Opasraportti

Courses in English for exchange students, 2014-15: Architecture (2014 - 2015)

COURSES FOR INTERNATIONAL STUDENTS 2014-15

The Oulu School of Architecture offers English conducted courses of the first year of the international master's degree programme to the exchange students of the School.

ENGLISH CONDUCTED COURSES IN ARCHITECTURE FOR EXCHANGE STUDENTS

The Weboodi Course Catalogue lists courses taught in English for exchange students at the Oulu School of Architecture during the academic year of 2014-2015.

When planning your exchange studies and the required learning agreement please use the information provided under the **Courses** tab in this catalogue. Please read carefully the information of each course you wish to take (language of instruction, target group, course content, timing, preceding studies, additional information etc.).

All exchange students must submit their exchange application after nomination made by their home university through SoleMOVE.

Accepted exchange students are required to register to all courses. Course registration takes place once you have arrived in Oulu and received your University of Oulu login information. More information on registration will be provided during orientation. When registering you will be able to find detailed information on teaching and schedule under **Instruction** tab.

The courses are all master level courses taught in English and intended for exchange students of the Oulu School of Architecture only. The courses offered are part of the International Master's Degree Programme in Architectural Design. Some additional options are also available within the so called 'varying courses', e.g. workshops and competitions throughout the academic year. The exact contents, objectives and extent of the individual varying courses will be announced at the beginning of each term. These additional courses can be added in the student's Learning Agreement during the studies in Oulu.

Further information on application process and services for incoming exchange students:

BASIC MODULE (1 / Autumn)

Design-led Urban Renewal 30 ECTS cr

Code	ECTS cr
454522S Urban Space Design	10
455521S Urban Space Detailing	10
455522S Design in Urban Context	10

COMPLEMENTARY MODULE (1 / Spring)

Design of public buildings 30 ECTS cr

Code		ECTS cr
<u>452504A</u>	Contemporary Architecture IV	15
<u>453533A</u>	Large Scale Structures	5
<u>455517S</u>	Architectural Lighting	5
<u>455517A</u>	Interior Design	5 - 10

Code		ECTS cr
<u>452550S</u>	Varying Courses in Contemporary Architecture	2-10
<u>453550S</u>	Varying Courses in Architectural Construction	2-10
<u>454550S</u>	Varying Courses in Urban Design and Planning	2-10
<u>451515S</u>	Restoration	15

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Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja jaksot

455517S: Architectural Lighting, 5 op 452504A: Contemporary Architecture IV, 15 op 455522S: Design in Urban Context, 10 op 455517A: Interior Design, 5 - 10 op 453533A: Large scale structures, 5 op 451515S: Restoration, 15 op 454522S: Urban Space Design, 10 op 455521S: Urban Space Detailing, 10 op 453550S: Varying Courses of Architectural Construction, 5 - 10 op 452550S: Varying Courses of Contemporary Architecture, 2 - 10 op 454550S: Varying Courses of Urban Design, 2 - 10 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

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 selecting lighting sources and making illumination 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:

4th year of studies (1st year of master level).

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

Grading: 1-5 Person responsible: University Teacher Henrika Pihlajaniemi Working life cooperation: No Other information:

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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 Learning outcomes:

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

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. Read more about assessment criteria at the University of Oulu webpage. **Grading:** 1 - 5, fail **Person responsible:** Professor Rainer Mahlamäki **Working life cooperation:**

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 Urban Space Detailing course.

Mode of delivery:

Contact teaching and independent studying.

Learning activities and teaching methods:

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

Target group:

4th year students (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 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.

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

Grading:

1-5

Person responsible:

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 cr / 5 ECTS 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 cr / 5 ECTS 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 cr / 5 ECTS 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 cr / 5 ECTS additional 12h lectures and/or contact teaching and 36h personal or/and group tutoring included.

Target group:

4th year of studies (1st year of master level).

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 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.

Read more about <u>assessment criteria</u> at the University of Oulu webpage. Grading: 1-5 Person responsible: University Lecturer Aulikki Herneoja Working life cooperation: No

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: Language of instruction: Finnish (part of literature in English) Timina: Autumn term 2 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. Mode of delivery: Course is based mainly on independent studies. Some contact teaching is given. Learning activities and teaching methods: 36 h lectures +32 h contact teaching 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. Read more about assessment criteria at the University of Oulu webpage. Grading: 1-5 Person responsible: University teacher Jussi Tervaoja. Working life cooperation: No Other information:

451515S: Restoration, 15 op

Opiskelumuoto: Advanced Studies Laji: Course Vastuuyksikkö: Oulu School of Architecture Arvostelu: 1 - 5, pass, fail

ECTS Credits:

15

Language of instruction: Finnish and English Timing: Autumn 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 planning 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 assessment. The student is also able to tell the reasons and principles for the new use of an old building and can apply that information in restoration planning.

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 36 h and 132 h contact teaching in design studio and seminars. Design task is done partially as group work. Field trips.

Target group:

Elective course for 5th 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 autumn 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.

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

Grading:

1-5. The evaluation is based on the quality of the learning diary and the delivered exercises.

Person responsible:

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

Working life cooperation:

Other information:

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454522S: Urban Space Design, 10 op

Voimassaolo: 01.08.2005 -Opiskelumuoto: Advanced Studies Laji: Course

Vastuuyksikkö: Oulu School of Architecture

ECTS Credits:

10

Language of instruction: English Timing: Autumn term 1-2.

Learning outcomes:

After completing the course the student is able to recognize 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 programs, plans (including strategic projects) 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 a multi-functional development plan for urban spaces, including a concept design of public urban spaces.

Contents:

The lectures deal especially with the design of public urban spaces, objectives and programs intended for developing the design management of such areas. 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).

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.

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

Grading:

1-5 Person responsible: Prof. Hennu Kjisik Working life cooperation: No Other information:

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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 + 80 h contact teaching

Target group:

4th year of studies (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 Urban Space Design. **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.

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

Grading:

1-5

Person responsible:

University Lecturer Aulikki Herneoja. Working life cooperation: No

Other information:

453550S: Varying Courses of Architectural Construction, 5 - 10 op

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 Language of instruction: Finnish Timing: varying Learning outcomes: After completing the course

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:

Contact teaching and independent studying in design studio.

Learning activities and teaching methods:

Personal and / or group tutoring. **Target group:** master level students

Prerequisites and co-requisites:

Recommended optional programme components: not applicable **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. Read more about assessment criteria at the University of Oulu webpage. Grading: 1 – 5 Person responsible: Professor Jouni Koiso-Kanttila Working life cooperation: No Other information: not applicable

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. 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. 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.

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

Grading: 1-5, fail 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 Opettajat: Hentilä, Helka-Liisa, Hennu Kjisik 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 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. **Target group:** 4th year Master level students. **Prerequisites and co-requisites:**

Recommended optional programme components:

The course is part of the module "Sustainable Urban Development".

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. Read more about <u>assessment criteria</u> at the University of Oulu webpage.

Grading:

1-5

Person responsible:

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

Working life cooperation:

No

Other information:

The student can also include the course into her / his optional studies if not included in the module "Sustainable Urban Development".