Opasraportti

Architecture (2016 - 2017)

Tutkintorakenteet

Degree programme in Architecture, B.Sc.

Tutkintorakenteen tila: published

Lukuvuosi: 2016-17

Lukuvuoden alkamispäivämäärä: 01.08.2016

Degree programme in Architecture, B.Sc.

Basic and Subject Studies (vähintään 120 op)

```
A410120: Basic and Intermediate Studies, Architecture, 120 op
   Compulsory courses
      450511P: Orientation, 1 op
      450521P: Computer Aided Design I, 5 op
      451535P: History of Architecture I, lecture course, 4 op
      451536P: History of Architecture I, studio course, 6 op
      452525P: Contemporary Architecture I, elements, 7 op
      452526P: Contemporary Architecture I, basic course, 8 op
      453521P: Basics of Architectural Construction, lecture course, 3 op
      453522P: Basics of Architectural Construction, studio course, 7 op
      453531P: Structural Technology, basic course, 3 op
      453532P: Wooden Structures, 2 op
      453535P: Basics of Building Physics, 2 op
      454521P: History of Urban Design, 5 op
      455501P: Basics of Design, 5 op
      455511P: Visual Arts I, 5 op
      455512P: Visual Arts II, 3 op
      451537A: History of Architecture II, lecture course, 3 op
      451538A: History of Architecture II, studio course, 5 op
      452523A: Contemporary Architecture II, elements, 7 op
      452528A: Contemporary Architecture II, basics, 8 op
      456502A: Renovation of Apartment Buildings, 5 op
      454501A: Urban Design, seminar course, 5 op
      454523A: Neighborhood Design, 5 op
      451504A: History of Architecture III, 3 op
   Select second domestic language
      901046Y: Second Official Language (Swedish), Written Skills, 1 op
      901047Y: Second Official Language (Swedish), Oral Skills, 1 op
      900081Y: Second Official Language (Finnish), Written Skills, 1 - 2 op
```

900082Y: Second Official Language (Finnish), Oral Skills, 1 - 3 op

Select courses in one foreign language, totaling 6 cr

903012P: Technical German 3, 6 op 904054P: Technical Russian 1, 7,5 op

902151Y: English for Architecture (ArkTK), 2 - 3 op 902152Y: English for Urban Planning (ArkTK), 2 - 3 op

Choose courses minium 5 credits

450537P: Revit Architecture basics and 3DI/3DS Studio MAX, co-operative use with CAD, 3 op

450538P: Autocad Basics, 2 op

450539P: Artlantis and Archicad basics, 3 op

Orientation Module, Architecture (vähintään 40 op)

A410121: Orientation Module, Architecture, 40 op

Compulsory courses

454504A: Town Planning, 10 op 452507A: Housing Design, 10 op

452529A: Contemporary Architecture III, 10 op 453504A: Design of Apartment Blocks, 10 op

453510A: Techniques of Plumbing, Heating and Ventilation, 3 op

453511A: Electrical Installation, 2 op

Bachelor's Work and Related Studies (vähintään 10 op)

455990A: Bachelor's Thesis / Architecture, 8 op

030005P: Information Skills, 1 op

450522A: Seminar, 1 op

450013A: The Maturity Test for Bachelor's Degree, 0 op

Optional Studies, Bachelor of Science (Architecture) (vähintään 10 op)

The optional studies may also include language studies (maximum extent 8 cr). If your basic and subject studies compulsory CAD courses exceed the required 10 cr, you may include the extra CAD courses in the optional studies.

A410171: Optional Studies, Bachelor of Science (Architecture), 10 op

Optional Studies

450541A: Photoshop, Advanced Photomanipulation, 2 op

450517A: Revit Architecture Advanced, 2 op

450540A: Archicad Advanced, 2 op

450545A: Illustrator Basics, 1 op

450547A: Indesign Basics, 1 op

450516P: Portfolio, 2 op

455513A: Visual Arts III, 4 op

455514A: Visual Arts IV / Architectural Photography, 4 op

451505A: History of Architecture III practices, 5 op

451540A: History of Architecture and renovation, varying courses, 2 - 10 op

452540A: Varying Courses of Contemporary Architecture, 2 - 10 op

453540A: Varying Courses of Architectural Construction, 2 - 10 op

454540A: Varying Courses of Urban Design, 2 - 10 op

450503A: Practical Training / Construction Site, 5 op

450505A: Practical Training, 5 op

Master's Degree in Architecture / MSc. (Arch)

Tutkintorakenteen tila: published

Lukuvuosi: 2016-17

Lukuvuoden alkamispäivämäärä: 01.08.2016

Master's Degree in Architecture / MSc. (Arch)

Basic Modules (vähintään 30 op)

Design-led Urban Renewal

A410224: Design-led Urban Renewal, 30 op

Compulsory courses

454522S: Urban Space Design, 10 op 455521S: Urban Space Detailing, 10 op 455522S: Design in Urban Context, 10 op

Sustainable Built Environment 1

A410225: Sustainable Built Environment 1, 30 op

Compulsory

453508A: Energy Efficient Building, lecture course, 5 op 456527S: Condition Assessment of Buildings, 5 op 456507S: Renovation of Apartment Buildings, 10 op 451511A: Historic Preservation, 10 op

Complementary modules (vähintään 30 op)

Design of Public Buildings 1

A410249: Design of Public Buildings 1, 15 op

Compulsory

452504A: Contemporary Architecture IV, 15 op

Design of Public Buildings 2

A410250: Design of Public Buildings 2, 15 op

Compulsory

453533A: Large scale structures, 5 op 455517S: Architectural Lighting, 5 op 455517A: Interior Design, 5 - 10 op

Sustainable Built Environment 2

A410251: Sustainable Built Environment 2, 15 op

Compulsory

453507A: Architectural Construction, Professional Skills, 10 op

454540A: Varying Courses of Urban Design, 2 - 10 op

Restoration

A410252: Restoration, 15 op

Compulsory

451515S: Restoration, 15 op

Advanced modules (vähintään 30 op)

Strategic Urban Planning

A410275: Strategic Urban Planning, 30 op

Compulsory

454505S: Municipal Planning, 15 op

454560S: Extension Course / Urban Design, 5 - 10 op 451560S: Research and Theory of Architecture, 2 - 10 op

450506A: Practical Training in ArchitectŽs Office, 5 op

450502A: Excursion Abroad, 2 op

Advanced Architectural Design

A410276: Advanced Architectural Design, 30 op

Compolsory courses

452505S: International Studio, 15 op

455561S: Advanced Studies in Architectural Design, 2 - 10 op 451560S: Research and Theory of Architecture, 2 - 10 op

450505A: Practical Training, 5 op

450502A: Excursion Abroad, 2 op

Master's Thesis (vähintään 30 op)

450099S: Master's Thesis, 30 op

450014S: The Maturity Test for Master's Degree, 0 op

Optional Studies

300002M: Advanced Information Skills, 1 op

451540A: History of Architecture and renovation, varying courses, 2 - 10 op ay451513S: History of Interior Design and Historical interiors (OPEN UNI), 5 op ay451523S: Traditional Japanese Arhitecture and Garden Art (OPEN UNI), 5 op

453540A: Varying Courses of Architectural Construction, 2 - 10 op 452550S: Varying Courses of Contemporary Architecture, 2 - 10 op 452540A: Varying Courses of Contemporary Architecture, 2 - 10 op

454550S: Varying Courses of Urban Design, 2 - 10 op 454540A: Varying Courses of Urban Design, 2 - 10 op

453551S: Varying courses in Architectural Construction, 2 - 10 op

451551S: Varying courses in History of Architecture and Renovation, 2 - 10 op

Master's Degree Programme in Architectural Design

Tutkintorakenteen tila: published

Lukuvuosi: 2016-17

Lukuvuoden alkamispäivämäärä: 01.08.2016

Master's Degree Programme in Architectural Design 120 ECTS

Basic Module (vähintään 30 op)

A410224: Design-led Urban Renewal, 30 op

Compulsory courses

454522S: Urban Space Design, 10 op 455521S: Urban Space Detailing, 10 op 455522S: Design in Urban Context, 10 op

Complementary modules (vähintään 30 op)

A410249: Design of Public Buildings 1, 15 op

Compulsory

452504A: Contemporary Architecture IV, 15 op

A410250: Design of Public Buildings 2, 15 op

Compulsory

453533A: Large scale structures, 5 op 455517S: Architectural Lighting, 5 op 455517A: Interior Design, 5 - 10 op

Advanced module (vähintään 30 op)

A410276: Advanced Architectural Design, 30 op

Compolsory courses

452505S: International Studio, 15 op

455561S: Advanced Studies in Architectural Design, 2 - 10 op 451560S: Research and Theory of Architecture, 2 - 10 op

450505A: Practical Training, 5 op 450502A: Excursion Abroad, 2 op

Master's Thesis (vähintään 30 op)

450099S: Master's Thesis, 30 op

450014S: The Maturity Test for Master's Degree, 0 op

Elective studies

List of optional courses which may be included in the arhitect's degree when available within the year plan of the school

900020Y: Finnish for Advanced Students, 4 op

900019Y: Finnish for Foreigners (beginners), 2 op

900021Y: Finnish for Foreigners, Beginners 3, 6 op

900022Y: Finnish for Foreigners, Intermediate 1, 2 op

451511A: Historic Preservation, 10 op

900016Y: Intermediate Finnish Course 2, 5 op

451515S: Restoration, 15 op

900023Y: Structures of the Finnish Language, 4 op

900017Y: Survival Finnish Course, 2 op

900018Y: Survival finnish (extended), 4 op

452550S: Varying Courses of Contemporary Architecture, 2 - 10 op

454550S: Varying Courses of Urban Design, 2 - 10 op

453551S: Varying courses in Architectural Construction, 2 - 10 op

451551S: Varying courses in History of Architecture and Renovation, 2 - 10 op

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja - jaksot

450551P: A1 ArchiCAD basics, 2 op

450552P: A3Autocad basics, 1 op

450546A: Powerpoint and PDF (presentations and portfolios), 1 op

450550P: R1 Revit basics, 2 op

450549A: Rhinoceros and Grasshopper basics, 2 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuuluvien opintokohteiden kuvaukset

A410120: Basic and Intermediate Studies, Architecture, 120 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Basic and Intermediate Studies

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory courses

450511P: Orientation, 1 op

Voimassaolo: 01.08.2015 -Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Finnish

Timing:

Autumn term I, the first week of studies

Learning outcomes:

After the orientation the student is able to ask for essential information concerning his / her studies, and to recognize the study environment, and the tutors and other staff. Additionally the student is able to describe the practices and study methods of the degree program and is able to form an idea of the study path.

Contents:

The students are familiarized with the practices of the school, drawing techniques and equipment. The orientation week includes a workshop.

Mode of delivery:

Contact teaching + some independent studies.

Learning activities and teaching methods:

20 h contact teaching.

Target group:

1. vuosikurssin opiskelijat

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

Assessment methods and criteria:

Attendance at the contact teaching sessions and the workshop

Grading:

Pass.

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

_

Other information:

-

450521P: Computer Aided Design I, 5 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Asko Leinonen

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

The autumn and spring terms

Learning outcomes:

The students are able to use CAD applications to design standard 2D drawings and to produce printable sheets, can model 3D objects with the surface modeling techniques, can adjust lightning objects and materials in 3D models, can modify the settings for perspective views, know the main differences between a traditional CAD and a BIM (building information modeling), can make page layouts and are able to improve digital photos using image editing software.

Contents:

During the autumn term the students study computer aided 2D drafting in Autocad and 3D modeling in SketchUp Pro. In the autumn term the students complete a small modeling exercise. During the spring term the students study lights and materials in 3ds Max Design, study either Revit Architecture or ArchiCAD building information software, study photo editing and page layout using Adobe Photoshop and Indesign software. In the spring term the students also complete independently the building design exercise using the software studied.

Mode of delivery:

Contact teaching and independent studying

Learning activities and teaching methods:

Contact teaching 100 h, independent studying 35 h

Target group:

1st year Bachelor level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

_

Recommended or required reading:

The course literature will be announced separately

Assessment methods and criteria:

The evaluation is based mainly on the exercises

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Architect Asko Leinonen

Working life cooperation:

No

Other information:

The course is intended for the students of the Department of Architecture only.

451535P: History of Architecture I, lecture course, 4 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay451535P History of Architecture I, lecture course (OPEN UNI) 4.0 op

ECTS Credits:

4

Language of instruction:

Finnish

Timing:

Autumn term I and 2

Learning outcomes:

After completing the course the student can evaluate the interaction between style periods of European architectural history, technical development and social changes. The student can classify the different eras and recognize their most significant buildings and architects. After the course the student can interpret the classical language of architecture the classical grammar of architecture, as well as recognize the historical layers of built environment.

Contents:

Lectures discuss the general history of architecture and discipline of styles from prehistory until the end of 18 th century and introduce old building methods like brickwork bonds and traditional vault constructions.

Mode of delivery:

Lectures, additionally independent studies

Learning activities and teaching methods:

Lessons 56 hrs

Target group:

1st year Bachelor level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is combined to exercises (451536P)

Recommended or required reading:

Handouts, digital slides. A literature list will be delivered during the course.

Assessment methods and criteria:

Assessment is based on two written examinations. Written examinations or learning diary.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University lecturer N.N.

Working life cooperation:

No

451536P: History of Architecture I, studio course, 6 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

ECTS Credits:

6

Language of instruction:

Finnish and English

Timing:

Autumn term 1 and 2

Learning outcomes:

Having completed the course the student is able to observe the built environment and is able to identify and to describe different historical styles and layers of architecture. The student is also able to present these observations by using different drawing technics and writing and the student knows how to observe the built environment.

Contents:

Exercises consist of three separate tasks. The exercises are designed to train the students to observe the built environment and to use the vocabulary of architectural styles and history of architecture. The aim is to learn the terminology of classical architecture and to be able to express the classical language by drawing and writing. The aim is also to enhance the student's own ability to sense and observe the special qualities of the built environment.

Mode of delivery:

Contact teaching and independent studying

Learning activities and teaching methods:

40h contact teaching in design studio.

Target group:

1st year Bachelor level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

The course is related to the History of Architecture 1, lecture course (451535P)

Recommended or required reading:

A list of literature will be handed out during the course

Assessment methods and criteria:

Design tasks and supplementary lectures and the evaluation sessions

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University teacher Özlem Özer-Kemppainen.

Working life cooperation:

No

Other information:

-

452525P: Contemporary Architecture I, elements, 7 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Matti Sanaksenaho

Opintokohteen kielet: Finnish

ECTS Credits:

7

Language of instruction:

Finnish

Timing:

Autumn term 1-2

Learning outcomes:

After completing the course the student can name internationally essential phenomena and important names within modern architecture. He/she can explain the main features of the development of post-war Finnish architecture. The student can design a small building, implementing the design basics included in the course, i.e. basics of giving form to space, architectural solutions and dimensioning. The student can carry out the design work utilizing background information (basics of housing design, dimensioning) and fundamentals of dimensioning of dwellings. Furthermore, the student is able to illustrate his/her design with the help of computer technology.

Contents:

Lectures on basic architectural concepts, architectural phenomena of current interest, nature of artistic work and knowledge of housing design. Composition and design exercises with emphasis on dimensioning and basics of housing design. Visitor lectures are part of course.

Mode of delivery:

Lectures, exercises and a written examination. The type of the examination will be specified at the beginning of the course. Contact teaching and independent studying.

Learning activities and teaching methods:

lectures 18h + contact teaching 77 hours.

Target group:

1.st year students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

453501P Architectural Construction, Basic Course

Recommended or required reading:

William J.R. Curtis: Modern architecture since 1900. Richard Weston: Materials, form and architecture Jari & Sirkkaliisa Jetsonen: Finnish summer houses

Assessment methods and criteria:

Based on examination and exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho.

Working life cooperation:

No.

Other information:

To provide an understanding of architecture and guide to creative design work.

452526P: Contemporary Architecture I, basic course, 8 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Sanaksenaho
Opintokohteen kielet: Finnish

ECTS Credits:

8

Language of instruction:

Finnish

Timing:

Autumn term 1-2

Learning outcomes:

After completing the course the student can name internationally essential phenomena and important names within modern architecture. He/she can explain the main features of the development of post-war Finnish architecture. The student can design a small building, implementing the design basics included in the course, i.e. basics of giving form to space, architectural solutions and dimensioning. The student can

carry out the design work utilizing background information (basics of housing design, dimensioning) and fundamentals of dimensioning of dwellings. Furthermore, the student is able to illustrate his/her design with the help of computer technology.

Contents:

Lectures on basic architectural concepts, architectural phenomena of current interest, nature of artistic work and knowledge of housing design. Composition and design exercises with emphasis on dimensioning and basics of housing design. Visitor lectures are part of course.

Mode of delivery:

Lectures, exercises and a written examination. The type of the examination will be specified at the beginning of the course. Contact teaching and independent studying.

Learning activities and teaching methods:

lectures 18h+ contact teaching 117 hours.

Target group:

1.st year students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

450521P CAD I

Recommended or required reading:

William J.R. Curtis: Modern architecture since 1900. Richard Weston: Materials, form and architecture Jari & Sirkkaliisa Jetsonen: Finnish summer houses

Assessment methods and criteria:

Based on examination and exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

prof. Matti Sanaksenaho

Working life cooperation:

No.

Other information:

To provide an understanding of architecture and guide to creative design work.

453521P: Basics of Architectural Construction, lecture course, 3 op

Voimassaolo: 01.08.2012 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Jari Heikkilä

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay453521P Basics of Architectural Construction, lecture course (OPEN UNI) 3.0 op

ECTS Credits:

3

Language of instruction:

Finnsh

Timing:

spring term, autumn term

Learning outcomes:

After completing the course the student can explain the basic concepts of architectural construction and present the functional principles of the building parts and structures of a wood constructed one-family house.

Contents:

Lectures on the education and the position of an architect in a building project, building concepts, basics of structural technology and building physics. Visits to realized projects. To give the student general data on architectural construction and on the functional requirements set for building parts.

Mode of delivery:

The course includes lectures and an exam.

Learning activities and teaching methods:

Lectures 34 h, independent studying 47 h.

Target group:

1 st and 2 nd year bachelor students

Prerequisites and co-requisites:

-

Recommended optional programme components:

The courses of the basics of Building Physics (453535P), Structural Technology (basic course) (453531P) and Wooden Structures (453532P) are recommended to take at the same time.

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

The evaluation is based on the exam.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1 - 5

Person responsible:

Docent Jari Heikkilä

Working life cooperation:

no

Other information:

-

453522P: Basics of Architectural Construction, studio course, 7 op

Voimassaolo: 01.08.2012 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Jouni Koiso-Kanttila **Opintokohteen kielet:** Finnish

ECTS Credits:

7

Language of instruction:

Finnish

Timing:

Autumn term

Learning outcomes:

After completing the course the student knows the basics of designing a wood-framed single-family house.

Contents:

The course includes the design of a wood frame house. To familiarize the student in detail with constructions and design of wood-framed one-family houses.

Mode of delivery:

Contact teaching, independent studying.

Learning activities and teaching methods:

10 h lectures, 82 h tutoring, 97 h independent studying.

Target group:

2nd year bachelor level students

Prerequisites and co-requisites:

Contemporary Architecture -course.

Recommended optional programme components:

The lectures within the Basics of Architectural Construction, lecture course (453521P) are linked with the contents of this course. The courses of the basics of Building Physics (453535P), Structural Technology (basic course) (453531P) and Wooden Structures (453532P) are recommended to take at the same time.

Recommended or required reading:

Läsnäolo ohjaustilanteissa, ekskursio ja harjoitukset.

Assessment methods and criteria:

Attendance at the contact teaching sessions and the design project.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

prof. NN, university teacher Petri Aarnio (coordinator)

Working life cooperation:

No

Other information:

_

453531P: Structural Technology, basic course, 3 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuvksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mikko Malaska
Opintokohteen kielet: Finnish

ECTS Credits:

3

Language of instruction:

Finnish

Timing:

Spring term

Upon completion of the course the student identifies and is able to describe frametypes and structural systems. The student also understands the balance of the object. Student is able to tell the origin of soil and soil types and knows their use as structural material and as object of soil construction and knows the principles of founding.

Contents:

Lectures comprise elements of tree subjects: the frame systems of the buildings, statics and soil constructions in Finnish circumstances. The design studio comprises of small structural design projects.

Mode of delivery:

Contact teaching and independent studying

Learning activities and teaching methods:

16h lectures, 14h tutoring, 51 h independent studying.

Target group:

1st year Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

Before Basics of Architectural Construction Courses (453522P).

Recommended or required reading:

Study compendium. Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam. The evaluation is based mainly on the exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

prof. Mikko Malaska, university teacher Hannu Liedes, university teacher Raimo Hannila.

Working life cooperation:

No

Other information:

-

453532P: Wooden Structures, 2 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

Leikkaavuudet:

ay453532P Wooden Structures (OPEN UNI) 2.0 op

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

Autumn term

Learning outcomes:

Upon completion of the course the student identifies the qualities of wood as structural material and is able to use wooden products to design the frame of a small long term building.

Contents:

Lectures comprise the qualities of wood including its strength properties, wooden products and structural detailing. The design studio comprises structural design project of a family house.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

14 h lectures, 6 h tutoring and 34 independent studying.

Target group:

2nd year Bachelor level students.

Prerequisites and co-requisites:

Basics of Building Physics (453535P) and Structural Technology, Basic Course (453531P).

Recommended optional programme components:

Basics of Architectural Construction, studio course.

Recommended or required reading:

Study compendium. Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam. Evaluation is based on exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

prof. Mikko Malaska, university teacher Heikki Pirkola

Working life cooperation:

No

Other information:

-

453535P: Basics of Building Physics, 2 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Pirkola, Heikki Juhani

Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

Spring term

Upon completion of the course the student identifies and understand basic building physic terms like heat, moisture, air permeability in the structures and is able to determine most typical key ratios for structures. Student is able to understand most common building materials and the affect on the indoor air of buildings. Student is able to understand the basics of low energy constructions.

Contents:

Living and structures before and now, thermal conductivity in structures, typical key ratios of structures, vapour and air permeability in structures, sources of moisture, air quality in buildings and low energy building.

Mode of delivery:

Contact teaching, independent studying

Learning activities and teaching methods:

16h lectures, 4h tutoring in calculations and 34h independent studying.

Target group:

1st year bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

Before Basics of Architectural Construction Courses (453522P).

Recommended or required reading:

Material given and shown in the lectures. Course literature will be announced separately.

Assessment methods and criteria:

The evaluation is based on the exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

university teacher Heikki Pirkola

Working life cooperation:

No

454521P: History of Urban Design, 5 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Nykänen, Kari Petteri Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish (part of literature in English)

Timing:

Autumn term 1-2.

Having completed the course the student identifies and is able to describe different historical phases of urban design. The student also identifies and is able to describe elements of urban form as well as implement them in an urban design project. The student can also independently obtain information needed in a small urban design project.

Contents:

Lectures comprise elements of urban form and historical phases of urban design in the western world and in Finland especially. The design studio comprises of a small urban design project.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

24 h lectures + 26 h contact teaching in design studio + 85 h independet studying.

Target group:

1.st year Bachelor level students

Prerequisites and co-requisites:

Recommended optional programme components:

-

Recommended or required reading:

Study compendium. Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam. The evaluation is based on the outcome of the design project (2/3) and exam (1/3).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Helka-Liisa Hentilä

Working life cooperation:

No

Other information:

-

455501P: Basics of Design, 5 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Aulikki Herneoja Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Spring term 2.

After completing the course the student can carry out a design exercise, making good use of the basics of design and detailing closely related to architecture. The exercise work is based on application of basics of design and detailing to practice. The student is able to apply the principles of sustainability in his / her design solutions and material selection.

Contents:

The objective of the course is to guide the student to understanding the basics of design and detailing closely connected to architecture. Lectures deal with basics of design related to architecture taking into account sustainable development perspective. The focus is on basics of detailing and jointing, the examination of the relationship between material, colour and light, introduction of fixed furnishing and designing of stairs. Course includes a visit to architecture target introduced by the architect himself from design and detailing perspective.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12h lectures and/or contact teaching and 38 h personal or/and group tutoring

Target group:

2nd year Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

Literature is giving during the course.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja

Working life cooperation:

No

Other information:

_

455511P: Visual Arts I, 5 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay455511P Visual Arts I (OPEN UNI) 5.0 op

ECTS Credits:

Language of instruction:

Finnish

Timing:

Autumn term 1-2

Learning outcomes:

After completing the course the student is able to comprehend various sides of visual expression and can implement these skills in exercise work.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

lectures and/ or contact teaching 6 hours and contact teaching and/ or groupteaching 92 hours.

Target group:

1.nd year students.

Prerequisites and co-requisites:

-

Recommended or required reading:

Supplemental reading list will be supplied during the course.

Assessment methods and criteria:

Based on exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

Other information:

To deal with different aspects of visual expression, to expand general knowledge relative to the various fields of art and to develop independent creative expression.

455512P: Visual Arts II, 3 op

Voimassaolo: 01.08.2005 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

Leikkaavuudet:

ay455512P Visual Arts II (OPEN UNI) 3.0 op

ECTS Credits:

3

Language of instruction:

Finnish

Timing:

Spring term 1-2

Learning outcomes:

After completing the course the student is able to comprehend various sides of visual expression and can implement these skills in exercise work.

Contents:

Classical model drawing and various applications of composition and colour theory. The relationship between architecture and colour as well as art and space is studied during the course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

lectures and/ or contact teaching 6 hours and contact teaching and/ or groupteaching 92 hours.

Target group:

1st year students.

Prerequisites and co-requisites:

-

Recommended or required reading:

Supplemental reading list will be supplied during the course.

Assessment methods and criteria:

Based on exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

Other information:

To deal with different aspects of visual expression, to expand general knowledge relative to the various fields of art and to develop independent creative expression.

451537A: History of Architecture II, lecture course, 3 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Anna-Maija Ylimaula
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay451537A History of Architecture II, lecture course (OPEN UNI) 3.0 op

ECTS Credits:

3

Language of instruction:

Finnish (literature partly in English)

Timing:

Spring term 1 and 2

During the course the student learns to recognize the historical roots of the contemporary architecture and recount the development up to today. Having completed the course, the student recognizes the most essential phenomena and styles of 19th and 20th century architecture and can reflect own personal views on contemporary architecture.

Contents:

Course discusses the general history of architecture of 19th and 20th centuries.

Mode of delivery:

Lectures, additionally independent studies.

Learning activities and teaching methods:

Lectures, additionally independent studies.

Target group:

1st year Bachelor's level students

Prerequisites and co-requisites:

History of architecture I, lecture course (451535P)

Recommended optional programme components:

Course is combined to practices (451538A)

Recommended or required reading:

Handouts, digital slides. A literature list will be handed out during the course

Assessment methods and criteria:

Assessment is based on two written examinations

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University lecturer N.N.

Working life cooperation:

No

Other information:

-

451538A: History of Architecture II, studio course, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Autumn term 1 and 2

Learning outcomes:

Having completed the course the student is able to do measurement drawings of the buildings, and have knowledge about the customary methods of documentation and inventory. Through the subject area of the course the student learns about the traditional building methods.

Contents:

During the course measurement drawings of a historical building or building groups are done. Both traditional and new methods of documentation, inventory and measurement are studied. The course includes a fieldwork where the traditional building methods and techniques are also studied.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

48 h contact teaching in design studio. 2 field trips.

Target group:

2nd year Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

The course is related to the History of Architecture 2, lecture course (451537A)

Recommended or required reading:

A list of literature will be handed out during the course.

Assessment methods and criteria:

Participation in the lectures, field work and evaluation sessions. Inventory project.

The evaluation is based on the quality of the inventory project.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University teacher Özlem Özer-Kemppainen.

Working life cooperation:

No

Other information:

-

452523A: Contemporary Architecture II, elements, 7 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Matti Sanaksenaho

Opintokohteen kielet: Finnish

ECTS Credits:

7

Language of instruction:

Finnish

Timing:

Autumn term 1-2

Learning outcomes:

After completing the course the student can name internationally essential phenomena and important names within modern architecture. He/she can explain the main features of the development of post-war Finnish architecture. The student can design a small (housing and puplic) building, implementing the design basics included in the course, i.e. basics of giving form to space, architectural solutions, dimensioning and understand the meaning of light in housedesign. The student can carry out the design work utilizing background information, basics of housing design e.g dimensioning, site, space, materials, natural light as a part of expression of architecture. Furthermore, the student is able to illustrate his/her design with the help of computer technology.

Contents:

Lectures on basic architectural concepts, architectural phenomena of current interest, the nature of artistic work and knowledge of housing design. Composition and design exercises with emphasis on dimensioning and basics of housing design. Visitor lectures are part of course.

Mode of delivery:

Lectures, exercises and a written examination. The type of the examination will be specified at the beginning of the course. Contact teaching and independent studying.

Learning activities and teaching methods:

lectures 18h + contact teaching 92 hours.

Target group:

2.nd year students.

Prerequisites and co-requisites:

452525P Contemporary Architecture I, elements and 452526P Contemporary Architecture I, basics

Recommended optional programme components:

450521P CAD I

Recommended or required reading:

William J.R. Curtis: Modern architecture since 1900.

Philip Jodidio: Architecture Now

Henry Plummer: The architecture of natural light

Assessment methods and criteria:

Based on examination and exercises.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

Other information:

To provide an understanding of architecture and guide to creative design work

452528A: Contemporary Architecture II, basics, 8 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Matti Sanaksenaho Opintokohteen kielet: Finnish

ECTS Credits:

Language of instruction:

Finnish

Timing:

Spring term 1-2

Learning outcomes:

After completing the course the student can name internationally essential phenomena and important names within modern architecture. He/she can explain the main features of the development of post-war Finnish architecture. The student can design a small (housing and puplic) building, implementing the design basics included in the course, i.e. basics of giving form to space, architectural solutions, dimensioning and understand the meaning of light in housedesign. The student can carry out the design work utilizing background information, basics of housing design e.g dimensioning, site, space, materials, natural light as a part of expression of architecture. Furthermore, the student is able to illustrate his/her design with the help of computer technology.

Contents:

Lectures on basic architectural concepts, architectural phenomena of current interest, the nature of artistic work and knowledge of housing design. Composition and design exercises with emphasis on dimensioning and basics of housing design. Visitor lectures are part of course.

Mode of delivery:

Lectures, exercises and a written examination. The type of the examination will be specified at the beginning of the course. Contact teaching and independent studying.

Learning activities and teaching methods:

lectures 18h+ contact teaching 132 hours.

Target group:

2.nd year students.

Prerequisites and co-requisites:

452525P Contemporary Architecture I, elements 452526P Contemporary Architecture I, basics 452523A Contemporary Architecture II, elements

Recommended optional programme components:

450521P CAD

Recommended or required reading:

William J.R. Curtis: Modern architecture since 1900.

Philip Jodidio: Architecture Now

Henry Plummer: The architecture of natural light

Assessment methods and criteria:

Based on examination and exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

prof. Matti Sanaksenaho

Working life cooperation:

No.

Other information:

To provide an understanding of architecture and guide to creative design work.

456502A: Renovation of Apartment Buildings, 5 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anu-Sisko Soikkeli

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Spring term 1-2

Learning outcomes:

After completing the course the student can explain the most common damage mechanisms in post-war wooden houses. The student can estimate how different methods of renovation will affect the functions and architecture of a wooden one-family house. The student can make technically safe choices between different ways of renovation, improving energy efficiency and functionality of the building. The student can explain the phases of a renovation design process. He / she can analyze the influences of the output level and the input level of the renovation on the design process. The student knows how to use the technical symbols of building renovation and prepare master plan drawings for the renovation of a one-family house.

Contents:

Completing a renovation plan for a wooden prefabricated dwelling house. Lectures deal especially with special features and post-war one-family houses and technical issues of renovating a wood-frame house. Visits are designed to support the process of composing the plan. Exercise of making master plans of the renovation of a prefabricated wooden house is carried out as pair work. To introduce the student to the principles and characteristics of building renovation and the maintenance of wood frame building as well as a renovation planning process from the viewpoint of an architect. A good command of correct renovation principles and knowledge of damages and repair methods of wooden buildings.

Mode of delivery:

Face-to-face teaching, independent studies

Learning activities and teaching methods:

Lectures, drawing a renovation plan, group work in pairs.

Target group:

3rd year Bachelor level students

Prerequisites and co-requisites:

Basics of Architectural Construction, studio course and lecture course

Recommended or required reading:

Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Senior lecturer Anu Soikkeli

Working life cooperation:

No

Other information:

-

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Leena Soudunsaari
Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS

Language of instruction:

Finnish (study materials mainly in English).

Timing:

Autumn term 1-2

Learning outcomes:

Having completed the course a student is familiar with seminar practices and identifies the most significant books on urban design theory. The student is also able to write an interpretative summary on literature from a given perspective.

Contents:

The course comprises of seminars (book presentations, discussions, and group tutoring) and of writing an interpretative summary of a book on urban design theory. The perspective for interpretation changes annually.

Mode of delivery:

Contact teaching plus independent studying.

Learning activities and teaching methods:

12 h lectures (including seminars) + 18 h tutoring + 105 h independent studying.

Target group:

2nd year Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

Within the range of possibility, implementation in collaboration with the course Tekniikan englanti (902011P).

Recommended or required reading:

Classic books on urban design theory.

Assessment methods and criteria:

The student participates in all seminars (or passes an optional exam) and delivers an exercise, which is conducted in pairs. The evaluation is based on the outcome of the exercise (75%) and active participation in seminar discussions (25%).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik

Working life cooperation:

No

Other information:

When implemented in collaboration with Tekniikan englanti 3 (902011P), the exercise will be written in English.

454523A: Neighborhood Design, 5 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

5 ECTS

Language of instruction:

Finnish.

Timing:

Spring term 1

Learning outcomes:

After completion of the course the student will understand the basic factors that affect the interdependence between spatial design and functional planning as well as recognises the principles of interaction between the human being and the built environment. The student will be able to perceive the specific characteristics of a given area and produce a design that corresponds to the level of a general town plan.

Contents:

The lectures cover basic aspects that affect the spatial design of a given area and the planning of different functions therein. The exercise consists of designing a plan on the level of a general town plan.

Mode of delivery:

Contact teaching plus independent studying.

Learning activities and teaching methods:

10 h lectures + 3 h seminar + 52 h contact teaching in design studio + 70 h independent studying.

Target group:

2nd year Bachelor level students.

Prerequisites and co-requisites:

History of Urban Design (454521P).

Recommended optional programme components:

-

Recommended or required reading:

Lecture notes and *Asuinaluesuunnittelu*, Jalkanen, R., Kajaste, T. et al., Rakennustieto, Helsinki, ISBN 951-676-446-0.

Assessment methods and criteria:

Exercise (design project) 2/3 of grade, exam 1/3 of grade.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik

Working life cooperation:

No

Other information:

-

451504A: History of Architecture III, 3 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Anna-Maija Ylimaula **Opintokohteen kielet:** Finnish

Leikkaavuudet:

ay451504A History of Architecture III (OPEN UNI) 3.0 op

ECTS Credits:

3

Language of instruction:

Finnish (literature in English and Swedish)

Timing:

Autumn term 2 and spring term 1

Learning outcomes:

The aim is to provide basic knowledge on the history of the Scandinavian and Finnish architecture from the prehistory until the 20th century.

Learning outcomes: After completing the course the student masters the historical background of the architecture of Finland and Scandinavia starting from pre-historical times. The student recognizes the temporal and stylistic layers of the history of our building tradition and is able to explicate features of Finland's architectural evolvement in a relation with the international development and especially in correlation to Sweden and the other Nordic countries.

Contents:

Lecture discusses the history of architecture in Scandinavia and especially in Finland from prehistory till 20th C.

Mode of delivery:

Lectures, additionally independent studies.

Learning activities and teaching methods:

Lectures 36 h

Target group:

3rd year Bachelor level students.

Prerequisites and co-requisites:

History of architecture I and II, lecture courses (451535P and 451537A)

Recommended optional programme components:

The course is related to the History of Architecture III, practices course (451505A). Together with the Architecture III, practices course, this course can form the Bachelor's diploma work (8 ECTS) of the Bachelor's degree.

Recommended or required reading:

Handouts, digital slides. A literature list will be handed out during the course

Assessment methods and criteria:

Assessment is based on written examinations.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University lecturer N.N.

Working life cooperation:

Nο

Other information:

-

Select second domestic language

901046Y: Second Official Language (Swedish), Written Skills, 1 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Opintokohteen kielet: Swedish

901047Y: Second Official Language (Swedish), Oral Skills, 1 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Opintokohteen kielet: Swedish

900081Y: Second Official Language (Finnish), Written Skills, 1 - 2 op

Voimassaolo: 01.01.2015 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Opintokohteen kielet: Finnish

900082Y: Second Official Language (Finnish), Oral Skills, 1 - 3 op

Voimassaolo: 01.01.2015 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Opintokohteen kielet: Finnish

Select courses in one foreign language, totaling 6 cr

903012P: Technical German 3, 6 op

Voimassaolo: 01.08.1995 -Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: German

Ei opintojaksokuvauksia.

904054P: Technical Russian 1, 7,5 op

Voimassaolo: 01.08.1995 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Russian

Proficiency level:

A2/B1 on the CEFR scale.

Status:

See the study guide of your degree programme.

Required proficiency level:

A2

ECTS Credits:

6 ECTS credits

Language of instruction:

Russian and Finnish

Timing:

Students who wish to participate in this course are asked to contact the course's teacher at the beginning of September.

Learning outcomes:

The course aims to give the student the means to manage in common communication situations and understand spoken and written Russian in professional contexts and discuss questions related to his/her special field.

Contents:

Various modes of studying: handouts, discussion exercises and language lab sessions.

Mode of delivery:

Group- and independent work.

Learning activities and teaching methods:

Self-study and group work.

Target group:

Students of the Faculty of Technology.

Prerequisites and co-requisites:

Elementary and intermediate courses in Russian or equivalnt knowledge.

Recommended optional programme components:

-

Recommended or required reading:

Material provided by the teacher.

Assessment methods and criteria:

Regular and active participation. Completion of the given assignments. Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / fail

Person responsible:

Ari Hepo-aho

Working life cooperation:

_

Other information:

-

902151Y: English for Architecture (ArkTK), 2 - 3 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuvksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Voidaan suorittaa useasti: Kyllä

Proficiency level:

CEFR B2 - C1

Status:

See the compulsory foreign language requirements for your own degree programme.

Required proficiency level:

You should have taken English as an "A" or "B" language at school, or have reached an equivalent level of skills. If you need to take English, but lack this background, please get in touch with the Languages and Communication contact teacher (Eva Braidwood) to discuss individual solutions.

ECTS Credits:

3 ECTS credits

Language of instruction:

English

Timing:

In the School of Architecture, your English studies take place in the spring term of your first year and continue in the autumn of the second year. This course is organized in the spring. The course is offered in two versions, one for 2 op and one for 3 op (54 hrs work and 80 hrs work). Students with the matriculation exam grade *laudatur* or *eximia cum laude approbatur* take the 2 op course and others take the 3 op course.

Learning outcomes:

By the end of the course, students will be able to

- demonstrate appropriate use of professional vocabulary
- develop efficient strategies and methods for maintaining their English proficiency
- use the core vocabulary and discourse patterns required for professional description and critique of architectural design
- demonstrate oral and written skills and presentation techniques necessary for working in a multicultural environment

Contents:

In this course, you will focus on developing oral and written English language skills which enable you to follow developments in your own field of architecture and get along in an international, intercultural environment with a sufficient level of proficiency.

The course provides students with the opportunity to develop professional and academic communication and field-related competences. Students will participate in simulated professional events including a project presentation, building/design presentation, discussion and critiquing of architectural solutions and case studies.

Mode of delivery:

This teaching is offered in the School of Architecture in the form of contact teaching and independent study.

Learning activities and teaching methods:

Target group:

Students of Architecture

Prerequisites and co-requisites:

See Required Proficiency Level

Recommended optional programme components:

See Status

Recommended or required reading:

The course is based on a selection of special language learning materials and field-related literature, and audio and visual material. The course material will be provided by the teacher. Lesson handouts and supplementary material are available during the course in Optima.

Assessment methods and criteria:

You are required to participate regularly in all contact teaching provided. Assessment will be based on the satisfactory completion of the course tasks and achievement of the learning outcomes. Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail.

Person responsible:

Eva Braidwood

Working life cooperation:

_

Other information:

Students with the matriculation exam grade *laudatur* or *eximia cum laude approbatur*, or who have graduated from an IB -program will be exempted from one part of the course (1 op) and will be required to complete a 2 op version of the course.

902152Y: English for Urban Planning (ArkTK), 2 - 3 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: English
Voidaan suorittaa useasti: Kyllä

Proficiency level:

CEFR B2 - C1

Status:

See the compulsory foreign language requirements for your own degree programme.

Required proficiency level:

You should have taken English as an "A" or "B" language at school, or have reached an equivalent level of skills. If you need to take English, but lack this background, please get in touch with the Languages and Communication contact teacher for your department to discuss individual solutions.

ECTS Credits:

3 ECTS credits

Language of instruction:

English

Timing:

In the School of Architecture, your English studies take place in the spring term of your first year and continue in the autumn of the second year.

By the end of the course, will be able to

- demonstrate appropriate use of field-specific vocabulary required for professional communication
- use English in field-specific academic writing and oral presentations
- follow the academic and professional conventions in critiquing the built environment, urban design and planning projects and reviewing field-related literature
- work efficiently in cooperation and contribute effectively to urban design-related projects

Contents:

In this course, you will focus on developing oral and written English language skills which enable you to follow developments in your own field of architecture and urban design and planning.

This course is integrated with your subject course in urban design and planning. In the first part of the course you will study professional criteria for and leading examples of urban development, and then present your own case study of a Finnish residential district. In the second part, you will write an argumentative essay / book review, which will be based on a compulsory text to be read in the Course for Urban Design and Planning. The essay will follow the conventions of academic and scientific writing, which you will practice in this course of English for Urban Planning.

Mode of delivery:

This teaching is offered in the School of Architecture in the form of contact teaching and independent study.

Learning activities and teaching methods:

_

Target group:

Students of Architecture

Prerequisites and co-requisites:

See Required Proficiency Level

Recommended optional programme components:

902151Y English for Architecture 2/3 ECTS credits

Recommended or required reading:

The course is based on a selection of special language learning materials and field-related literature, and audio and visual material. The course material will be provided by the teacher and will be available in Optima during the course.

Assessment methods and criteria:

You are required to participate regularly in all contact teaching provided. Assessment will be based on the satisfactory completion of the course tasks and achievement of the learning outcomes. Detailed assessment criteria will be provided by the teacher.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail.

Person responsible:

See contact teachers

Working life cooperation:

_

Other information:

Students with the matriculation exam grade *laudatur* or *eximia cum laude approbatur*, or who have graduated from an IB -programme will be exempted from one part of the course (1 ECTS credits) and will be required to complete a 2 ECTS credits version of the course.

Choose courses minium 5 credits

450537P: Revit Architecture basics and 3DI/3DS Studio MAX, co-operative use with CAD, 3 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

3

Language of instruction:

Finnish

Timing:

Autumn period

Learning outcomes:

<u>Revit</u>: students are able to produce presentation drawings based on the information model using basic tools and know the essential to produce building permit drawings.

<u>3DS Max</u>: students are able to transfer 3d models between 3ds MAX and other CAD and image processing software, supplement them and produce photorealistic images.

Contents:

Revit: project management, detailing tools, section, facade and perspective views. 3DS Max: import/export, editors, material, lightning, camera and calculation settings.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 24 h, independent studying 57 h

Target group:

2nd year bachelor students

Prerequisites and co-requisites:

_

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5.

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Introduction to conventional Building Information Modelling in Revit Architecture Environment. Introduction to 3Ds MAX modelling and illustration rendering in conjunction with other CAD software. The course is intended for the students of the Department of Architecture only.

450538P: Autocad Basics, 2 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timina:

Autumn period

Learning outcomes:

Students are able to produce basic presentation drawings using basic tools and know the essentials to producing building permit drawings.

Contents:

Project management, detailing tools, section, facade and perspective views.

Mode of delivery:

Lectures and practice work.

Learning activities and teaching methods:

Contact teaching 16 h, independent studying 38 h

Target group:

2nd year bachelor students

Prerequisites and co-requisites:

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Introduction to AutoCAD Environment. The course is intended for the students of the Department of Architecture only.

450539P: Artlantis and Archicad basics, 3 op

Voimassaolo: 01.08.2015 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

3

Language of instruction:

Finnish

Timing:

Autumn period

Learning outcomes:

<u>Artlantis</u>: students can import a 3D-model and combine it with other models. On the basis of this model, students can set the material, lighting and camera properties for a satisfactory end result in the rendering. <u>Archicad</u>: students are able to produce basic presentation drawings based on the information model using basic tools and know the essentials to producing building permit drawings.

Contents:

Artlantis: basics of the software.

Archicad: project management, detailing tools, section, facade and perspective views.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 24 h, independent studying 57 h

Target group:

2nd year bachelor students

Prerequisites and co-requisites:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Introduction to conventional Building Information Modelling in Archicad. The course is intended for the students of the Department of Architecture only.

A410121: Orientation Module, Architecture, 40 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Module Preparing for the Option

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

Compulsory courses

454504A: Town Planning, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

10 ECTS

Language of instruction:

Finnish

Timina:

Autumn term 1.

Learning outcomes:

After completing the course the student can name the main principles of the Finnish planning system and the process of town planning. The student comprehends and recognizes the various technical symbols and regulations in planning. Furthermore, the student is able to apply the learning outcome to a town plan level design exercise and produce documents, corresponding to an official town plan. The student can also describe main principles of sustainable planning.

Contents:

Lectures deal with different aspects of sustainable urban planning, the Finnish land use planning system, planning process and regulations. The course deals also with the planning of residential areas, traffic and urban landscapes. The town planning exercise will be completed using a special CAD programme for town planning.

Mode of delivery:

Contact teaching plus independent studying.

Learning activities and teaching methods:

16 h lectures + 64 h contact teaching in design studio + 136 h independent studying.

Target group:

3rd year Bachelor level students.

Prerequisites and co-requisites:

Neighbourhood Design (454523A).

Recommended optional programme components:

Design project is connected with courses Housing Design (A452507A) and Design of Apartment Blocks (453504A).

Recommended or required reading:

Study compendium. Recommended literature will be announced separately.

Assessment methods and criteria:

Exercise (design project, workshop and exam). Exercise (design project) 2/3 of grade, exam 1/3 of grade.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Helka-Liisa Hentilä

Working life cooperation:

Nο

Other information:

The town planning course offers one option for a Bachelor's thesis. Separate instruction will be available.

452507A: Housing Design, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mahlamäki Rainer
Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish

Timing:

Autumn term 2, spring term 1

Learning outcomes:

The objective of the course is to initiate the students through lectures and exercises into the bases of the housing design. Learning outcomes: After completing the course the student understands the characteristics of different housing and dwelling typologies, the measures of the dwellings, basic technical facts as well as main points of the history of the Finnish Housing. After completing the course the student is able to present a sketch design of a simple block of flats.

Contents:

The course consists of lectures, design task and participation to the critique-sessions organized together with the Laboratory of Building Sciences.

Mode of delivery:

Lectures and face-to-face teaching. The design task will be tutored mainly in groups.

Learning activities and teaching methods:

A housing design task is included in the course. The course is the second part of the 3 rd year joint design project.

Target group:

3rd year bachelor students

Prerequisites and co-requisites:

Design project is connected with courses Town Planning (454503A) and Design of Apartment Blocks (453503A). The Laboratory of Contemporary Architecture offers lectures in first autumn term and tutoring for the exercise mainly in second autumn term. Prerequisite: contemporary architecture I-II.

Recommended optional programme components:

see before

Recommended or required reading:

Course handout

Kahri, Pyykönen: Asuntosuunnittelu.

Assessment methods and criteria:

The course is completed by participating the lectures and performing the design task. The exercise will be graded after the course Design of Apartment Blocks is completed and will be based on the evaluation of the overall architectural quality, which is the final grading.

Grading:

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

452529A: Contemporary Architecture III, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laii: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Mahlamäki Rainer

Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish

Timing:

Autumn term 1-2

Learning outcomes:

The objective of the course is to initiate the students through lectures and exercises into the architecture and design principles of public buildings. Learning outcomes: After completing the course the student understands bases for the designing of public buildings, such as functionality, site-specification and general architectural solution. After completing the course the student is able to present a design of a small public building with the help of drawings and a scale model.

Contents:

The lectures deal contemporary architecture by analyzing for example schools, libraries, exhibition buildings and sacral buildings. There are both domestic and international examples. The lectures deal also with current features as well as the effects of technical solutions to the architecture of the building. Guest lectures are part of the course program.

Mode of delivery:

Lectures and face-to-face teaching

Learning activities and teaching methods:

The design task will be a tutored exercise or an architectural competition of a small public building. The exercise is tutored in common studio sessions and intermediate critiques. The completed works are presented in an open critique.

Target group:

3rd year bachelor students

Prerequisites and co-requisites:

Contemporary architecture I-II.

Recommended optional programme components:

The course continues the teaching given in Contemporary Architecture I-II courses, but this time focusing on the design of a public building. Contemporary Architecture III course offers one option for a Bachelors' thesis. Separate instruction will be delivered.

Recommended or required reading:

Summary of the lectures. List of readings will be handed out at the lectures.

Assessment methods and criteria:

Exercise (design project and possible exam). The form of the exam will be announced each year. The grading is based on evaluation of the achieved goals of the task, quality of the exercise and exam

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Rainer Mahlamäki

Working life cooperation:

No.

Other information:

-

453504A: Design of Apartment Blocks, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish

Timing:

Spring term

Learning outcomes:

After completing the course the student can explain the functional principles of the building parts and structures of a multi-story building and implement these principles in construction design of main structural elements and complimentary building parts. The student is able to design a block of flats which fulfils the building regulations and to produce its working and detail drawings.

Contents:

The content of the course is defined in connection with the assignment of the exercise project. To introduce students to the essential issues within architectural construction and to provide the student with skills to work within the architectural design of energy efficient apartment houses according to the principles of sustainability.

Mode of delivery:

Contact teaching, independent studying.

Learning activities and teaching methods:

34 h lectures, 90 h tutoring and 146 h independent studying.

Target group:

3rd year bachelor students

Prerequisites and co-requisites:

Completion of Architectural Construction, basic courses. The exercise is a part of the compulsory joint studio course arranged in collaboration with Contemporary Architecture and Urban Design. The student may present the project of the course as his/her Bachelor's work.

Recommended optional programme components:

Techniques of Plumbing, Heating and Ventilation -course (453510A) and Electrical Installations -course (453511A).

Assessment methods and criteria:

The evaluation is based on the outcome of the exercise work and the exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN, university teacher Petri Aarnio

Working life cooperation:

-

Other information:

-

453510A: Techniques of Plumbing, Heating and Ventilation, 3 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Pentti Kuurola

Opintokohteen kielet: Finnish

Leikkaavuudet:

485506A Heating, Ventilation and Air Conditioning Technology 3.0 op

ECTS Credits:

3

Language of instruction:

Finnish

Timing:

autumn term, spring term

Learning outcomes:

After completing the course the student recognizes the technical symbols of plumbing, heating and ventilation, can interpret the plans, define the need of space required by the systems and present how the installations of the systems, their maintenance and detecting of damage can be taken into consideration in the design work. The student can also explain the influence of heating, plumbing and ventilation systems on the energy efficiency, interior climate and pleasantness of buildings.

Contents:

Lectures on official regulations, technical drawings and space reservations for various installation systems and methods. Design exercises: necessary provisions in designs for spaces, ducts and piping routes. The course gives the student a general idea of heating, plumbing and air-conditioning technology. One aim of the course is to introduce the student to the requirements of such technology as part of designing and building, including demands of indoor climate, energy efficiency, spatial needs and dimensioning of technical installations, maintenance and detecting of damage.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

The course includes 20 h lectures, 25 h tutoring and 36 h independent studying.

Target group:

3rd year bachelor students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

Exercises are based on the design exercise of the course Design of Apartment Blocks (452504A).

Recommended or required reading:

List of readings will be handled out during the course.

Assessment methods and criteria:

Lectures and exercises and written exam. The evaluation is based on the exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Pentti Kuurola

Working life cooperation:

No

Other information:

-

453511A: Electrical Installation, 2 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Jorma Korkalo

Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

spring term

Learning outcomes:

After completing the course the student recognizes the technical symbols of electrical installations and systems, can interpret the plans, define the need of space required by the systems and present how the installations of the systems, their maintenance and detecting of damage can be taken into consideration in the design work. The student can also explain the central criteria of artificial lighting design.

Contents:

Lectures on official regulations, space reservations for electrical equipment, electrical plans and knowledge of the electrical information file, mounting and space reservations. Lighting technology, sources of light and lamps. Design exercises: necessary provisions in designs for spaces, ducts and piping routes, drawing up of an electrical plan.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

18 h lectures, 6 h tutoring and 30 h independent studying.

Target group:

3rd year bachelor students.

Prerequisites and co-requisites:

Recommended optional programme components:

Exercises are based on the design exercise of the course (452504A) Design of Apartment Blocks.

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

The evaluation is based on the student's attendance at the lectures and on exercises.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Jorma Korkalo

Working life cooperation:

Nο

Other information:

-

455990A: Bachelor's Thesis / Architecture, 8 op

Voimassaolo: 01.08.2007 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

ECTS Credits:

8 ECTS

Language of instruction:

Finnish

Timing:

Spring term of the 3rd year of bachelor's degree studies

Learning outcomes:

The student is able to utilize the acquired knowledge and apply learned skills in can in practical design work. The student is able to solve design problems and visualize solutions in different scales and to implement different possibilities of visual expression as part of creative work.

Contents:

The bachelor's work is based on one of the design exercises of the 3rd year of bachelor level studies completed for the respective teaching unit (contemporary architecture III, town planning, housing design, design of apartment blocks or history of architecture III studio course).

Mode of delivery:

Individual project work and contact teaching in studio and computer lab.

Learning activities and teaching methods:

The bachelor's thesis work completes the bachelor level studies. The bachelor's work is supervised by the teaching unit whose exercise work has been selected for the basis for the bachelor's work. The final project is presented in a common bachelor's work seminar in May.

Target group:

3rd year bachelor students

Prerequisites and co-requisites:

Compulsory basic and intermediate studies, the 3rd year exercise project which has been selected by the student as the basis for the bachelor's work.

Recommended optional programme components:

study units included in the preparatory module

Recommended or required reading:

The materials of the compulsory study unit, including the project work that the student has selected for the basis of his / her bachelor's work

Assessment methods and criteria:

The student follows the bachelor work instructions of the supervising teaching unit and the faculty. A printed and bound A3 copy of the illustrated bachelor's work is required..

Grading:

Pass / Fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor n.n. in the supervising laboratory

Working life cooperation:

No

Other information:

Separate detailed bachelor's work instructions are published on the web pages of the faculty.

030005P: Information Skills, 1 op

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Faculty of Technology

Arvostelu: 1 - 5, pass, fail

Opettajat: Sassali, Jani Henrik, Ursula Heinikoski

Opintokohteen kielet: Finnish

Leikkaavuudet:

030004P Introduction to Information Retrieval 0.0 op

ECTS Credits:

1 ECTS credit

Language of instruction:

Finnish

Timing:

2nd or 3rd year

Learning outcomes:

Students know the different phases of information retrieval process and basic techniques of scientific information retrieval. They will find the most important reference databases of their discipline and know how to evaluate information sources and retrieval results.

Contents:

Retrieval of scientific information, the retrieval process, key databases of the discipline, and evaluation of information retrieval and information sources.

Mode of delivery:

Blended teaching: classroom training, web-based learning material and exercises in Optima environment, a final assignment on a topic of the student's own choice

Learning activities and teaching methods:

Training sessions 8h, group working 7h, self-study 12h

Target group:

Compulsory for all students of the Faculty of Technology, the Faculty of Information Technology and Electrical Engineering and the Faculty of Architecture. In the Faculty of Science compulsory for students of biology, physics, geosciences, chemistry and geography. Optional for students of biochemistry and mathematics.

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

Web learning material https://wiki.oulu.fi/display/030005P.

Assessment methods and criteria:

Passing the course requires participation in the training sessions and successful completion of the course assignments.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

pass/fail

Person responsible:

Science and Technology Library Tellus, tellustieto (at) oulu.fi

Working life cooperation:

-

Other information:

_

450522A: Seminar, 1 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS

Language of instruction:

Finnish

Timing:

Spring term 2

Learning outcomes:

The student is able to express himself both linguistically and in writing as well as communicate and transmit visual information

Contents:

The student presents his bachelor's thesis work in the seminar. The teachers participating in the seminar give oral feed-back on the project.

Mode of delivery:

The two days seminar is takes place in a lecture room and the exhibition space.

Learning activities and teaching methods:

The student present his bachelor's work in the seminar digitally, using the data projector. For the exhibition of the bachelor's works the student prints A3 size prints of each panel of the bachelor's project according to the detailed instructions given by the respective teaching unit.

Target group:

3 rd year bachelor students

Prerequisites and co-requisites:

Bachelor's work.

Recommended optional programme components:

The seminar is part of the he bachelor's thesis work.

Recommended or required reading:

_

Assessment methods and criteria:

Participation in the seminar

Grading:

Pass / Fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor NN of the supervising teaching unit

Working life cooperation:

No

Other information:

Separate detailed bachelor's work instructions are published on the web pages of the faculty.

450013A: The Maturity Test for Bachelor's Degree, 0 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

0

Language of instruction:

Finnish / Swedish

Timing:

Spring term 2

Learning outcomes:

The student is able to communicate in Finnish or in Swedish and is able to express himself both linguistically and in writing.

Contents:

Written essay.

Mode of delivery:

The essay is written in exam-like conditions on a given subject.

Learning activities and teaching methods:

Written essay. The maturity test is a part of the bachelor's dissertation.

Target group:

3rd year bachelor students

Prerequisites and co-requisites:

Bachelor's work.

Recommended optional programme components:

_

Recommended or required reading:

-

Assessment methods and criteria:

The recommended extent of the essay is 3 pages.

Grading:

Pass / Fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor n.n. in the supervising teaching unit

Working life cooperation:

Nο

Other information:

-

A410171: Optional Studies, Bachelor of Science (Architecture), 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Optional Studies

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Optional Studies

450541A: Photoshop, Advanced Photomanipulation, 2 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Asko Leinonen

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay450541A Photoshop, Advanced Photomanipulation (OPEN UNI) 2.0 op

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

_

Learning outcomes:

Students are able to complete image renderings from 3d modelling software and to supplement them by combining elements from photos for a photorealistic and expressive end-result.

Contents:

Color correction, perspective correction.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 16 h, independent studying 38 h

Target group:

-

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

Software help files and handouts. **Assessment methods and criteria:**

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Adding a finishing touch in Photoshop to images produced with other rendering software. The course is intended for the students of the Department of Architecture only.

450517A: Revit Architecture Advanced, 2 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

Students are able to produce complex building components and detail models into the Building Information Model and schedules from the information gathered.

Contents:

Self-made objects, complex forms, schedules and legends.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 16 h, independent studying 38 h

Target group:

-

Prerequisites and co-requisites:

R1 Revit Architecture basics and 3DI 3DS Max, co-operative use with CAD

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Introduction to effective Building Information Modelling in Revit Architecture Environment. The course is intended for the students of the Department of Architecture only.

450540A: Archicad Advanced, 2 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

Students are able to produce complex building components and detail models into the Building Information Model and schedules from the information gathered.

Contents:

Self-made objects, complex forms, schedules and legends.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 16 h, independent studying 38 h

Target group:

-

Prerequisites and co-requisites:

450539P art Artlantis and AR1 Archicad basics

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

NO

Other information:

Introduction to advanced Building Information Modelling in Archicad. The course is intended for the students of the Department of Architecture only.

450545A: Illustrator Basics, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

1

Language of instruction:

Finnish

Timing:

_

Learning outcomes:

The student is familiar with the basics of the vector graphics tools and has an overall understanding of the software. The student os able to produce publishable layouts that combine graphic and text material from different sources.

Contents:

Vector drawing, importing graphics, layout and PDF-export.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 8 h, independent studying 19 h

Target group:

-

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

n. n.

Working life cooperation:

Nο

Other information:

Basics of Illustrator for page layout and vector graphics. The course is intended for the students of the Department of Architecture only.

450547A: Indesign Basics, 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Asko Leinonen

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay450547A Indesign Basics (OPEN UNI) 1.0 op

ECTS Credits:

1

Language of instruction:

Finnish

Timing:

_

Learning outcomes:

Students master the basic page layout features and understand the possibilities of the software. Students are able to produce pages ready for release combining visual and textual material from various sources.

Contents:

Placing formatted text and pictures, page layout and PDF publishing.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 8 h, independent studying 19 h

Target group:

-

Prerequisites and co-requisites:

Recommended optional programme components:

-

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Oulu School of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

Nο

Other information:

Basic features of page layout in Indesign. The course is intended for the students of the Department of Architecture only.

450516P: Portfolio, 2 op

Voimassaolo: 01.08.2013 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Asko Leinonen
Opintokohteen kielet: Finnish

ECTS Credits:

2

Language of instruction:

Finnish

Timing:

autumn term

Learning outcomes:

The student can make the sample portfolio based on his or her basic portfolio. The sample portfolio is a document intended to be published.

Contents:

The portfolio is an instrument for improving the student's own activity. With the help of the portfolio the student records the progression of his or her learning. During the course the student receives tools to design and create a portfolio of sample projects and artworks. The focus of teaching is to take advantage of graphic and visualization resources, using the desktop publishing.

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

The course is based on lectures (20 h), an exercise (25) and contact teaching (10 h). The student makes the exercise work, presenting his or her all-around activities.

Target group:

Bachelor level students

Prerequisites and co-requisites:

The course is a compulsory study unit in the bachelor's study programme.

Recommended optional programme components:

-

Recommended or required reading:

The bibliography will be stated during lessons.

Assessment methods and criteria:

The aim of the lectures is to prepare the students to make an exercise, in which a sample folder of student's artworks is presented. The assessment is based on above-mentioned exercise, where basic mastery of taught matters and visual skills are focused.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Architect Asko Leinonen

Working life cooperation:

_

Other information:

-

455513A: Visual Arts III, 4 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Sanaksenaho
Opintokohteen kielet: Finnish

Leikkaavuudet:

ay455513A Visual Arts III (OPEN UNI) 4.0 op

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

4

Language of instruction:

Finnish

Timing:

autumn or spring term

Learning outcomes:

To deal with different aspects of visual expression, to expand general knowledge relative to the various fields of art and to develop independent creative expression.

Learning outcomes: After completing the course the student is able to comprehend various sides of visual expression and can implement these skills in exercise work.

Contents:

The course options are graphics and ceramics.

Mode of delivery:

Contact teaching and independent studying in art studio

Learning activities and teaching methods:

Lectures and/ or contact teaching 6 hours and contact teaching and/ or groupteaching 74 hours

Target group:

Bachelor level students

Recommended or required reading:

Supplemental reading list will be supplied during the course

Assessment methods and criteria:

Based on exercises

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

455514A: Visual Arts IV / Architectural Photography, 4 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

4

Language of instruction:

Finnish

Timing:

spring term

Learning outcomes:

To initiate the students into the basics of photography and digital raw working methods. After completing the course the student is able to use photography equipment in order to produce digital material for illustrating architecture.

Contents:

The course includes information of digital cameras, lenses, focusing, depth of field, aperture, exposure, shutter speed and lights. Also digital raw pictures will be retouched with Adobe Bridge and Photoshop applications.

Mode of delivery:

Lectures, contact teaching and independent studying.

Learning activities and teaching methods:

Lectures 20 h and contact teaching and independent studying 20 h. The exercise work (65 h) is made independently or in a small group.

Target group:

The course is an optional study unit in the bachelor's study programme.

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

Supplemental reading list will be supplied during the course.

Assessment methods and criteria:

Based on exercises

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Architect Asko Leinonen.

Working life cooperation:

-

Other information:

-

451505A: History of Architecture III practices, 5 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Anna-Maija Ylimaula
Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Spring term I and 2

Learning outcomes:

The aim of the course is to teach how to do the restoration plan of a small-scale historical building. The course concentrates on the evaluation of building heritage and the architectural design for the re-use of a historical building.

Learning outcomes: Students learn to observe, analyse and evaluate the special requirements of the historical building particularly when its function is converted into new use.

Contents:

The restoration plan of a small-scale historical building which is based on the assessment and evaluation of the building. The student may present the project of the course as Bachelor's diploma work.

Mode of delivery:

Lectures, additionally independent studies.

Learning activities and teaching methods:

50 h contact teaching in design studio. Field trips.

Target group:

3rd year Bachelor level students. The student may present the project of the course as Bachelor's diploma work

Prerequisites and co-requisites:

-

Recommended optional programme components:

The course is an elective course. The course is related to the History of Architecture III, lecture course (451504A). Together with the Architecture III, lecture course, this course can form the Bachelor's diploma work (8 ECTS) of the Bachelor degree.

Recommended or required reading:

The lecture material and other materials concerning the course will be uploaded to the Department's network drive. A list of literature will be handed out during the course.

Assessment methods and criteria:

Students participate in lectures, field work and evaluation sessions and present a restoration plan.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University teacher Özlem Özer-Kemppainen

Working life cooperation:

No

Other information:

-

451540A: History of Architecture and renovation, varying courses, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Anna-Maija Ylimaula
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish and English

Timing:

Flexible, autumn and spring terms

Contents:

The content of the course is defined separately.

Mode of delivery:

variable

Target group:

Bachelor level students

Prerequisites and co-requisites:

Elective course

Recommended or required reading:

Defined separately

Assessment methods and criteria:

The course does not include any lectures or examinations. Assessment depends on the assignment.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula

Working life cooperation:

No

452540A: Varying Courses of Contemporary Architecture, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Sanaksenaho
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish/English

Timing:

Autumn term 1-2 and Spring term 1-2

Learning outcomes:

After completing the course the student knows the design principles of public buildings and features of contemporary architecture. The student is familiar with fresh architectural tendencies and has developed a

personal view on architecture. He / she has the facility for making schematic plans for a demanding public building with a personal touch. He / she understands the influence of design to building and is able to do assisting construction work.

Contents:

Varies yearly. The course contains one design exercise of a public building. Participation in an open competition or architecture workshop is possible.

Mode of delivery:

Face-to-face teaching, workshops.

Learning activities and teaching methods:

The completed works are presented in an open critique. Evaluation is based on the processing of the exercise.

Target group:

Bachelor and master level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Freebased and recommended to those, who are going to make a graduation in contemporary architecture or architectural construction.

Recommended or required reading:

List of articles on contemporary architecture and projects (will be announced at the beginning of the course).

Assessment methods and criteria:

Based on exercises.

Grading:

1-5 or pass/fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

Other information:

The aim of the course is to initiate students to recent tendencies in architecture, the methods of build buildings, new types of buildings in domestic and international architecture through exercises.

453540A: Varying Courses of Architectural Construction, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Janne Pihlajaniemi Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish

Timing:

varying

Learning outcomes:

After completing the course the student has independently gone deeply into a specific field within architectural construction in order to be able to implement his / her skills in producing drawings of demanding building parts and details independently and to present the functional justifications of the selected solutions.

Alternatively the student can independently write a survey, dealing with a specific field within architectural construction according to his / her own choice. In the survey the student can analyze, explain and estimate the issues of architectural construction in question.

Contents:

The content of the course varies. The exercise work can alternatively be a design project, including a sufficient extent of working and detail drawings, or a written study on an individually defined topic. The course is elective. The aim of the course is to deepen one's skills within the field of architectural construction.

Mode of delivery:

Independent studies, contact teaching.

Learning activities and teaching methods:

54 h – 270 h independent studies and personal and / or group tutoring.

Target group:

Bachelor level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

The evaluation is made based on outcome of the individual exercise work completed independently. No exam is included in the course.

Grading:

1 – 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN, university teacher Petri Aarnio

Working life cooperation:

No

Other information:

-

454540A: Varying Courses of Urban Design, 2 - 10 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish or English.

Timing:

Autumn term 1-2 / Spring term 1-2.

Learning outcomes:

After completing the course the student can identify current features in planning and urban design as well as describe their impacts to functional and spatial planning of human settlements. The student can implement learning outcomes in different planning and urban design tasks.

Contents:

Current features of planning, urban design, and urban development, such as urban design in a northern context.

Mode of delivery:

Mostly independent studying + contact teaching.

Learning activities and teaching methods:

8-64 h contact teaching in design studio + 46-206 h independet studying.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended or required reading:

Study material is announced separately.

Assessment methods and criteria:

Exercise (design project). Basic options are participation in a competition (student competition, open competition), summer school or thematic design studio. The assessment is based on the design project. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik, prof. Helka-Liisa Hentilä

Working life cooperation:

No

Other information:

The student can include the course into her / his optional studies.

450503A: Practical Training / Construction Site, 5 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Petri Aarnio

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnsh

Timing:

The best timing for construction site practical training is the summer after the 1 st or 2 nd year of bachelor level.

Learning outcomes:

After the construction site practical training the student can describe one possible building site designed by him / her in the future and its working environment looked from the point of view of his / her study. The student can name problems in the working environment and can make improvement proposal to them. The student finds point of contacts between working life and the studies.

Contents:

The objective of the practical training is to acquaint the student with the working life on the building site. The practical training supports and promotes theoretical studying. Furthermore, the practical training gives the general idea about the technical and economic organizing, administration and management of the building site. The practical training is usually performed in the ordinary worker's position.

Mode of delivery:

The student finds the placement for construction site practical training by her- / himself. The construction site practical training can be replaced with weekly visits on the site during half a year.

Learning activities and teaching methods:

The student writes an illustrated report, which describes the events of the site and present a testimonial of the training.

Target group:

1 st year bachelor students

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The laboratory for architectural construction provides the instructions for construction site practical training.

Assessment methods and criteria:

The report of construction site practical training submitted to the responsible person.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Teacher Petri Aarnio

Working life cooperation:

Yes. The student has the responsibility of finding the work placement him / herself.

Other information:

-

450505A: Practical Training, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Petri Aarnio

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish / English

Timina:

The best timing for practical training in architect's office is the summers during bachelor level.

Learning outcomes:

After completing the practical training the student is able to describe one possible occupation after his / her graduation. The student can recognize and solve problems of the working environment. The student is able to implement theoretical knowledge in practice. The student recognizes the architect's professional tasks at his / her work place during the practical training.

Contents:

The aim of practical training in architect's office is to initiate the student into architects' work and tasks. It is essential for students to get to know the work field of an architect in order to begin his / her own professional career after graduation most efficiently. Recommended places of work for practical training are private or public design and planning offices lead by qualified architects.

Mode of delivery:

The student finds the placement for practical training by her- / himself.

Learning activities and teaching methods:

The student has to write a report and present a testimonial of the training. The practical training is supervised by the laboratory of architectural construction.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The laboratory for architectural construction provides the instructions for practical training.

Assessment methods and criteria:

The report of the practical training period submitted to the supervising laboratory.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University teacher Petri Aarnio

Working life cooperation:

Yes. The student has the responsibility of finding the work placement him / herself.

A410224: Design-led Urban Renewal, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Module of the Option

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** English

Ei opintojaksokuvauksia.

454522S: Urban Space Design, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuvksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Sari Hirvonen-Kantola **Opintokohteen kielet:** English

ECTS Credits:

10 ECTS

Language of instruction:

English

Timing:

Autumn term 1-2.

Learning outcomes:

After completing the course the student is able to recognise features of current interest within the design of public urban space, and to identify interaction between the built environment, society, culture, technology, and nature. The student is able to demonstrate various programmes, plans, and aims for the development of the functional and physical environment. The student is able to carry out a thematic analysis, set design goals, and to produce multifunctional development plans for urban spaces.

Contents:

The lectures deal especially with the design of public urban spaces. The exercise work focuses on thematic design and development of the functional and physical environment within an urban context.

Mode of delivery:

Contact teaching plus independent studying.

Learning activities and teaching methods:

16 h lectures + 80 h contact teaching in design studio (including workshop) + 174 h independent studying.

Target group:

4th year Master level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

The Course is part of the module "Design-Led Urban Renewal". The design project is connected with Urban Space Detailing (455521S).

Recommended or required reading:

Literature will be announced separately.

Assessment methods and criteria:

Exercise (design project). Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik

Working life cooperation:

No

Other information:

-

455521S: Urban Space Detailing, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Aulikki Herneoja Opintokohteen kielet: English

ECTS Credits:

10

Language of instruction:

English

Timing:

Autumn term 1 & 2

Learning outcomes:

After completing the course the student can make a detailed plan for an urban space, taking into account various sectors and approaches of urban space detailing, including material alternatives and different lighting options. In the project work the student can apply the use of large variations of scale to an instrument of urban space detailing. Student is able to take into account sustainable development aspects when choosing materials and making the design solutions.

Contents:

The aim of the course is to go deeply into issues of detailing of urban space with focus on over-all concept. The purpose is to initiate the students to utilize outdoor furniture, accessories and lighting in outdoor design and to acquaint the students with materials and requirements of designing green areas. Lectures, exercise work and visits to the site. The students make a detailed design for the site studied as an exercise work within the Urban Space Design course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

16h lectures + maximum 80 h contact teaching

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design-Led Urban Renewal. Design project is connected with 454522S Urban Space Design -course.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course. Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja.

Working life cooperation:

Nο

Other information:

-

455522S: Design in Urban Context, 10 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Aulikki Herneoja Opintokohteen kielet: English

ECTS Credits:

10

Language of instruction:

English

Timing:

Autumn term 1 & 2

Learning outcomes:

After completing the course the student is able to recognize an industrially designed product and analyze its design related substance and is able to make commentary literary synopsis. The student can carry out an exercise work of designing an object related to urban context, applying the contents of the course as well as history of industrial design and contemporary design. The student is able to apply the principles of sustainability in his / her design solutions and material selection.

Contents:

To give a general overview of history, theory and praxis of industrial design in the urban context and to develop the student's facility for research. The lectures deal with main issues of the history of industrial design and recent features of design emphasis on urban context. Research skills are dealt with when students make a commentary synopsis of a book on contemporary design / designer. The viewpoints of sustainability are included in the lectures and discussions held during the course. The emphasis of the course is on design exercise work, which is a design task object related to the Urban Space Detailing course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

16h lectures and/or contact teaching and maximum 80 h personal or/and group tutoring

Target group:

1st year of master level

Prerequisites and co-requisites:

_

Recommended optional programme components:

Course is part of module Design-Led Urban Renewal. Design project is connected with 455521S Urban Space Detailing.

Recommended or required reading:

Literature is given during the course.

Assessment methods and criteria:

The student participates in lectures, makes lecture diary, commentary synopsis and delivers a design exercise made by given instructions. The evaluation is based on the outcome of the design project (2/3) and lecture diary and commentary synopsis together (1/3). No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja

Working life cooperation:

No

Other information:

-

A410225: Sustainable Built Environment 1, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Module of the Option

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

453508A: Energy Efficient Building, lecture course, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Autumn term

Learning outcomes:

After completing the course the student can explain the basic concepts of energy and material efficiency in architectural construction. The student can apply this knowledge in energy calculations.

Contents:

Lectures on the principles on energy efficiency, energy calculations and sustainable development in constructing. The aim of the course is to provide the student with basic knowledge of energy efficiency and general knowledge of Sustainable Development in constructing and developing.

Mode of delivery:

Lectures, energy calculation exercises, exam and independent studying.

Learning activities and teaching methods:

26 h lectures, 24 h tutoring in energy calculations, 85 h independent working.

Target group:

1st year master level students.

Prerequisites and co-requisites:

Completion of BSc in architecture.

Recommended optional programme components:

Architectural Construction, professional skills course (453507A).

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

Assessment is based on energy calculation exercise and exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN

Working life cooperation:

-

Other information:

_

456527S: Condition Assessment of Buildings, 5 op

Voimassaolo: 01.08.2013 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anu-Sisko Soikkeli

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish

Timing:

Autumn term 2

Learning outcomes:

After completing the course the student can draw conclusions from the condition and the requirements for renovation of a building. The student can classify the forms of condition assessment, carry out the assessment and prepare a report.

Contents:

Common methods and all phases of condition assessment. As an exercise a condition assessment is made a situ and in laboratory circumstances. The course provides the student with facilities for making a condition assessment even in a demanding renovation project.

Mode of delivery:

Face-to-face teaching, independent studies.

Learning activities and teaching methods:

Lectures, laboratory exercises, group work, examination.

Target group:

Master level students.

Prerequisites and co-requisites:

Renovation of Housing Blocks -course.

Recommended or required reading:

Study compendium. Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Senior lecturer Anu Soikkeli

Working life cooperation:

No

Other information:

-

456507S: Renovation of Apartment Buildings, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anu-Sisko Soikkeli

Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish

Timing:

Autumn terms 1-2

Learning outcomes:

After completing the course the student can explain the most common damage mechanisms in stone-built houses. The student can estimate how different methods of renovation will affect the functions and architecture of a building. The student can make choices between different ways of renovation based on their impact, and make a safe renovation plan, improving accessibility and energy efficiency of the building. The student can explain the phases of a renovation planning process of a housing corporation apartment building and estimate the interactive character of the process and the challenges caused by the ownership of the building. The student recognizes the debt of refurbishment of our stock of apartment buildings and the possibilities of improving the living environment of e.g. the aging through renovation of apartment houses.

Contents:

Specific issues concerning renovation of concrete and stone structure apartment houses. Forms of damages of various types of structures, methods of evaluating condition and usability, repair measures but also project managing and project documents, and the design process. The aim of the course is to provide skills for completing a renovation plan for a typical apartment house.

Mode of delivery:

Face-to-face teaching.

Learning activities and teaching methods:

Lectures, drawing a renovation plan for an apartment house, group work in pairs, independent studies.

Target group:

1st year master level students.

Prerequisites and co-requisites:

Design of Apartment Blocks -course.

Recommended optional programme components:

Energy Efficient Buildings course

Recommended or required reading:

Course literature will be announced separately.

Assessment methods and criteria:

Design project and exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Senior lecturer Anu Soikkeli

Working life cooperation:

No

Other information:

-

451511A: Historic Preservation, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Anna-Maija Ylimaula **Opintokohteen kielet:** Finnish

ECTS Credits:

10

Language of instruction:

Finnish and English

Timing:

Autumn term I and 2

Learning outcomes:

The aim of the course is to provide basic knowledge of historic preservation and the history and theories of the protection of the built environment as well as of the practical methods and to initiate the students into application of these methods in practice.

During the course the student learns to analyze the meaning and the content of the built heritage and environment. The student is able to specify architectural, cultural and historical values of buildings, built environments and different places, their identity and integrity. After completing the course the student is able to tell what are the historical and theoretical foundations of preservation and the used contemporary methods. The student is able to apply the methods into practice starting with the documentation and assessment and resulting in historic preservation and the plan for protecting the built environment.

Contents:

The course content is an entity in which the lectures and the exercise are connected.

Lectures: The lectures are dealing with the history and theories of the preservation of architectural heritage, the legislation and international recommendations as well as the practice and the contemporary methods of historic preservation.

Exercise: The preservation plan of a cultural milieu or historic preservation atlas, assessment and a plan to develop of the chosen area or object of the environment.

Mode of delivery:

Lectures and contact teaching in design studio.

Learning activities and teaching methods:

Lectures 28 h and 70 h contact teaching in design studio. Design task is done partially as group work. Field trips.

Target group:

4th year, Master's level students.

Prerequisites and co-requisites:

The student has passed courses I-III of history of architecture or has substituting study credits.

Recommended optional programme components:

This course is part of the complementary module of the sustainable urban development. This course is recommended to be taken before the Restoration course (451515S)

Recommended or required reading:

See separate list of literature and the provided material on the database of the course.

Assessment methods and criteria:

The student participates in the lectures and writes a learning diary and does the exercises demanded during the course.

The evaluation is based on the quality of the learning diary and the delivered exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University teacher Özlem Özer-Kemppainen

Working life cooperation:

-

Other information:

-

A410249: Design of Public Buildings 1, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

452504A: Contemporary Architecture IV, 15 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Mahlamäki Rainer

Opintokohteen kielet: Finnish

ECTS Credits:

15

Language of instruction:

Finnish/English

Timing:

spring term 1-2

Learning outcomes:

The objective of the course is to initiate the students through lectures and exercises into the architecture and designing of public buildings.

Learning outcomes: After completing the course the student has the skills to sketch a medium- size (approx. 1000–8000 m2) public building, taking into account the structural, technical and important security requirements (exercise). Furthermore, the student recognizes the social and technical background, as well as and trends of contemporary architecture related with public buildings (lectures).

Contents:

The lectures deal current features in architecture and specific issues related to the topic of the design exercise. The task of the exercise is to design a medium-size public building, including the principles of fire safety, acoustics, load bearing structures and technical installations. Guest lectures are part of the course program.

Mode of delivery:

Lectures and face-to-face teaching

Learning activities and teaching methods:

The course comprises lectures, a design exercise and an exam. The exercise is tutored in common studio sessions and intermediate critiques. The completed works are presented in an open critique. Evaluation is based on the architectural quality and implementation of the objectives of the design project, and the result of the exam.

Target group:

4th year master students. The course is intended for students in the Architectural Design and Building Design orientations.

Prerequisites and co-requisites:

Prerequisite: contemporary architecture III or bachelor's degree.

Recommended optional programme components:

Teachings of structural technology and building techniques are implemented in the exercise. The exercise is linked with the courses of interior design and architectural lighting.

Recommended or required reading:

Summary of the lectures. List of readings will be handed out at the lectures.

Assessment methods and criteria:

Exercise (design project and possible exam). The form of the exam will be announced each year. The grading is based on evaluation of the achieved goals of the task, quality of the exercise and exam

Grading:

1 - 5, fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

A410250: Design of Public Buildings 2, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

453533A: Large scale structures, 5 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish (part of literature in English)

Timing:

Autumn

Learning outcomes:

Upon completion of the course the student identifies the qualities of concrete and steel as structural material and is able to use these materials to design the frame of a public building.

Contents:

Lectures comprise the qualities of concrete, steel and various bricks including their strength properties, products and structural detailing with them. The design studio comprises structural design project of a large scale building.g.

Mode of delivery:

Course is based mainly on independent studies. Some contact teaching is given.

Learning activities and teaching methods:

Lectures and demonstrations 48 h. Self-study 87 h.

Target group:

1st year master level students.

Prerequisites and co-requisites:

Bachelor level courses in structures and building sciencies

Recommended optional programme components:

Design work is linked to modern architecture IV.

Recommended or required reading:

Study compendiums. Other course literature will be announced separately.

Assessment methods and criteria:

Design project and exam. Evaluation is based on exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

university teacher Matti Kangaspuoskari, university teacher Raimo Hannila.

Working life cooperation:

Nο

Other information:

_

455517S: Architectural Lighting, 5 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Henrika Pihlajaniemi

Opintokohteen kielet: English

ECTS Credits:

5

Language of instruction:

English

Timing:

Spring term 1 & 2

Learning outcomes:

After completing the course the student commands the concepts of natural and artificial lighting, in order to be able to analyze the relationship between architecture and light, using basic concepts of lighting. The student can prepare a lighting scheme for his/her own design project and make a CAD-visualized lighting design based on the scheme, utilizing both natural light and various artificial light sources. The student is able to apply the principles of sustainability in his/her design solutions, in utilizing natural light and in selection of light sources.

Contents:

The objective of the course is to study the relationship between architecture and light. The studies cover both natural and artificial light. The lectures deal with architecture and light, concepts of light, modes of lighting as well as different sources of artificial light and types of light fixtures. Both indoor and outdoor lighting solutions are studied. Aspects of sustainability and energy efficiency are included in the contents of the course, in connection with designing and controlling natural light, as well as in relation to selection of light sources and designing controllable lighting solutions, using artificial lighting. The project work comprises a lighting analysis of a selected interior and a concept level CAD-visualized lighting design, which is connected to the exercise work in contemporary architecture. The course includes visits to places and interiors of interest within lighting design.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12h lectures and/or contact teaching and 36h personal or/and group tutoring.

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design of Public Buildings. Architectural Lighting course is suggested to proceed together with 455517A Interior Design course.

Recommended or required reading:

Course literature will be announced separately.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to the instructions. The evaluation is made based on the outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Teacher Henrika Pihlajaniemi

Working life cooperation:

No

Other information:

-

455517A: Interior Design, 5 - 10 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Aulikki Herneoja

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay455517A Interior Design (OPEN UNI) 5.0 op

ECTS Credits:

5-10

Language of instruction:

English

Timing:

Spring term 1 & 2

Learning outcomes:

After completing the course the student can analyze space and make sketches for an interior, utilizing various sectors of interior design in a creative manner. The student can implement the basic concepts of interior design when presenting his / her design work. The student is able to apply the principles of sustainability in his / her design solutions and material selection. When extending the course to 10 ECTS credits, after completing the course the student can prepare working drawings and identify quality factors, displaying his / her command of the basics of designing fixed furniture. The student is able to apply the principles of sustainability in his / her design solutions and material selection, e.g. taking into account sorting of waste and principles of life-cycle housing.

Contents:

The objective of the course is to provide students with basic skills of interior design and to guide the students to practical design work. When extending the course to 10 ECTS credits the aim of the lectures and the exercise work of the course is to deepen the students' knowledge in special issues within interior design, in particular designing fixed furniture. Lectures deal with basic concepts of interior design and the connection between architecture and interior design and aspects of sustainable development. The focus is

on materials, colours and lighting of the space, basics of design of fixed furniture and textiles. The exercise work is a sketch level design of an interior. When extending the course to 10 ECTS credits lectures deal with special issues within interior design and aspects of sustainability, with focus on fixed furniture design. The student is initiated to practices of fixture design and quality factors through analyzing two kitchens. The exercise work is a working drawing level fixture design. Visits to professionally designed interiors are included in the course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12h lectures and/or contact teaching and 36h personal or/and group tutoring. When extending the course to 10 ECTS credits additional lectures and/or contact teaching and personal and/or group tutoring altogether maximum 50 h is included.

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design of Public Buildings. Interior Design is suggested to proceed together with course 455517 Architectural Lighting.

Recommended or required reading:

Literature is given during the course.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja

Working life cooperation:

No

A410251: Sustainable Built Environment 2, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

453507A: Architectural Construction, Professional Skills, 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish

Timing:

Spring term

Learning outcomes:

After completing the course the student has through independent work acquainted with principles of energy efficiency in buildings and the tasks of an architect in order to be able to define the architect's tasks in the process of designing energy efficient buildings. The student can implement his / her skills of architectural construction in producing difficult and demanding drawings of building parts and details nearly independently.

Contents:

The content of the course is defined in connection with the assignment of the exercise project. The task is to design a low emission, renewable energy-using and energy efficient building. To introduce students to the essential issues within architectural construction and energy efficiency of buildings.

Mode of delivery:

Project work in studio.

Learning activities and teaching methods:

240 h independent studying and 30 h tutoring.

Target group:

1st year master level students

Prerequisites and co-requisites:

Completion of BSc in architecture.

Recommended optional programme components:

Energy Efficient Buildings course (453508A).

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

The evaluation is made based on outcome of the exercise work completed independently.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University teacher Petri Aarnio

Working life cooperation:

-

Other information:

-

454540A: Varying Courses of Urban Design, 2 - 10 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish or English.

Timing:

Autumn term 1-2 / Spring term 1-2.

Learning outcomes:

After completing the course the student can identify current features in planning and urban design as well as describe their impacts to functional and spatial planning of human settlements. The student can implement learning outcomes in different planning and urban design tasks.

Contents:

Current features of planning, urban design, and urban development, such as urban design in a northern context.

Mode of delivery:

Mostly independent studying + contact teaching.

Learning activities and teaching methods:

8-64 h contact teaching in design studio + 46-206 h independet studying.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended or required reading:

Study material is announced separately.

Assessment methods and criteria:

Exercise (design project). Basic options are participation in a competition (student competition, open competition), summer school or thematic design studio. The assessment is based on the design project. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik, prof. Helka-Liisa Hentilä

Working life cooperation:

No

Other information:

The student can include the course into her / his optional studies.

A410252: Restoration, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

Compulsory

451515S: Restoration, 15 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Anna-Maija Ylimaula
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

15

Language of instruction:

Finnish and English

Timing:

Spring term I and 2

Learning outcomes:

The aim of the course is to introduce the students both the scientific and practical basics of restoration and to enable the student to combine the historical value assessment into comprehensive architectural design work in restoration projects which also have an emphasis on building conservation of modern heritage. **Learning outcomes:** After completing the course the student is able to tell what are the historical and theoretical foundations of restoration and the most important philosophical approaches/schools of restoration. The student is able to analyze the historical values of a building and can make a restoration plan based on the

Contents:

The course content is an entity in which the lectures and the exercise are connected.

The lectures are dealing with the historical, philosophical and theoretical criteria of the restoration of the architectural heritage, the contemporary restoration practices and technical solutions. Visits to restoration sites and to successfully restored buildings as well as lectures by the visiting experts are included in the course. The exercise is about the use of the built cultural heritage and the problems faced when a new purpose for use is needed. The emphasis is on planning and organizing a restoration project.

Mode of delivery:

Lectures and contact teaching in design studio.

Learning activities and teaching methods:

Lectures 30 h and 120 h contact teaching in design studio and seminars. Design task is done partially as group work. Field trips.

Target group:

Elective course for 4th year Master's level students.

Prerequisites and co-requisites:

The student has passed courses 1-III of history of architecture or has substituting study credits.

Recommended optional programme components:

This course is a part of the advanced module "Building project and restoration". The course is carried out during the spring term of the 5th year studies. It is recommended that the student has taken the Historic preservation course (451511A) prior to this course.

Recommended or required reading:

See separate list of literature and the provided material on the database of the course.

Assessment methods and criteria:

The student participates in the lectures and writes a learning diary and does the exercises demanded during the course.

The evaluation is based on the quality of the learning diary and the delivered exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University lecturer Özlem Özer-Kemppainen.

Working life cooperation:

Nο

Other information:

-

A410275: Strategic Urban Planning, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

454505S: Municipal Planning, 15 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Emilia Rönkkö
Opintokohteen kielet: Finnish

ECTS Credits:

15 ECTS

Language of instruction:

Finnish

Timing:

Autumn term 1-2.

Learning outcomes:

After completing the course the student can understand the main principles of strategic and participatory planning, identifies main phases and methods of general and regional planning and is able to use analysis reports and knowledge produced by stakeholders as part of the planning process. The student is able in cooperation with others to set strategic goals and to comprise a holistic land use vision. The student is also able to describe how a participatory planning process is managed.

Contents:

The course consists of lectures and authentic exercises in sustainable local planning as part of regional and national planning, impact assessment, strategic planning, management of planning processes and stakeholder participation. Depending on the target area, exercises aim towards sustainable management of growth or shrinkage strategies as part of planning. Students train their co-operational skills also by working in groups throughout the course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

24 h lectures + 126 h other contact teaching (field trips, participatory planning seminars, contact teaching in design studio) + 255 h independent studying.

Target group:

5th year Master level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

The course is part of the module "Strategic Planning" and it is connected to Extension Course of Planning (454560S).

Recommended or required reading:

Study compendium. Required and recommended reading will be announced separately.

Assessment methods and criteria:

Exercise (planning project), participatory planning seminars and exam. The evaluation is based on the outcome of the planning project (2/3) and exam (1/3).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Helka-Liisa Hentilä

Working life cooperation:

Nο

Other information:

The course is organized in close cooperation with a northern municipality and it includes some simulation of participatory planning practices with local stakeholders.

454560S: Extension Course / Urban Design, 5 - 10 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opintokohteen kielet:** Finnish

ECTS Credits:

5-10 ECTS

Language of instruction:

Finnish

Timing:

Autumn term 1-2.

Learning outcomes:

After completing the course the student is able to produce surveys of the planning area by using different methods, analyse them and make conclusions. The student is also able to describe different methods of producing and ways of implementing background material, inquiries and research results as part of planning process. The student is also able to describe their role in strategic planning.

Contents:

The course concentrates on the borderline between theory and practice in strategic urban planning.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12-24 h contact teaching, including seminars + 123-246 h independent studying.

Target group:

5th year Master level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

The course is part of module Strategic Planning and it is tightly connected to Municipal Planning (454505S).

Recommended or required reading:

Study material is announced separately.

Assessment methods and criteria:

Exercise (written report) and participation in seminars. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Helka-Liisa Hentilä

Working life cooperation:

Nο

Other information:

-

451560S: Research and Theory of Architecture, 2 - 10 op

Voimassaolo: 01.08.2006 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuvksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Anna-Maija Ylimaula **Opintokohteen kielet:** Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish and English

Timing:

Autumn term I and 2

Learning outcomes:

The course initiates the students into the fundamentals of research and provides basic knowledge of the development of architectural theories and the current features of the research in the field of architecture. Learning outcomes: The aim of the course is to deepen one's skills in knowledge of architecture and to strengthen the foundation of research based studies in architecture. During the course the student learns to view architecture from the standpoint of architectural theories and to analyze ontological and historical starting points of theory and practice of architecture. After completing the course the student is familiar with the basic concepts of research and can illustrate fields and methods of architectural research.

Contents:

Visiting experts will give lectures on research and theory of architecture within a yearly varying topic. During the seminar the students are examining the topic of the course through lectures and analyses. The exercise is a written survey, applying methods of scientific research. The surveys are analyzed and evaluated during the seminar.

Mode of delivery:

Active participation and writing a scientific article are required for accomplishing the course.

Learning activities and teaching methods:

Lectures and seminars 15 h and workshop 6 h. Active participation and writing a scientific article are required for accomplishing the course.

Target group:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Prerequisites and co-requisites:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Recommended optional programme components:

The course is recommended particularly for students who intend to do their master's thesis or doctoral thesis in the field of architecture. For accomplishing the course, an active participation is required. Instead of an exam student writes a journal based on the course.

Recommended or required reading:

Separate list of literature will be handed out.

Assessment methods and criteria:

The student participates in the lectures and writing workshops and he/she writes an article during the course. Students are recommended to participate in the National Architectural Research Seminars. The course requires attendance and writing of a scientific article.

Grading:

1-5, Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, PhD, architect Janne Pihlajaniemi

Working life cooperation:

No

Other information:

-

450506A: Practical Training in ArchitectŽs Office, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Petri Aarnio

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish / English

Timing:

The best timing for practical training in architect's office is the summer after the 3 rd year of bachelor level or after the 1 st year of master level studies.

Learning outcomes:

After completing the practical training the student is able to describe one possible occupation after his / her graduation. The student can recognize and solve problems of the working environment. The student is able to implement theoretical knowledge in practice. The student recognizes the architect's professional tasks at his / her work place during the practical training.

Contents:

The aim of practical training in architect's office is to initiate the student into architects' work and tasks. It is essential for students to get to know the work field of an architect in order to begin his / her own professional career after graduation most efficiently. Recommended places of work for practical training are private or public design and planning offices lead by qualified architects.

Mode of delivery:

The student finds the placement for practical training by her- / himself.

Learning activities and teaching methods:

At least two months compulsory practical training (3 cr) is required for the architect's degree. The student has to write a report and present a testimonial of the training. The practical training is supervised by the laboratory of architectural construction.

Target group:

1st and 2nd year master level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The laboratory for architectural construction provides the instructions for practical training.

Assessment methods and criteria:

The report of the practical training period submitted to the supervising laboratory.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University teacher Petri Aarnio

Working life cooperation:

Yes. The student has the responsibility of finding the work placement him / herself.

Other information:

-

450502A: Excursion Abroad, 2 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mahlamäki Rainer
Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS

Language of instruction:

Finnish/English

Timing:

turn of the 1st and 2nd half of the autumn term

Learning outcomes:

The purpose of the study trip is to complement the student's ability to identify architectural sights known from the theoretical courses in architecture, their three-dimensional and empirical character as well as relation to place and history. After attending the study trip the student has a better understanding of the features of internationally significant architecture.

Contents:

The excursion program includes visits to top-quality architectural sights in the target city or country. The excursion program may include individual buildings, housing estates or urban spaces and environments. Visits to local architecture schools may also be included in the program. During the spring term of the 1 st year of the master studies the course includes preparing a detailed excursion program together with the excursion leader, as well as all the practical arrangements for the trip.

Mode of delivery:

Contact teaching and individual study. The study trip is organized at the end of the first half /at the beginning of the second half of the autumn term in the second year of the master level (duration of the trip including travel is max. 14 days). The excursion leader is selected and the target and the frame for the program of the excursion are decided upon by the end of the previous year. The excursion program is approved by the education committee of the school. The detailed program and travel arrangements will be completed during the spring term of the 1 st year of the master level together with the excursion leader, who is one of the full-time teachers of the School. The students have to cover their own expenses of the excursion.

Learning activities and teaching methods:

2 h lectures and 56 h additional contact teaching

Target group:

1st and 2nd year master level students

Prerequisites and co-requisites:

_

Recommended optional programme components:

-

Recommended or required reading:

The excursion program including detailed information on the targets.

Assessment methods and criteria:

Attending the study trip and preparing the excursion program and guide as well as the travel arrangements.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

A410276: Advanced Architectural Design, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: English

Ei opintojaksokuvauksia.

Compolsory courses

452505S: International Studio, 15 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mahlamäki Rainer
Opintokohteen kielet: Finnish

ECTS Credits:

15

Language of instruction:

Finnish/English

Timing:

autumn term 1-2

Learning outcomes:

The objective of the course is to widen and deepen the student's knowledge of public buildings, housing design and design in general through lectures and exercises. Learning outcomes: After completing the course the student can set his / her own objectives to the given task and offer solutions in the form of drawings and models.

Contents:

The lectures deal current features in architecture and specific issues related to the topic of the design exercise. The student selects the topic of the task by him- / herself with the help of the teachers. The exercise can comprise a design project (extent at least 8 ECTS) complemented by a written survey.

Mode of delivery:

Lectures and face-to-face teaching

Learning activities and teaching methods:

The exercise is tutored in common studio sessions and intermediate critiques. The completed works are presented in an open critique. Evaluation is based on the architectural quality, standard and processing of the exercise.

Target group:

5th year master students

Prerequisites and co-requisites:

Contemporary architecture IV or equivalent course.

Recommended optional programme components:

The course is intended for students in the Architectural Design and Building Design orientations.

Recommended or required reading:

List of readings will be handed out at the lectures.

Assessment methods and criteria:

The grading is based on evaluation of the achieved goals of the task, quality of the exercise.

Grading:

1 - 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

455561S: Advanced Studies in Architectural Design, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Aulikki Herneoja
Opintokohteen kielet: Finnish

ECTS Credits:

2-10 ECTS

Language of instruction:

Finnish or English

Timing:

Autumn 1 & 2

Learning outcomes:

After completing the course the student is able to fairly independently carry out a project work related to architectural design. Student is able to implement the previously learned knowledge through particular issues defined individually with the teacher. The student is able to apply the principles of sustainability. Student is able to apply research skills in his / her exercise (for example research by design).

Contents:

The aim of the course is to offer the student the possibility to advance his/her knowledge of a special issue of design through a literary and /or a visual thesis and in design exercise according to his / her own choice. Chosen design issue should be attached to the theme of Contemporary Architecture V-course exercise. The content of the course is defined individually in co-operation with the teacher. The student completes a literary and /or a visual thesis and design exercise according to an agreed program. The aim of the course is to offer the student the possibility to advance his/her knowledge of a special issue of design through a literary and /or a visual thesis and in design exercise according to his / her own choice. Chosen design issue should be attached to the theme of Contemporary Architecture V-course exercise. The content of the course is defined individually in co-operation with the teacher. The student completes a literary and /or a visual thesis and design exercise according to an agreed program.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

Personal or / and group tutoring maximum 20-80 hours.

Target group:

2nd year master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Belongs to master level Advanced Architectural Design -module. Advanced Studies of Architectural Design -course is suggested to proceed together with course 452505S Contemporary Architecture V.

Recommended or required reading:

Course literature will be according to the chosen issue of design.

Assessment methods and criteria:

The student completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja.

Working life cooperation:

No

Other information:

-

451560S: Research and Theory of Architecture, 2 - 10 op

Voimassaolo: 01.08.2006 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Anna-Maija Ylimaula **Opintokohteen kielet:** Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish and English

Timing:

Autumn term I and 2

Learning outcomes:

The course initiates the students into the fundamentals of research and provides basic knowledge of the development of architectural theories and the current features of the research in the field of architecture. Learning outcomes: The aim of the course is to deepen one's skills in knowledge of architecture and to strengthen the foundation of research based studies in architecture. During the course the student learns to view architecture from the standpoint of architectural theories and to analyze ontological and historical starting points of theory and practice of architecture. After completing the course the student is familiar with the basic concepts of research and can illustrate fields and methods of architectural research.

Contents:

Visiting experts will give lectures on research and theory of architecture within a yearly varying topic. During the seminar the students are examining the topic of the course through lectures and analyses. The exercise is a written survey, applying methods of scientific research. The surveys are analyzed and evaluated during the seminar.

Mode of delivery:

Active participation and writing a scientific article are required for accomplishing the course.

Learning activities and teaching methods:

Lectures and seminars 15 h and workshop 6 h. Active participation and writing a scientific article are required for accomplishing the course.

Target group:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Prerequisites and co-requisites:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Recommended optional programme components:

The course is recommended particularly for students who intend to do their master's thesis or doctoral thesis in the field of architecture. For accomplishing the course, an active participation is required. Instead of an exam student writes a journal based on the course.

Recommended or required reading:

Separate list of literature will be handed out.

Assessment methods and criteria:

The student participates in the lectures and writing workshops and he/she writes an article during the course. Students are recommended to participate in the National Architectural Research Seminars. The course requires attendance and writing of a scientific article.

Grading:

1-5, Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, PhD, architect Janne Pihlajaniemi

Working life cooperation:

No

Other information:

_

450505A: Practical Training, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Petri Aarnio

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish / English

Timing:

The best timing for practical training in architect's office is the summers during bachelor level.

Learning outcomes:

After completing the practical training the student is able to describe one possible occupation after his / her graduation. The student can recognize and solve problems of the working environment. The student is able to implement theoretical knowledge in practice. The student recognizes the architect's professional tasks at his / her work place during the practical training.

Contents:

The aim of practical training in architect's office is to initiate the student into architects' work and tasks. It is essential for students to get to know the work field of an architect in order to begin his / her own professional career after graduation most efficiently. Recommended places of work for practical training are private or public design and planning offices lead by qualified architects.

Mode of delivery:

The student finds the placement for practical training by her- / himself.

Learning activities and teaching methods:

The student has to write a report and present a testimonial of the training. The practical training is supervised by the laboratory of architectural construction.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

_

Recommended or required reading:

The laboratory for architectural construction provides the instructions for practical training.

Assessment methods and criteria:

The report of the practical training period submitted to the supervising laboratory.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University teacher Petri Aarnio

Working life cooperation:

Yes. The student has the responsibility of finding the work placement him / herself.

450502A: Excursion Abroad, 2 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Mahlamäki Rainer

Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS

Language of instruction:

Finnish/English

Timing:

turn of the 1st and 2nd half of the autumn term

Learning outcomes:

The purpose of the study trip is to complement the student's ability to identify architectural sights known from the theoretical courses in architecture, their three-dimensional and empirical character as well as relation to place and history. After attending the study trip the student has a better understanding of the features of internationally significant architecture.

Contents:

The excursion program includes visits to top-quality architectural sights in the target city or country. The excursion program may include individual buildings, housing estates or urban spaces and environments. Visits to local architecture schools may also be included in the program. During the spring term of the 1 st year of the master studies the course includes preparing a detailed excursion program together with the excursion leader, as well as all the practical arrangements for the trip.

Mode of delivery:

Contact teaching and individual study. The study trip is organized at the end of the first half /at the beginning of the second half of the autumn term in the second year of the master level (duration of the trip including travel is max. 14 days). The excursion leader is selected and the target and the frame for the program of the excursion are decided upon by the end of the previous year. The excursion program is approved by the education committee of the school. The detailed program and travel arrangements will be completed during the spring term of the 1 st year of the master level together with the excursion leader, who is one of the full-time teachers of the School. The students have to cover their own expenses of the excursion.

Learning activities and teaching methods:

2 h lectures and 56 h additional contact teaching

Target group:

1st and 2nd year master level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The excursion program including detailed information on the targets.

Assessment methods and criteria:

Attending the study trip and preparing the excursion program and guide as well as the travel arrangements.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

450099S: Master's Thesis, 30 op

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

30 ECTS

Language of instruction:

Finnish/English

Timing:

Recommended timing the spring term of the 2nd year of the master level.

Learning outcomes:

The student is able to set objectives to the given design task, and through utilizing processes of creative work is able to develop various solutions based on analyses and problem solving, regardless of the scale of the task. The student is able to apply advanced working methods and tools in a creative manner in the solutions visualization. The student is capable of taking responsibility of his own professional developing and specialization.

Contents:

The student defines the contents of his / her work, consulting the supervisor of the diploma thesis. The study programme board accepts the contents, the subject and the topic of the thesis work.

Mode of delivery:

Individual work. The diploma thesis completes the master's degree studies.

Learning activities and teaching methods:

The diploma thesis work is supervised by a staff member of the Faculty. The work is presented and evaluated in the diploma seminar.

Target group:

2nd year master level students

Prerequisites and co-requisites:

all the additional studies required for the architect's degree, totaling 90 ECTS

Recommended optional programme components:

The diploma work is part of the advanced studies of the curriculum.

Recommended or required reading:

_

Assessment methods and criteria:

The thesis work is made independently by the student. One week before the final presentation the student pins up the panels of the diploma for display in the faculty exhibition room. The thesis work is saved digitally and reviewed through the University of Oulu Laturi electronic thesis (E-thesis) submission system.

Grading:

1 - 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor NN of the supervising teaching unit

Working life cooperation:

Yes

Other information:

separate detailed diploma thesis instructions are published on the web pages of the faculty.

450014S: The Maturity Test for Master's Degree, 0 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

0

Language of instruction:

Finnish / Swedish / English

Timing:

flexible

Learning outcomes:

The student is able to communicate in the language of the diploma thesis work and is able to present intimate knowledge in the field of his / her diploma thesis work.

Contents:

The essay is written on the subject of the thesis work.

Mode of delivery:

The maturity test is a part of the master's dissertation.

Learning activities and teaching methods:

Written essay.

Target group:

master level students

Prerequisites and co-requisites:

Diploma thesis work

Recommended optional programme components:

-

Recommended or required reading:

-

Assessment methods and criteria:

The recommended extent of the essay corresponds to the abstract of the written part of the diploma thesis work. Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / Fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor NN in the supervising teaching unit

Working life cooperation:

_

Other information:

-

300002M: Advanced Information Skills, 1 op

Voimassaolo: 01.08.2009 - Opiskelumuoto: Other Studies

Laji: Course

Vastuuyksikkö: Faculty of Science

Arvostelu: 1 - 5, pass, fail
Opettajat: Ursula Heinikoski
Opintokohteen kielet: Finnish

ECTS Credits:

1 ECTS credit

Language of instruction:

Finnish

Timing:

Intended for degree students working on their diploma/master's thesis. The course unit is held once in the autumn and once in the spring semester.

Learning outcomes:

Students know the different phases of scientific information retrieval process and basic techniques of systematic information search. They will find the most important reference databases of their discipline and know how to evaluate information sources and search results.

Contents:

Scientific information retrieval, evaluation of search results and information sources, information search on subject areas of diploma/master's thesis.

Mode of delivery:

Blended teaching

Learning activities and teaching methods:

Lectures 10 h, self-study 17 h

Target group:

The course is optional for students of Science and Technology.

Recommended or required reading:

Web learning material:

http://libguides.oulu.fi/tieteellinentiedonhankinta

http://libguides.oulu.fi/julkaisujenarviointi

Assessment methods and criteria:

Passing the course requires participation in the lectures and successful completion of the course assignments.

Grading:

pass/fail

Person responsible:

Library information specialists, informationservice(at)oulu.fi

451540A: History of Architecture and renovation, varying courses, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Anna-Maija Ylimaula Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish and English

Timing:

Flexible, autumn and spring terms

Contents:

The content of the course is defined separately.

Mode of delivery:

variable

Target group:

Bachelor level students

Prerequisites and co-requisites:

Elective course

Recommended or required reading:

Defined separately

Assessment methods and criteria:

The course does not include any lectures or examinations. Assessment depends on the assignment.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula

Working life cooperation:

No

ay451513S: History of Interior Design and Historical interiors (OPEN UNI), 5 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

451513S History of Interior Design / Historical interiors 5.0 op

Language of instruction:

Finnish

Learning outcomes:

To provide a general impression of the history of European interior decoration and the development of Finnish interior decoration in relation to it.

Learning outcome: After completing the course the student recognizes and is able to describe the periods of the European history of interior design in general and to compare the special features of the development of Finnish interior design in relation to the European.

Contents:

The lecture topics cover interior decoration from the Classical period to modern times. Attention is paid to the connections between architecture, the general way of life and interior decoration.

Assessment methods and criteria:

A written examination after the lectures, essay / restoration or reconstruction plan.

ay451523S: Traditional Japanese Arhitecture and Garden Art (OPEN UNI), 5 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

451523S Traditional Japanese Arhitecture and Garden Art 5.0 op

Language of instruction:

Finnish

Timing:

The course is arranged according to the program of the Open University

Learning outcomes:

The aim of the course is to introduce the basics of Japanese architecture and garden art as well as the literature of the field.

Learning outcomes: After completing the course the student is able to describe the historical eras of Japanese architecture. He / she can evaluate the tradition of Japanese architecture and garden art as a whole and recognize the most essential examples of existing building tradition, as well as the traditional values of Japanese culture and their reflections in the built environment.

Contents:

Lectures on Japanese traditional architecture and garden art. The content of the course varies yearly.

Mode of delivery:

Lectures

Learning activities and teaching methods:

Lectures 24h

Target group:

Elective course, arranged as an intensive course

Prerequisites and co-requisites:

The course is organized by the Open University

Recommended or required reading:

Separate list of literature will be delivered during the course

Assessment methods and criteria:

∟ssay

Read more about assessment criteria at the University of Oulu webpage.

453540A: Varying Courses of Architectural Construction, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Janne Pihlajaniemi

Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish Timing: varying

Learning outcomes:

After completing the course the student has independently gone deeply into a specific field within architectural construction in order to be able to implement his / her skills in producing drawings of demanding building parts and details independently and to present the functional justifications of the selected solutions.

Alternatively the student can independently write a survey, dealing with a specific field within architectural construction according to his / her own choice. In the survey the student can analyze, explain and estimate the issues of architectural construction in question.

Contents:

The content of the course varies. The exercise work can alternatively be a design project, including a sufficient extent of working and detail drawings, or a written study on an individually defined topic. The course is elective. The aim of the course is to deepen one's skills within the field of architectural construction.

Mode of delivery:

Independent studies, contact teaching.

Learning activities and teaching methods:

54 h – 270 h independent studies and personal and / or group tutoring.

Target group:

Bachelor level students

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

List of readings will be handed out during the course.

Assessment methods and criteria:

The evaluation is made based on outcome of the individual exercise work completed independently. No exam is included in the course.

Grading:

1 - 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi /architecture/node/5921

Person responsible:

NN, university teacher Petri Aarnio

Working life cooperation:

No

Other information:

452550S: Varying Courses of Contemporary Architecture, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Mahlamäki Rainer Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish/English

Timing:

not specified

Learning outcomes:

The objective of the course is to initiate the student into contemporary tendencies in architecture, to new ways and methods of building and new building types, both in domestic and international architecture. During the course one can learn how to make a proposal for an architectural competition, or attend a workshop. The workshops train students in combining the phases of designing and building, and constructing in particular. Learning outcomes: After completing the course the student is able to deal with the specific topic of his / her work either through writing or designing. The student has adequate skills for making a proposal for an architectural competition. After completing a workshop the student distinguishes the connection between design and construction and can at least assist in construction work.

Contents:

The course comprises short lectures and case studies dealing with the respective topic. The project is a design exercise for a public building selected by the student. The exercise may also be participation in an open architectural competition or an architectural workshop.

Mode of delivery:

Face-to-face teaching, workshops.

Learning activities and teaching methods:

The completed works are presented in an open critique. Evaluation is based on the processing of the exercise.

Target group:

master level students

Prerequisites and co-requisites:

bachelor's degree

Recommended or required reading:

List of articles on contemporary architecture and projects (will be announced at the beginning of the course).

Assessment methods and criteria:

The course is completed by participating the lectures and performing the design task.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

452540A: Varying Courses of Contemporary Architecture, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Matti Sanaksenaho
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish/English

Timing:

Autumn term 1-2 and Spring term 1-2

Learning outcomes:

After completing the course the student knows the design principles of public buildings and features of contemporary architecture. The student is familiar with fresh architectural tendencies and has developed a personal view on

architecture. He / she has the facility for making schematic plans for a demanding public building with a personal touch. He / she understands the influence of design to building and is able to do assisting construction work.

Contents:

Varies yearly. The course contains one design exercise of a public building. Participation in an open competition or architecture workshop is possible.

Mode of delivery:

Face-to-face teaching, workshops.

Learning activities and teaching methods:

The completed works are presented in an open critique. Evaluation is based on the processing of the exercise.

Target group:

Bachelor and master level students

Prerequisites and co-requisites:

• • •

Recommended optional programme components:

Freebased and recommended to those, who are going to make a graduation in contemporary architecture or architectural construction.

Recommended or required reading:

List of articles on contemporary architecture and projects (will be announced at the beginning of the course).

Assessment methods and criteria:

Based on exercises.

Grading:

1-5 or pass/fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Matti Sanaksenaho

Working life cooperation:

No

Other information:

The aim of the course is to initiate students to recent tendencies in architecture, the methods of build buildings, new types of buildings in domestic and international architecture through exercises.

454550S: Varying Courses of Urban Design, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10 ECTS

Language of instruction:

Finnish or English.

Timing:

Autumn term 1-2 / Spring term 1-2.

Learning outcomes:

After completing the course the student is able to identify current features in planning and urban design as well as describe their impacts to functional and spatial planning of human settlements. The student can critically implement learning outcomes in different planning and urban design tasks.

Contents

Current features of planning, urban design, and urban development, such as urban planning in developing countries and/or in a northern context, and responsible planning.

Mode of delivery:

Mostly independent studying + contact teaching.

Learning activities and teaching methods:

8-64 h contact teaching in design studio + 46-206 h independet studying.

Target group:

4th year Master level students.

Prerequisites and co-requisites:

_

Recommended optional programme components:

Recommended or required reading:

Study material will be announced separately.

Assessment methods and criteria:

Exercise (design project). Basic options are participation in a competition (student competition, open competition) or a thematic design studio. The assessment is based on the design project. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik, prof. Helka-Liisa Hentilä.

Working life cooperation:

Nο

Other information:

_

454540A: Varying Courses of Urban Design, 2 - 10 op

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish or English.

Timing:

Autumn term 1-2 / Spring term 1-2.

Learning outcomes:

After completing the course the student can identify current features in planning and urban design as well as describe their impacts to functional and spatial planning of human settlements. The student can implement learning outcomes in different planning and urban design tasks.

Contents:

Current features of planning, urban design, and urban development, such as urban design in a northern context.

Mode of delivery:

Mostly independent studying + contact teaching.

Learning activities and teaching methods:

8-64 h contact teaching in design studio + 46-206 h independet studying.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended or required reading:

Study material is announced separately.

Assessment methods and criteria:

Exercise (design project). Basic options are participation in a competition (student competition, open competition), summer school or thematic design studio. The assessment is based on the design project. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik, prof. Helka-Liisa Hentilä

Working life cooperation:

No

Other information:

The student can include the course into her / his optional studies.

453551S: Varying courses in Architectural Construction, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish **Timing:**Varying

Learning outcomes:

After completing the course the student has independently gone deeply into a specific field within architectural construction in order to be able to implement his / her skills in producing drawings of demanding building parts and details independently and to present the functional justifications of the selected solutions. Alternatively the student can independently write a survey, dealing with a specific field within architectural construction according to his / her own choice. In the survey the student can analyze, explain and estimate the issues of architectural construction in question.

Contents:

The content of the course varies. The exercise work can alternatively be a design project, including a sufficient extent of working and detail drawings, or a written study on an individually defined topic. The course is elective. The aim of the course is to deepen one's skills within the field of architectural construction.

Mode of delivery:

Independent studies, tutoring.

Learning activities and teaching methods:

54 h – 270 h independent studying and personal and / or group tutoring.

Target group:

Master level students

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

List of readings will be handed out during the course

Assessment methods and criteria:

The evaluation is made based on outcome of the individual exercise work completed independently. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN, university teacher Petri Aarnio

Working life cooperation:

-

Other information:

-

451551S: Varying courses in History of Architecture and Renovation, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish or English

Timing:

Flexible, autumn and spring terms

Contents:

The content of the course is defined separately.

Mode of delivery:

Varies

Target group:

Master's level students

Prerequisites and co-requisites:

Elective course

Recommended or required reading:

Defined separately

Assessment methods and criteria:

The course does not include any lectures or examinations. Assessment depends on the assignment.

Grading:

1-5, pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula.

A410224: Design-led Urban Renewal, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Module of the Option

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

Compulsory courses

454522S: Urban Space Design, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Sari Hirvonen-Kantola

Opintokohteen kielet: English

ECTS Credits:

10 ECTS

Language of instruction:

English

Timing:

Autumn term 1-2.

Learning outcomes:

After completing the course the student is able to recognise features of current interest within the design of public urban space, and to identify interaction between the built environment, society, culture, technology, and nature. The student is able to demonstrate various programmes, plans, and aims for the development of the functional and physical environment. The student is able to carry out a thematic analysis, set design goals, and to produce multifunctional development plans for urban spaces.

Contents:

The lectures deal especially with the design of public urban spaces. The exercise work focuses on thematic design and development of the functional and physical environment within an urban context.

Mode of delivery:

Contact teaching plus independent studying.

Learning activities and teaching methods:

16 h lectures + 80 h contact teaching in design studio (including workshop) + 174 h independent studying.

Target group:

4th year Master level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

The Course is part of the module "Design-Led Urban Renewal". The design project is connected with Urban Space Detailing (455521S).

Recommended or required reading:

Literature will be announced separately.

Assessment methods and criteria:

Exercise (design project). Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik

Working life cooperation:

No

Other information:

_

455521S: Urban Space Detailing, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Aulikki Herneoja
Opintokohteen kielet: English

ECTS Credits:

10

Language of instruction:

English

Timing:

Autumn term 1 & 2

Learning outcomes:

After completing the course the student can make a detailed plan for an urban space, taking into account various sectors and approaches of urban space detailing, including material alternatives and different lighting options. In the project work the student can apply the use of large variations of scale to an instrument of urban space detailing. Student is able to take into account sustainable development aspects when choosing materials and making the design solutions.

Contents:

The aim of the course is to go deeply into issues of detailing of urban space with focus on over-all concept. The purpose is to initiate the students to utilize outdoor furniture, accessories and lighting in outdoor design and to acquaint the students with materials and requirements of designing green areas. Lectures, exercise work and visits to the site. The students make a detailed design for the site studied as an exercise work within the Urban Space Design course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

16h lectures + maximum 80 h contact teaching

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design-Led Urban Renewal. Design project is connected with 454522S Urban Space Design -course.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course. Read more about assessment criteria at the University of Oulu webpage.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja.

Working life cooperation:

No

Other information:

-

455522S: Design in Urban Context, 10 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Aulikki Herneoja

Opintokohteen kielet: English

ECTS Credits:

10

Language of instruction:

English

Timing:

Autumn term 1 & 2

Learning outcomes:

After completing the course the student is able to recognize an industrially designed product and analyze its design related substance and is able to make commentary literary synopsis. The student can carry out an exercise work of designing an object related to urban context, applying the contents of the course as well as history of industrial design and contemporary design. The student is able to apply the principles of sustainability in his / her design solutions and material selection.

Contents:

To give a general overview of history, theory and praxis of industrial design in the urban context and to develop the student's facility for research. The lectures deal with main issues of the history of industrial design and recent features of design emphasis on urban context. Research skills are dealt with when students make a commentary synopsis of a book on contemporary design / designer. The viewpoints of sustainability are included in the lectures and discussions held during the course. The emphasis of the course is on design exercise work, which is a design task object related to the Urban Space Detailing course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

16h lectures and/or contact teaching and maximum 80 h personal or/and group tutoring

Target group:

1st year of master level

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design-Led Urban Renewal. Design project is connected with 455521S Urban Space Detailing.

Recommended or required reading:

Literature is given during the course.

Assessment methods and criteria:

The student participates in lectures, makes lecture diary, commentary synopsis and delivers a design exercise made by given instructions. The evaluation is based on the outcome of the design project (2/3) and lecture diary and commentary synopsis together (1/3). No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja

Working life cooperation:

No

Other information:

A410249: Design of Public Buildings 1, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

452504A: Contemporary Architecture IV, 15 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mahlamäki Rainer
Opintokohteen kielet: Finnish

ECTS Credits:

15

Language of instruction:

Finnish/English

Timing:

spring term 1-2

Learning outcomes:

The objective of the course is to initiate the students through lectures and exercises into the architecture and designing of public buildings.

Learning outcomes: After completing the course the student has the skills to sketch a medium- size (approx. 1000–8000 m2) public building, taking into account the structural, technical and important security requirements (exercise). Furthermore, the student recognizes the social and technical background, as well as and trends of contemporary architecture related with public buildings (lectures).

Contents:

The lectures deal current features in architecture and specific issues related to the topic of the design exercise. The task of the exercise is to design a medium-size public building, including the principles of fire safety, acoustics, load bearing structures and technical installations. Guest lectures are part of the course program.

Mode of delivery:

Lectures and face-to-face teaching

Learning activities and teaching methods:

The course comprises lectures, a design exercise and an exam. The exercise is tutored in common studio sessions and intermediate critiques. The completed works are presented in an open critique. Evaluation is based on the architectural quality and implementation of the objectives of the design project, and the result of the exam.

Target group:

4th year master students. The course is intended for students in the Architectural Design and Building Design orientations.

Prerequisites and co-requisites:

Prerequisite: contemporary architecture III or bachelor's degree.

Recommended optional programme components:

Teachings of structural technology and building techniques are implemented in the exercise. The exercise is linked with the courses of interior design and architectural lighting.

Recommended or required reading:

Summary of the lectures. List of readings will be handed out at the lectures.

Assessment methods and criteria:

Exercise (design project and possible exam). The form of the exam will be announced each year. The grading is based on evaluation of the achieved goals of the task, quality of the exercise and exam

Grading:

1 - 5. fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

_

A410250: Design of Public Buildings 2, 15 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Supplementary Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

Compulsory

453533A: Large scale structures, 5 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish (part of literature in English)

Timing:

Autumn

Learning outcomes:

Upon completion of the course the student identifies the qualities of concrete and steel as structural material and is able to use these materials to design the frame of a public building.

Contents:

Lectures comprise the qualities of concrete, steel and various bricks including their strength properties, products and structural detailing with them. The design studio comprises structural design project of a large scale building.g.

Mode of delivery:

Course is based mainly on independent studies. Some contact teaching is given.

Learning activities and teaching methods:

Lectures and demonstrations 48 h. Self-study 87 h.

Target group:

1st year master level students.

Prerequisites and co-requisites:

Bachelor level courses in structures and building sciencies

Recommended optional programme components:

Design work is linked to modern architecture IV.

Recommended or required reading:

Study compendiums. Other course literature will be announced separately.

Assessment methods and criteria:

Design project and exam. Evaluation is based on exam.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

university teacher Matti Kangaspuoskari, university teacher Raimo Hannila.

Working life cooperation:

No

Other information:

-

455517S: Architectural Lighting, 5 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Henrika Pihlajaniemi

Opintokohteen kielet: English

ECTS Credits:

5

Language of instruction:

English

Timing:

Spring term 1 & 2

Learning outcomes:

After completing the course the student commands the concepts of natural and artificial lighting, in order to be able to analyze the relationship between architecture and light, using basic concepts of lighting. The

student can prepare a lighting scheme for his/her own design project and make a CAD-visualized lighting design based on the scheme, utilizing both natural light and various artificial light sources. The student is able to apply the principles of sustainability in his/her design solutions, in utilizing natural light and in selection of light sources.

Contents:

The objective of the course is to study the relationship between architecture and light. The studies cover both natural and artificial light. The lectures deal with architecture and light, concepts of light, modes of lighting as well as different sources of artificial light and types of light fixtures. Both indoor and outdoor lighting solutions are studied. Aspects of sustainability and energy efficiency are included in the contents of the course, in connection with designing and controlling natural light, as well as in relation to selection of light sources and designing controllable lighting solutions, using artificial lighting. The project work comprises a lighting analysis of a selected interior and a concept level CAD-visualized lighting design, which is connected to the exercise work in contemporary architecture. The course includes visits to places and interiors of interest within lighting design.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12h lectures and/or contact teaching and 36h personal or/and group tutoring.

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design of Public Buildings. Architectural Lighting course is suggested to proceed together with 455517A Interior Design course.

Recommended or required reading:

Course literature will be announced separately.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to the instructions. The evaluation is made based on the outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Teacher Henrika Pihlajaniemi

Working life cooperation:

No

Other information:

-

455517A: Interior Design, 5 - 10 op

Voimassaolo: 01.08.2012 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Aulikki Herneoja Opintokohteen kielet: Finnish

Leikkaavuudet:

ay455517A Interior Design (OPEN UNI) 5.0 op

ECTS Credits:

5-10

Language of instruction:

English

Timing:

Spring term 1 & 2

Learning outcomes:

After completing the course the student can analyze space and make sketches for an interior, utilizing various sectors of interior design in a creative manner. The student can implement the basic concepts of interior design when presenting his / her design work. The student is able to apply the principles of sustainability in his / her design solutions and material selection. When extending the course to 10 ECTS credits, after completing the course the student can prepare working drawings and identify quality factors, displaying his / her command of the basics of designing fixed furniture. The student is able to apply the principles of sustainability in his / her design solutions and material selection, e.g. taking into account sorting of waste and principles of life-cycle housing.

Contents:

The objective of the course is to provide students with basic skills of interior design and to guide the students to practical design work. When extending the course to 10 ECTS credits the aim of the lectures and the exercise work of the course is to deepen the students' knowledge in special issues within interior design, in particular designing fixed furniture. Lectures deal with basic concepts of interior design and the connection between architecture and interior design and aspects of sustainable development. The focus is on materials, colours and lighting of the space, basics of design of fixed furniture and textiles. The exercise work is a sketch level design of an interior. When extending the course to 10 ECTS credits lectures deal with special issues within interior design and aspects of sustainability, with focus on fixed furniture design. The student is initiated to practices of fixture design and quality factors through analyzing two kitchens. The exercise work is a working drawing level fixture design. Visits to professionally designed interiors are included in the course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

12h lectures and/or contact teaching and 36h personal or/and group tutoring. When extending the course to 10 ECTS credits additional lectures and/or contact teaching and personal and/or group tutoring altogether maximum 50 h is included.

Target group:

1st year of master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Course is part of module Design of Public Buildings. Interior Design is suggested to proceed together with course 455517 Architectural Lighting.

Recommended or required reading:

Literature is given during the course.

Assessment methods and criteria:

The student attends the lectures and completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja

Working life cooperation:

A410276: Advanced Architectural Design, 30 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Module

Laji: Study module

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: English

Ei opintojaksokuvauksia.

Compolsory courses

452505S: International Studio, 15 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Mahlamäki Rainer
Opintokohteen kielet: Finnish

ECTS Credits:

15

Language of instruction:

Finnish/English

Timing:

autumn term 1-2

Learning outcomes:

The objective of the course is to widen and deepen the student's knowledge of public buildings, housing design and design in general through lectures and exercises. Learning outcomes: After completing the course the student can set his / her own objectives to the given task and offer solutions in the form of drawings and models.

Contents:

The lectures deal current features in architecture and specific issues related to the topic of the design exercise. The student selects the topic of the task by him- / herself with the help of the teachers. The exercise can comprise a design project (extent at least 8 ECTS) complemented by a written survey.

Mode of delivery:

Lectures and face-to-face teaching

Learning activities and teaching methods:

The exercise is tutored in common studio sessions and intermediate critiques. The completed works are presented in an open critique. Evaluation is based on the architectural quality, standard and processing of the exercise.

Target group:

5th year master students

Prerequisites and co-requisites:

Contemporary architecture IV or equivalent course.

Recommended optional programme components:

The course is intended for students in the Architectural Design and Building Design orientations.

Recommended or required reading:

List of readings will be handed out at the lectures.

Assessment methods and criteria:

The grading is based on evaluation of the achieved goals of the task, quality of the exercise.

Grading:

1 - 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

-

455561S: Advanced Studies in Architectural Design, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Aulikki Herneoja

Opintokohteen kielet: Finnish

ECTS Credits:

2-10 ECTS

Language of instruction:

Finnish or English

Timing:

Autumn 1 & 2

Learning outcomes:

After completing the course the student is able to fairly independently carry out a project work related to architectural design. Student is able to implement the previously learned knowledge through particular issues defined individually with the teacher. The student is able to apply the principles of sustainability. Student is able to apply research skills in his / her exercise (for example research by design).

Contents:

The aim of the course is to offer the student the possibility to advance his/her knowledge of a special issue of design through a literary and /or a visual thesis and in design exercise according to his / her own choice. Chosen design issue should be attached to the theme of Contemporary Architecture V-course exercise. The content of the course is defined individually in co-operation with the teacher. The student completes a literary and /or a visual thesis and design exercise according to an agreed program. The aim of the course is to offer the student the possibility to advance his/her knowledge of a special issue of design through a literary and /or a visual thesis and in design exercise according to his / her own choice. Chosen design issue should be attached to the theme of Contemporary Architecture V-course exercise. The content of the course is defined individually in co-operation with the teacher. The student completes a literary and /or a visual thesis and design exercise according to an agreed program.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

Personal or / and group tutoring maximum 20-80 hours.

Target group:

2nd year master students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Belongs to master level Advanced Architectural Design -module. Advanced Studies of Architectural Design -course is suggested to proceed together with course 452505S Contemporary Architecture V.

Recommended or required reading:

Course literature will be according to the chosen issue of design.

Assessment methods and criteria:

The student completes a design exercise according to instructions. The evaluation is made based on outcome of the exercise work. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University Lecturer Aulikki Herneoja.

Working life cooperation:

Nο

Other information:

_

451560S: Research and Theory of Architecture, 2 - 10 op

Voimassaolo: 01.08.2006 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish and English

Timing:

Autumn term I and 2

Learning outcomes:

The course initiates the students into the fundamentals of research and provides basic knowledge of the development of architectural theories and the current features of the research in the field of architecture. Learning outcomes: The aim of the course is to deepen one's skills in knowledge of architecture and to strengthen the foundation of research based studies in architecture. During the course the student learns to view architecture from the standpoint of architectural theories and to analyze ontological and historical starting points of theory and practice of architecture. After completing the course the student is familiar with the basic concepts of research and can illustrate fields and methods of architectural research.

Contents:

Visiting experts will give lectures on research and theory of architecture within a yearly varying topic. During the seminar the students are examining the topic of the course through lectures and analyses. The exercise is a written survey, applying methods of scientific research. The surveys are analyzed and evaluated during the seminar.

Mode of delivery:

Active participation and writing a scientific article are required for accomplishing the course.

Learning activities and teaching methods:

Lectures and seminars 15 h and workshop 6 h. Active participation and writing a scientific article are required for accomplishing the course.

Target group:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Prerequisites and co-requisites:

The course is primarily intended for post-graduate students, but also master's students are welcome to attend. The course is included in all the three orientations of the master's level as an optional study unit.

Recommended optional programme components:

The course is recommended particularly for students who intend to do their master's thesis or doctoral thesis in the field of architecture. For accomplishing the course, an active participation is required. Instead of an exam student writes a journal based on the course.

Recommended or required reading:

Separate list of literature will be handed out.

Assessment methods and criteria:

The student participates in the lectures and writing workshops and he/she writes an article during the course. Students are recommended to participate in the National Architectural Research Seminars. The course requires attendance and writing of a scientific article.

Grading:

1-5. Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, PhD, architect Janne Pihlajaniemi

Working life cooperation:

No

Other information:

-

450505A: Practical Training, 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Practical training

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail **Opettajat:** Petri Aarnio

Opintokohteen kielet: Finnish

ECTS Credits:

5

Language of instruction:

Finnish / English

Timing:

The best timing for practical training in architect's office is the summers during bachelor level.

Learning outcomes:

After completing the practical training the student is able to describe one possible occupation after his / her graduation. The student can recognize and solve problems of the working environment. The student is able to implement theoretical knowledge in practice. The student recognizes the architect's professional tasks at his / her work place during the practical training.

Contents:

The aim of practical training in architect's office is to initiate the student into architects' work and tasks. It is essential for students to get to know the work field of an architect in order to begin his / her own professional career after graduation most efficiently. Recommended places of work for practical training are private or public design and planning offices lead by qualified architects.

Mode of delivery:

The student finds the placement for practical training by her- / himself.

Learning activities and teaching methods:

The student has to write a report and present a testimonial of the training. The practical training is supervised by the laboratory of architectural construction.

Target group:

Bachelor level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The laboratory for architectural construction provides the instructions for practical training.

Assessment methods and criteria:

The report of the practical training period submitted to the supervising laboratory.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

University teacher Petri Aarnio

Working life cooperation:

Yes. The student has the responsibility of finding the work placement him / herself.

450502A: Excursion Abroad, 2 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Mahlamäki Rainer Opintokohteen kielet: Finnish

ECTS Credits:

2 ECTS

Language of instruction:

Finnish/English

Timing:

turn of the 1st and 2nd half of the autumn term

Learning outcomes:

The purpose of the study trip is to complement the student's ability to identify architectural sights known from the theoretical courses in architecture, their three-dimensional and empirical character as well as relation to place and history. After attending the study trip the student has a better understanding of the features of internationally significant architecture.

Contents:

The excursion program includes visits to top-quality architectural sights in the target city or country. The excursion program may include individual buildings, housing estates or urban spaces and environments. Visits to local architecture schools may also be included in the program. During the spring term of the 1 st year of the master studies the course includes preparing a detailed excursion program together with the excursion leader, as well as all the practical arrangements for the trip.

Mode of delivery:

Contact teaching and individual study. The study trip is organized at the end of the first half /at the beginning of the second half of the autumn term in the second year of the master level (duration of the trip including travel is max. 14 days). The excursion leader is selected and the target and the frame for the program of the excursion are decided upon by the end of the previous year. The excursion program is approved by the education committee of the school. The detailed program and travel arrangements will be completed during the spring term of the 1 st year of the master level together with the excursion leader, who is one of the full-time teachers of the School. The students have to cover their own expenses of the excursion.

Learning activities and teaching methods:

2 h lectures and 56 h additional contact teaching

Target group:

1st and 2nd year master level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

-

Recommended or required reading:

The excursion program including detailed information on the targets.

Assessment methods and criteria:

Attending the study trip and preparing the excursion program and guide as well as the travel arrangements.

Grading:

Pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

-

Other information:

_

450099S: Master's Thesis, 30 op

Opiskelumuoto: Advanced Studies

Laji: Diploma thesis

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

30 ECTS

Language of instruction:

Finnish/English

Timing:

Recommended timing the spring term of the 2nd year of the master level.

Learning outcomes:

The student is able to set objectives to the given design task, and through utilizing processes of creative work is able to develop various solutions based on analyses and problem solving, regardless of the scale of the task. The student is able to apply advanced working methods and tools in a creative manner in the solutions visualization. The student is capable of taking responsibility of his own professional developing and specialization.

Contents:

The student defines the contents of his / her work, consulting the supervisor of the diploma thesis. The study programme board accepts the contents, the subject and the topic of the thesis work.

Mode of delivery:

Individual work. The diploma thesis completes the master's degree studies.

Learning activities and teaching methods:

The diploma thesis work is supervised by a staff member of the Faculty. The work is presented and evaluated in the diploma seminar.

Target group:

2nd year master level students

Prerequisites and co-requisites:

all the additional studies required for the architect's degree, totaling 90 ECTS

Recommended optional programme components:

The diploma work is part of the advanced studies of the curriculum.

Recommended or required reading:

-

Assessment methods and criteria:

The thesis work is made independently by the student. One week before the final presentation the student pins up the panels of the diploma for display in the faculty exhibition room. The thesis work is saved digitally and reviewed through the University of Oulu Laturi electronic thesis (E-thesis) submission system.

Grading:

1 - 5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor NN of the supervising teaching unit

Working life cooperation:

Yes

Other information:

separate detailed diploma thesis instructions are published on the web pages of the faculty.

450014S: The Maturity Test for Master's Degree, 0 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

0

Language of instruction:

Finnish / Swedish / English

Timing:

flexible

Learning outcomes:

The student is able to communicate in the language of the diploma thesis work and is able to present intimate knowledge in the field of his / her diploma thesis work.

Contents:

The essay is written on the subject of the thesis work.

Mode of delivery:

The maturity test is a part of the master's dissertation.

Learning activities and teaching methods:

Written essay.

Target group:

master level students

Prerequisites and co-requisites:

Diploma thesis work

Recommended optional programme components:

-

Recommended or required reading:

Assessment methods and criteria:

The recommended extent of the essay corresponds to the abstract of the written part of the diploma thesis work. Read more about assessment criteria at the University of Oulu webpage.

Grading:

Pass / Fail

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor NN in the supervising teaching unit

Working life cooperation:

-

Other information:

-

900020Y: Finnish for Advanced Students, 4 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Leikkaavuudet:

ay900020Y Finnish for Advanced Students (OPEN UNI) 4.0 op

Proficiency level:

B1, according to the Common European Framework

Status:

-

Required proficiency level:

A2.2 Completion of the Intermediate Finnish course 2 (900016Y) or the equivalent language skills.

ECTS Credits:

4 ECTS credits

Language of instruction:

Finnish

Timing:

-

Learning outcomes:

By the end of the course the student can deal with most situations in Finnish. S/he can understand clear standard input on familiar matters regularly encountered in work, school and leisure and also the main points of messages and conversations in colloquial Finnish. The student is able to produce simple coherent and logical text on different topics. S/he can describe experiences and events, dreams, hopes and ambitions, and also explain and justify her/his opinions better than before.

Contents:

During the course students acquire the knowledge and skills for communicating also in more formal situations and learn to understand formal and official texts. In the course students develop their Finnish skills for everyday living, study and work purposes. In addition, they also study in more detail the differences between spoken and written language.

The topics and communicative situations covered in the course are: the social welfare and political system in Finland (e.g. family life, working life, culture, history, environmental matters) giving a presentation on a topic within one's own

field or of personal interest.

The structures studied are: more about conditional (perfect tense of conditional), more about passive (past, perfect and pluperfect of passive), the imperative, the essive and translative cases, more about comparison of adjectives, more case covernment.

Mode of delivery:

Multi-modal teaching (Contact teaching, on-line teaching and independent work)

Learning activities and teaching methods:

Lessons once a week (40 h), guided study in the Optima learning environment (40 h) and self study (20 h)

Target group:

International degree and post-graduate degree students, exchange students of the University and the staff of the university

Prerequisites and co-requisites:

Completion of the Intermediate Finnish course 2 or equivalent skills in Finnish

Recommended optional programme components:

-

Recommended or required reading:

Gehring, S., Heinzmann, S., Päivärinne, S. & Udd, T. (2013): Suomen mestari 3 (chapters 1–6) and material in the Optima learning environment

Assessment methods and criteria:

Regular and active participation in the weekly lessons (once a week), self study tasks, other homework assignments and written exam at the end of the course will be observed in assessment.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

_

Other information:

Sign-up in WebOodi. The lessons will be held once a week during a 13-week period.

900019Y: Finnish for Foreigners (beginners), 2 op

Voimassaolo: 01.08.1995 - 31.07.2005

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

900021Y: Finnish for Foreigners, Beginners 3, 6 op

Voimassaolo: 01.08.1995 - 31.07.2005

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

900022Y: Finnish for Foreigners, Intermediate 1, 2 op

Voimassaolo: 01.08.1995 - 31.07.2007

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

451511A: Historic Preservation, 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opettajat: Anna-Maija Ylimaula

Opintokohteen kielet: Finnish

ECTS Credits:

10

Language of instruction:

Finnish and English

Timing:

Autumn term I and 2

Learning outcomes:

The aim of the course is to provide basic knowledge of historic preservation and the history and theories of the protection of the built environment as well as of the practical methods and to initiate the students into application of these methods in practice.

During the course the student learns to analyze the meaning and the content of the built heritage and environment. The student is able to specify architectural, cultural and historical values of buildings, built environments and different places, their identity and integrity. After completing the course the student is able to tell what are the historical and theoretical foundations of preservation and the used contemporary methods. The student is able to apply the methods into practice starting with the documentation and assessment and resulting in historic preservation and the plan for protecting the built environment.

Contents:

The course content is an entity in which the lectures and the exercise are connected.

Lectures: The lectures are dealing with the history and theories of the preservation of architectural heritage, the legislation and international recommendations as well as the practice and the contemporary methods of historic preservation.

Exercise: The preservation plan of a cultural milieu or historic preservation atlas, assessment and a plan to develop of the chosen area or object of the environment.

Mode of delivery:

Lectures and contact teaching in design studio.

Learning activities and teaching methods:

Lectures 28 h and 70 h contact teaching in design studio. Design task is done partially as group work. Field trips.

Target group:

4th year, Master's level students.

Prerequisites and co-requisites:

The student has passed courses I-III of history of architecture or has substituting study credits.

Recommended optional programme components:

This course is part of the complementary module of the sustainable urban development. This course is recommended to be taken before the Restoration course (451515S)

Recommended or required reading:

See separate list of literature and the provided material on the database of the course.

Assessment methods and criteria:

The student participates in the lectures and writes a learning diary and does the exercises demanded during the course.

The evaluation is based on the quality of the learning diary and the delivered exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University teacher Özlem Özer-Kemppainen

Working life cooperation:

-

Other information:

-

900016Y: Intermediate Finnish Course 2, 5 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Proficiency level:

A2.2

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

A2.1, Completion of the Intermediate Finnish course 1 (900015Y) or the equivalent language skills.

ECTS Credits:

5 ECTS credits

Language of instruction:

Finnish

Timing:

Learning outcomes:

By the end of the course the student can communicate in various informal situations in Finnish. The student understands the main points of messages and talk around her/him. S/he can produce simple connected text on topics which are familiar or of personal interest and describe experiences and also report heard content to others.

Contents:

The course is an upper intermediate course. During the course students learn the necessary written and oral skills to be able to cope in informal situations arising during everyday life, work and study. In the course, students practise understanding more Finnish talk and newspaper articles, and finding information and talking about it to other people. Part of the course consists of guided self study tasks. In the classes the main stress is on oral exercises and group work.

The topics and communicative situations covered in the course are: transactions e.g. in clothes shops, at the doctor's and on the phone, Finnish small talk, reacting in different situations, planning a trip and booking e.g. a flight, information and facts about Finland and its history, telling about one's home country and home town, features of colloquial/spoken language.

The structures studied are: the perfect and pluperfect, revision of all the verb tenses, comparison of adjectives, more about the conditional, more about the plural declension of nouns (particularly the plural partitive case), more about object and predicative cases, the passive imperfect.

Mode of delivery:

Contact teaching and guided self study

Learning activities and teaching methods:

Lessons once a week (40 h) and guided self study (85 h)

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University **Prerequisites and co-requisites:**

Completion of the Intermediate Finnish Course 1

Recommended optional programme components:

-

Recommended or required reading:

Gehring, S. & Heinzmann, S.: Suomen mestari 2 (chapters 6 - 9)

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and written exam at the end of the course will be observed in assessment.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Grading scale is 1-5.

Person responsible:

Anne Koskela

Working life cooperation:

_

Other information:

Sign-up in WebOodi. The lessons will be held once a week during a 13-week period.

451515S: Restoration, 15 op

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Anna-Maija Ylimaula Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

15

Language of instruction:

Finnish and English

Timing:

Spring term I and 2

Learning outcomes:

The aim of the course is to introduce the students both the scientific and practical basics of restoration and to enable the student to combine the historical value assessment into comprehensive architectural design work in restoration projects which also have an emphasis on building conservation of modern heritage.

Learning outcomes: After completing the course the student is able to tell what are the historical and theoretical foundations of restoration and the most important philosophical approaches/schools of restoration. The student is able to analyze the historical values of a building and can make a restoration plan based on the

Contents:

The course content is an entity in which the lectures and the exercise are connected.

The lectures are dealing with the historical, philosophical and theoretical criteria of the restoration of the architectural heritage, the contemporary restoration practices and technical solutions. Visits to restoration sites and to successfully restored buildings as well as lectures by the visiting experts are included in the course. The exercise is about the use of the built cultural heritage and the problems faced when a new purpose for use is needed. The emphasis is on planning and organizing a restoration project.

Mode of delivery:

Lectures and contact teaching in design studio.

Learning activities and teaching methods:

Lectures 30 h and 120 h contact teaching in design studio and seminars. Design task is done partially as group work. Field trips.

Target group:

Elective course for 4th year Master's level students.

Prerequisites and co-requisites:

The student has passed courses 1-III of history of architecture or has substituting study credits.

Recommended optional programme components:

This course is a part of the advanced module "Building project and restoration". The course is carried out during the spring term of the 5th year studies. It is recommended that the student has taken the Historic preservation course (451511A) prior to this course.

Recommended or required reading:

See separate list of literature and the provided material on the database of the course.

Assessment methods and criteria:

The student participates in the lectures and writes a learning diary and does the exercises demanded during the course

The evaluation is based on the quality of the learning diary and the delivered exercises.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula, University lecturer Özlem Özer-Kemppainen.

Working life cooperation:

No

Other information:

_

900023Y: Structures of the Finnish Language, 4 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Proficiency level:

B2, according to the Common European Framework

Status:

The course is intended for the international students in every faculty of University of Oulu.

Required proficiency level:

Completion of the Finnish for advanced students or the equivalent language skills.

ECTS Credits:

4 ECTS credits

Language of instruction:

Finnish

Timing:

_

Learning outcomes:

By the end of the course the student has a general overview of the structures of the Finnish language. S/he has gained a deeper understanding of the special nature and features of the Finnish language and can apply structures in her/his own communication.

Contents:

During the course, students will extend their knowledge of Finnish grammar and improve their skills by practising a variety of structures until they become second nature. The course consists of sections on phonology, morphology and syntax. Each of these sections includes a theoretical component and exercises. The course consists of sections on phonology, morphology and syntax. Each of these sections includes a theoretical component and exercises.

Mode of delivery:

The course will be held online using an Optima environment.

Learning activities and teaching methods:

One contact lesson and after that guided independent studying using online.

Target group:

International degree and post-graduate degree students, exchange students and the staff members of the University **Prerequisites and co-requisites:**

Completion of the Finnish for advanced students or the equivalent language skills.

Recommended optional programme components:

-

Recommended or required reading:

Web based material

Assessment methods and criteria:

To pass the course, the students must complete all the required assignments.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Grading is on a pass/fail basis.

Person responsible:

Anne Koskela

Working life cooperation:

Other information:

Sign-up in WebOodi.

900017Y: Survival Finnish Course, 2 op

Voimassaolo: 01.08.1995 -

Opiskelumuoto: Language and Communication Studies

Laii: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Leikkaavuudet:

av900017Y Survival Finnish Course (OPEN UNI) 2.0 op

Proficiency level:

A1.1

Status:

The course is intended for the international students in every faculty of Oulu University.

Required proficiency level:

No previous Finnish studies.

ECTS Credits:

2 ECTS credits

Language of instruction:

Finnish and English

Timing:

Learning outcomes:

By the end of the course the student can understand and use some very common everyday expressions and phrases, and s/he can locate informational content in simple texts and messages. The student also knows the basic characteristics of Finnish language and Finnish communication styles.

This is an introductory course which aims to help students to cope with the most common everyday situations in Finnish. During the course, students learn some useful everyday phrases, some general features of the vocabulary and grammar, and the main principles of pronunciation.

The topics and communicative situations covered in the course are: general information about the Finnish language, some politeness phrases (how to greet people, thank and apologize), introducing oneself, giving and asking for basic personal information, numbers, some time expressions (how to tell and ask the time, days of the week, time of day), food, drink and asking about prices.

The structures studied are: personal pronouns and their possessive forms, forming affirmative, negative and interrogative sentences, the conjugation of some verbs, the basics of the partitive singular and some local cases for answering the 'where'-question.

Mode of delivery:

Multi-modal teaching (Contact teaching, on-line teaching and independent work)

Learning activities and teaching methods:

Lessons 1–2 times a week (12–14 h) and guided self study (36 h)

International degree and post-graduate degree students and exchange students of the University

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading:

Will be provided during the course.

Assessment methods and criteria:

Regular and active participation in the weekly lessons (twice a week), homework assignments and written exam at the end of the course will be observed in assessment.

Read more about assessment criteria at the University of Oulu webpage.

Grading:

Grading scale is 1-5. **Person responsible:**

Anne Koskela

Working life cooperation:

-

Other information: Sign-up in WebOodi.

900018Y: Survival finnish (extended), 4 op

Voimassaolo: 01.08.1995 - 31.07.2007

Opiskelumuoto: Language and Communication Studies

Laji: Course

Vastuuyksikkö: Languages and Communication

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

452550S: Varying Courses of Contemporary Architecture, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opettajat: Mahlamäki Rainer Opintokohteen kielet: Finnish Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10

Language of instruction:

Finnish/English

Timing: not specified

Learning outcomes:

The objective of the course is to initiate the student into contemporary tendencies in architecture, to new ways and methods of building and new building types, both in domestic and international architecture. During the course one can learn how to make a proposal for an architectural competition, or attend a workshop. The workshops train students in combining the phases of designing and building, and constructing in particular. Learning outcomes: After completing the course the student is able to deal with the specific topic of his / her work either through writing or designing. The student has adequate skills for making a proposal for an architectural competition. After completing a workshop the student distinguishes the connection between design and construction and can at least assist in construction work.

Contents:

The course comprises short lectures and case studies dealing with the respective topic. The project is a design exercise for a public building selected by the student. The exercise may also be participation in an open architectural competition or an architectural workshop.

Mode of delivery:

Face-to-face teaching, workshops.

Learning activities and teaching methods:

The completed works are presented in an open critique. Evaluation is based on the processing of the exercise.

Target group:

master level students

Prerequisites and co-requisites:

bachelor's degree

Recommended or required reading:

List of articles on contemporary architecture and projects (will be announced at the beginning of the course).

Assessment methods and criteria:

The course is completed by participating the lectures and performing the design task.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Rainer Mahlamäki

Working life cooperation:

Other information:

_

454550S: Varying Courses of Urban Design, 2 - 10 op

Voimassaolo: 01.08.2005 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Voidaan suorittaa useasti: Kyllä

ECTS Credits:

2-10 ECTS

Language of instruction:

Finnish or English.

Timing:

Autumn term 1-2 / Spring term 1-2.

Learning outcomes:

After completing the course the student is able to identify current features in planning and urban design as well as describe their impacts to functional and spatial planning of human settlements. The student can critically implement learning outcomes in different planning and urban design tasks.

Contents:

Current features of planning, urban design, and urban development, such as urban planning in developing countries and/or in a northern context, and responsible planning.

Mode of delivery:

Mostly independent studying + contact teaching.

Learning activities and teaching methods:

8-64 h contact teaching in design studio + 46-206 h independet studying.

Target group:

4th year Master level students.

Prerequisites and co-requisites:

-

Recommended optional programme components:

Recommended or required reading:

Study material will be announced separately.

Assessment methods and criteria:

Exercise (design project). Basic options are participation in a competition (student competition, open competition) or a thematic design studio. The assessment is based on the design project. Grading is based on the exercise.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Prof. Hennu Kjisik, prof. Helka-Liisa Hentilä.

Working life cooperation:

No

Other information:

_

453551S: Varying courses in Architectural Construction, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laii: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail

Opintokohteen kielet: Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish **Timing:** Varying

Learning outcomes:

After completing the course the student has independently gone deeply into a specific field within architectural construction in order to be able to implement his / her skills in producing drawings of demanding building parts and details independently and to present the functional justifications of the selected solutions. Alternatively the student can independently write a survey, dealing with a specific field within architectural construction according to his / her own choice. In the survey the student can analyze, explain and estimate the issues of architectural construction in question.

Contents:

The content of the course varies. The exercise work can alternatively be a design project, including a sufficient extent of working and detail drawings, or a written study on an individually defined topic. The course is elective. The aim of the course is to deepen one's skills within the field of architectural construction.

Mode of delivery:

Independent studies, tutoring.

Learning activities and teaching methods:

54 h - 270 h independent studying and personal and / or group tutoring.

Target group:

Master level students

Prerequisites and co-requisites:

-

Recommended optional programme components:

Recommended or required reading:

List of readings will be handed out during the course

Assessment methods and criteria:

The evaluation is made based on outcome of the individual exercise work completed independently. No exam is included in the course.

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

NN, university teacher Petri Aarnio

Working life cooperation:

Other information:

-

451551S: Varying courses in History of Architecture and Renovation, 2 - 10 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opettajat: Anna-Maija Ylimaula
Opintokohteen kielet: Finnish

ECTS Credits:

2-10

Language of instruction:

Finnish or English

Timing:

Flexible, autumn and spring terms

Contents:

The content of the course is defined separately.

Mode of delivery:

Varies

Target group:

Master's level students

Prerequisites and co-requisites:

Elective course

Recommended or required reading:

Defined separately

Assessment methods and criteria:

The course does not include any lectures or examinations. Assessment depends on the assignment.

Grading:

1-5, pass

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

Professor Anna-Maija Ylimaula.

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

450551P: A1 ArchiCAD basics, 2 op

Voimassaolo: 01.08.2017 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

450552P: A3Autocad basics, 1 op

Voimassaolo: 01.08.2017 - Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

450546A: Powerpoint and PDF (presentations and portfolios), 1 op

Voimassaolo: 01.08.2011 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish

ECTS Credits:

1

Language of instruction:

Finnish **Timing:**

_

Learning outcomes:

The student is able to efficiently use the slide formatting and transition properties. The student can apply suitable presets for producing PDF-files for a defined use.

Contents:

Use of preformatted slide masters. Quality settings for PDF-conversion.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 8 h, independent studying 19 h

Target group:

-

Prerequisites and co-requisites:

-

Recommended optional programme components:

_

Recommended or required reading:

Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi/architecture/node/5921

Person responsible:

n. n.

Working life cooperation:

No

Other information:

Controlled and efficient application of the features in Powerpoint and Adobe Acrobat. The course is intended for the students of the Department of Architecture only

450550P: R1 Revit basics, 2 op

Voimassaolo: 01.08.2017 - Opiskelumuoto: Basic Studies Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

Ei opintojaksokuvauksia.

450549A: Rhinoceros and Grasshopper basics, 2 op

Voimassaolo: 01.08.2015 -Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Oulu School of Architecture

Arvostelu: 1 - 5, pass, fail Opintokohteen kielet: Finnish

ECTS Credits:

Language of instruction:

Finnish Timing:

Autumn period

Learning outcomes:

Rhinoceros: the student is able to apply the basic toolset of the software for modelling precise freeform 3Dmodels and line drawings. In addition the student can transfer model data between other software.

Grasshopper: basics of algorithmic/parametric modelling.

Contents:

Rhinoceros: surfaces, solids, annotation, layout.

Grasshopper: UI, basics of the toolset.

Mode of delivery:

Lectures and course work.

Learning activities and teaching methods:

Contact teaching 16 h, independent studying 38 h

Target group:

Prerequisites and co-requisites:

Recommended optional programme components:

Recommended or required reading: Software help files and handouts.

Assessment methods and criteria:

Based on a project work (the presentation material of a design course at the Department of Architecture or an equivalent work).

Grading:

1-5

Brief instructions on the grading scale and assessment of studies on the school's website at http://www.oulu.fi /architecture/node/5921

Person responsible:

NN

Working life cooperation:

No

Other information:

Introduction to simple modelling in Rhinoceros. Introduction to programing in Grasshopper. The course is intended for the students of the Department of Architecture only.