective equipment in basic tasks
- know how to recognise the most common base metals and describe their material properties
- know how make simple solder joints
- know how to describe how to join different-size objects using hard solders

05MUJALOTP1 Precious metals and basic manufacturing techniques 1: 4 ECTS

Learning outcomes

Students

- know how to describe typical tasks in working precious metals
- know how to use handicraft methods to make different types of jewellery from precious metals
- know how to describe the principles of stone-setting
- know how to recognise precious and base metals commonly used in goldsmithing, and how to describe their special characteristics
- are familiar with the most common surface treatment methods and the operational principle of electrolysis
- know how to use hand tools, machinery and equipment for basic tasks
- know how to work persistently and independently

05MUJALOTP2 Precious metals and basic manufacturing techniques 2: 5 ECTS

Learning outcomes

Students

- know how to work using precious metal manufacturing techniques
- understand the mechanics of jewellery
- know how to make fastening mechanisms
- know how to work independently
- know how to describe the most common industrial manufacturing methods in goldsmithing, and how to compare their strengths and weaknesses to manual work

MI00AX89 Swedish language, written skills: 1.5 ECTS

Learning outcomes

The course provides skills that correspond to level B1 in the Common European Framework for

Languages:

"Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, and leisure. Can deal with most situations likely to arise while travelling in an area where the language is spoken. Can produce simple connected text on topics that are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions. Can give reasons and explanations for opinions and plans."

The above description indicates the skill level, but it is based on objectives related to standard language. The description is adapted for each professional field.

MI00AX90 Swedish language, oral skills: 1.5 ECTS

Learning outcomes

The course provides skills that correspond to level B1 in the Common European Framework for Languages:

"Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, and leisure. Can deal with most situations likely to arise while travelling in an area where the language is spoken. Can produce simple connected text on topics that are familiar or of personal interest. Can describe experiences and events, dreams, hopes and ambitions. Can give reasons and explanations for opinions and plans."

The above description indicates the skill level, but it is based on objectives related to standard language. The description is adapted for each professional field.

MI00AZ48 Design process 1: 4 ECTS

Learning outcomes

Students

- know how to describe the special characteristics of the tasks of a jewellery designer
- know how to use problem-solving skills, self-expression and creative thinking
- know how to manufacture typical three-dimensional jewellery design models on different scales, using different model materials and handicraft methods
- know how to work according to the manufacturing process and how to schedule their work
- know how to work alone and in a team

MIKOMU16-1005 PROFESSIONAL STUDIES: 105 ECTS

MIKOMU16-1006 User-centred design: 14 ECTS

Learning outcomes of the study module

Students

- know how to describe the role of user-centred design and ergonomics in products
- know how to use various methods of user research
- know how to use user research for their own design assignment
- know how to write high-quality professional texts
- know how to communicate orally, and in writing, in various business situations

- know how to portray the human body and its movements through drawing

05MUKÄYTMU User-centred design: 5 ECTS

Learning outcomes

Students

- know how to use the basic principles of user-centred design in their design work
- know how to use research material to determine user groups in their design work
- know how to define and prioritise different usability perspectives in their design work
- know how to use different research methods to gather information about users
- know how to apply the "design for all" principle in their design work
- know how to design a product from a user-centred point of view

05MUKÄYTTKM User-centred research and development methods: 2 ECTS

Learning outcomes

Students

- know how to use user-centred methods in development and research, and the design process
- know how to apply user information in the design process and how to document it
- know how to find and analyse user information

05MUELÄVÄ1 Life drawing I: 3 ECTS

Learning outcomes

Students

- know how to make observations and draw a three-dimensional human image on two-dimensional paper
- know how to measure human proportions on papers of different sizes and develop their sense of proportion
- know how to specify and contrast shades of light and shadow, and develop the ability to differentiate between shades
- know how to capture a shape and changes in it, by outlining and shading
- know how to use observations to create a basic image that captures the movement, shape and structure of the human body
- know how to create a croquis book (a portfolio) from their drawings

MI00AW67 Professional communication: 3 ECTS

Learning outcomes

Students know how to

- assess and interpret the meanings of various messages, and develop their communication skills
- apply oral and written communication skills in an appropriate and dialogic manner in real-life customer service
- apply teamwork skills in meetings and negotiations

- plan and produce customer texts and scientific articles of high linguistic quality

MI00AW69 Information literacy: 1 ECTS

Learning outcomes

Students know how to

- recognise their information needs and the importance of information-gathering at various stages of their studies
- gather the information they need in their studies in an efficient and versatile manner
- use different types of source materials and services in their studies
- apply source criticism to information materials
- use information ethically

MIKOMU16-1007 Eco-efficient design: 14 ECTS

Learning outcomes of the study module

Students

- know how to describe the principles and possibilities of eco-efficient and ethical thinking
- know how to assess the environmental impact of various manufacturing technologies
- know how to use eco-efficient manufacturing technology in their work

05MUYMPTEMU Eco-efficient design: 5 ECTS

Learning outcomes

Students

- know how to design products considering information on their life cycle, materials, manufacturing methods, and eco-efficient technologies and practices
- know how to find and use information on the environmental legislation that concerns design and their professional field
- know how to discuss the principles of eco-efficient thinking
- know how to choose eco-efficient product development strategies as part of design
- know how to combine eco-efficient thinking, user-centred design and consumer behaviour analysis
- know how to anticipate the effect of environmental issues on business and competitiveness
- know how to create a product design
- know how to report the environmental impact of a product throughout its life cycle

05MUTIESUVA Computer-aided design and manufacturing: 4 ECTS

Learning outcomes

Students

- know how to use 3D modelling in their professional field
- know how to create concrete objects from a digital model, using different methods
- know how to use various computer-aided manufacturing techniques
- know how to use the most common rapid manufacturing techniques, equipment and materials

- know how to cooperate with the manufacturing industry to manufacture models

05MUSYVTT Advanced manufacturing techniques: 5 ECTS

Learning outcomes

Students

- know how to assess the influence of manufacturing techniques on a company's business
- know how to assess the differences between handicraft and industrial production
- know how to choose appropriate manufacturing technologies
- know how to choose and use different techniques for unique and mass-produced objects
- know how to work as a subcontractor to a company according to their needs
- know how to design a product

MIKOMU16-1008 Designer's presentation: 16 ECTS

Learning outcomes of the study module

Students

- know how to use visual expression as the designer's instrument
- know how to experiment with and assess various (visual) techniques and methods
- know how to create product presentations
- know how to create commercial graphics
- know how to use many styles to create a presentation in English
- know how to create a representative portfolio presenting the results and processes of their work
- know how to apply the principles of product presentation in creating a portfolio

05MUMUPORTF Designer's portfolio: 6 ECTS

Learning outcomes

Students

- know how to describe and explain the typical structure of a portfolio
- know how to assess the influence of the presentation of a portfolio on the image of a designer's competencies and profile
- know how to explain the importance of a portfolio to a designer
- know how to assess the relative quality of a portfolio
- know how to name printing materials used in the field of graphics
- know how to explain the material requirements and cost structures of the modern printing process
- know how to maintain and complement their portfolio, when applying for an internship or an exchange programme
- know how to update their portfolio and complement it, when applying for an internship or an exchange programme

05MUPIMA Drawing and painting: 3 ECTS

Learning outcomes

Students

- know how to use composition skills and how to apply them in professional assignments
- know how to recognise rhythm, tension, balance, variation and harmony in an image
- know how to recognise and test different image-making methods and materials
- know how to do self-assessment through expression based on observation

MI00AW71 Business English basics: 3 ECTS

Learning outcomes

The course provides skills that correspond to level B2 in the Common European Framework for Languages: "Can understand the main ideas of complex texts on both concrete and abstract topics, also in their field of specialisation. Can communicate with a degree of fluency and spontaneity that enables regular interaction with native speakers without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain their opinion on a current issue, giving the advantages and disadvantages of various views."

The above description indicates the skill level, but it is based on objectives related to standard language.

The description is adapted for each professional field.

05MUKORUAS Jewellery and accessories: 4 ECTS

Learning outcomes

Students

- know how to assess their professional opportunities in fields close to jewellery design
- know how to assess and compare the differences, characteristics and similarities between jewellery and accessories
- know how to design and make accessories
- know how to work as a jewellery designer, making jewellery and accessories

MIKOMU16-1009 Advanced design process: 16 ECTS

Learning outcomes of the study module

Students

- know how to work according to the principles of the design process in use in the vehicle design industry
- know how to use computer-aided design in the design process
- know how to apply ideas of sculpture in product design
- know how to conduct research and development based on industrial and commercial goals
- know how to describe the evolutionary stages of the design industry and explain how the various stages are linked to the present day

05MUMALTYÖ Modelling as a tool: 5 ECTS

Learning outcomes

Students

- know how to explain the role of 3D modelling in their profession
- know how to compare different modelling techniques and file formats
- know how to use modelling concepts
- know how to use 3D software to create various models needed in design projects
- know how to produce 3D visualisations of modelled geometries

05MUPLAST1 Sculpture I: 3 ECTS

Learning outcomes

Students

- know how to discuss contemporary sculpture, using relevant concepts and expressive language
- know how to analyse and use shape, material, space, light and movement and their relationships in three-dimensional work
- know how to use the basic materials and working methods of sculpture
- know how to describe the relationship of mass and volume to people and the surrounding space
- know how to design exhibitions, and lighting for three-dimensional works

05MUMUOHIST History of design: 3 ECTS

Learning outcomes

Students

- know how to describe the periods, characteristics and pivotal representatives of Finnish and international design
- know how to analyse the key stages and characteristics of design history from the point of view of the professional field
- know how to establish the social factors that influence design and analyse the links between design and visual arts

MI00AZ51 Design process 2: 5 ECTS

Learning outcomes

Students

- know how to analyse problems related to the working methods, material strengths and manufacturing methods in jewellery design
- know how to develop design methods
- know how to work in a group and develop the necessary processes
- know how to reflect on and assess their own skills, knowledge and expression
- know how to solve problem issues in constructive products and design

MIKOMU16-1010 Product development and the designer: 15 ECTS

Learning outcomes of the study module

Students

- know how to describe the principles of interaction between the client and the designer
- know how to analyse the information acquired for a design project
- know how to cooperate with various parties in product development
- know how to assess the prerequisites for outsourcing and procuring products
- know how to appropriately use computer-aided design at different stages of the design process
- know how to find information about the various forms of business and the special characteristics of entrepreneurship in design

05MULUOVAYR Entrepreneurship in the creative industry: 3 ECTS

Learning outcomes

Students

- know how to explain the personal characteristics required for running a business in the creative industry
- know how to assess their strengths and development areas in working as an entrepreneur
- know how to compare different forms of business, and describe the fundamentals of responsibility, ownership and taxation that influence the selection of a form of business
- know how to list methods of user-driven marketing for a product or service provided by a creative business
- know how to use a company's profitability figures
- know how to assess business ideas and their profitability in the creative industry
- know how to create a preliminary business plan
- know how to assess a business idea and related business model

05MUTUOKPR Product development project: 7 ECTS

Learning outcomes

Students

- know how to describe the principles of interaction between the client and the designer
- know how to describe the principles of the product development process
- know how to incorporate the design process into the product development process
- know how to cooperate with various parties in product development
- know how to operate in a multi-cultural environment.
- know how to market their expertise

05MUMATYHD Material combinations: 5 ECTS

Learning outcomes

Students

- know how to describe the physical properties of materials used in jewellery
- know how to describe the potential uses of various materials in jewellery design
- know how to choose the right materials for jewellery
- know how to choose the right methods to work the materials used in jewellery
- know how to create jewellery using different materials

MIKOMU16-1011 Professional profile: 15 ECTS

Learning outcomes of the study module

Students

- know how to assess the importance of product development for the business strategy of a company
- know how to assess the importance of design as a strategic tool and its influence on a company's business
- know how to create a plan to develop their professional profile
- know how to use the methods of futures research and explain the importance of futures research in the work of a designer
- know how to act and make decisions in multidisciplinary operating environments

05MUMUIDEN Designer identity: 5 ECTS

Learning outcomes

Students

- know how to explain the importance of developing their professional profile and identity to progress into employment and further studies
- know how to develop a professional profile as a designer
- know how to assess the influence of various operational environments and their special characteristics on a designer's work
- know how to assess the influence of design on a company's business

05MUTUTU Futures research: 5 ECTS

Learning outcomes

Students

- know how to use the principles of futures research as part of the design process
- know how to analyse and anticipate consumer needs and operational environments based on information from futures research
- know how to use information from futures research on weak signals
- know how to create various scenarios to assess the importance and influence of future changes on a company's operational strategy

MI00AZ53 Strategic design: 5 ECTS

Learning outcomes

Students

- know how to explain the role of design as a strategic factor in business
- know how to assess the importance of organising design and the related operational models
- know how to observe and recognise the varying practices of design
- know how to create their own collection concept from a strategic starting point

MIKOMU16-1013 Advanced professional studies: 15 ECTS

Learning outcomes of the study module

Students

- know how to choose a research method
- know how to conduct background research for a design project
- know how to report the results of their background research
- know how to assess their special professional competencies
- know how to use stone-setting techniques and combine materials
- know how to use gemmological information in the work of a jewellery designer

05MUKORUGEM Jewellery designer's gemmology: 5 ECTS

Learning outcomes

Students

- know how to use gem identification information in the work of a jewellery designer
- know how to use gem identification equipment
- know how to describe the cultural meanings related to the use of jewellery and how to explain their role in jewellery design
- know how to use gems in jewellery design
- know how to offer customers appraisals of the price and quality of gems
- know how to buy gems

05MUTKMOPIT Research and development methods: 3 ECTS

Learning outcomes

Students

- know how to use key theories of design research in development and research
- know how to act according to the principles of reliability and ethicality
- know how to acquire research data
- know how to write well-argued formal text

MI00BA39 Supporting major studies: 7 ECTS

Learning outcomes

Students

- know how to work according to the principles of stone-setting
- know how to describe different forms of cutting stones and use them in stone-setting
- know how to make and use the hand tools and gravers needed in basic stone-setting styles

MIKOMU16-1015 PROFESSIONAL PRACTICE: 30 ECTS

Learning outcomes of the study module

Students

- know how to observe and identify workplace practices
- know how to assess their competencies in relation to the requirements of working life
- know how to make a plan to develop their competencies
- know how to manage real-life work situations and tasks that the degree qualifies them to do
- know how to develop their special competencies to prepare them for expert tasks in the field

05MUERIH Specialisation practice: 15 ECTS

Learning outcomes

After the practice period, students

- know how to assess their special competencies in relation to the practical requirements of working life
- know how to systematically develop their professional skills
- know how to work jobs in their field of specialisation
- know how to describe their extended professional network
- know how to interact with people and organisations in working life

05MUTEH Professional practice: 15 ECTS

Learning outcomes

After the practice period, students

- know how to assess their competencies in relation to the practical requirements of working life
- know how to plan their specialisation track according to the requirements of their professional field
- know how to work jobs in their field of study
- know how to develop their professional network

MIKOMU16-1016 THESIS: 15 ECTS

Learning outcomes of the study module

Students

- know how to work according to the design process in their professional field and related professional practices
- know how to express themselves visually and in writing
- know how to gather information using a variety of means and exercising source criticism
- know how to use the design and research methods of their professional field in their thesis

05MUOPN Thesis: 15 ECTS

Learning outcomes

Students

- know how to work according to the design process in their professional field and related professional practices

- know how to express themselves visually and in writing
- know how to gather information using a variety of means and exercising source criticism
- know how to use the design and research methods of their professional field in their thesis

MIKOMU16-1017 COMPLEMENTARY COMPETENCIES: 30 ECTS

MIKOMU16-1018 OTHER PROFESSIONAL STUDIES: 15 ECTS

05MUKOPIVÄ Coating and dyeing jewellery materials: 5 ECTS

Learning outcomes

Enamelling

Students

- know how to describe what enamelling is
- know how to use enamelling in jewellery design
- know how to analyse the relationship between old and new jewellery design
- know how to describe what colorit is
- know how to work in an experimental manner and produce information independently

Dyeing jewellery materials

Students

- know how to explain the dyeing techniques used in jewellery
- know how to choose a dyeing technique for a jewellery material
- know how to use dyeing and coating equipment and chemicals, taking into account job safety
- know how to choose dyeing and coating techniques, taking into account practicality and visual aspects

05MUTAOKO Forging techniques in jewellery design: 5 ECTS

Learning outcomes

Students

- know how to assess the potential of forging techniques in jewellery design
- know how to choose the right tools for forging jewellery
- know how to create jewellery using forging techniques
- know how to combine forging techniques with other jewellery-manufacturing techniques

05MUGAETS Galvanisation and etching techniques: 5 ECTS

Learning outcomes

Students

- know how to describe the galvanisation techniques used in jewellery

- know how to describe the etching techniques used in jewellery
- know how to choose suitable galvanisation and etching techniques for specific pieces of jewellery
- know how to use galvanisation and etching techniques, taking into account job safety
- know how to choose the right techniques, taking into account practicality and visual aspects

MIKOMU16-1019 ELECTIVE STUDIES: 15 ECTS