

Oulu UAS, School of Engineering & Natural Resources

Exchange Programmes in Engineering

Academic Year 2015-2016

Last updated: 14 October 2015. Further updates possible at a later stage! Refresh document in your browser to retrieve the latest version.

This document provides an overview of exchange programmes in English and the application procedure to Oulu UAS' School of Engineering and Natural Resources, for the academic year 2015-2016:

Autumn 2015 (Late August - December 2015)

N.B.! Studies in autumn begin with a mandatory orientation day on 27 August and last until 18 December 2015. Arrival 24 -26 August 2015.

Spring 2016 (January - mid-May 2016)

N.B.! Studies in spring begin with a mandatory orientation day on 7 January 2016 and last until 13 May 2016.

Dev LAB will last until 17 June 2016.

Some courses may end earlier depending on timetables! Arrival 4 - 6 January 2016.

Study possibilities in English consist of exchange programmes, including courses and partly also project work opportunities:

<http://u.oamk.fi/engineeringprogrammes>

If you have any questions regarding studies or the application procedure for exchange students, feel free to contact:

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Exchange Programmes

You may choose and apply to exchange programmes in engineering. Please note that studies can be chosen only from one exchange programme option and as indicated, for otherwise there will be timetable conflicts etc.!

• Information and Communication Technology (ICT)

Includes studies in Software Engineering / Internet Technologies N.B.! You may choose studies on ICT-Bachelor-level only from one year (second or third year)

Dev LAB (business-driven project works in multidisciplinary teams by which students develop their own technological products (demos) and/or services in areas such as health & social care, well-being, digital services, environment and tourism etc. Targeted, especially at ICT students (programmers)

• Electrical & Automation Engineering (EAE)

• Mechanical & Production Engineering (MEC)

• Civil Engineering (CIV)

• Energy Technology (incl. Building Services and Laboratory Sciences) (ENE)

Application Procedure

(1) Before applying, check whether you meet the following requirements:

• Suitable study background and a minimum of 1 1/2 years' studies at your home university.

• Sufficient English language skills, at least B2 level according to the Common European Framework of Reference for Languages:

<http://europass.cedefop.europa.eu/en/resources/european-language-levels-cefr>

(2) Before applying, contact the international coordinator of your home university to get an approval for your study/practical training abroad period at Oulu UAS.

(3) Before applying, ask your international coordinator of your home university to send a nomination message by e-mail to the contact person mentioned above. The message must include your full name, e-mail address and information for which academic year/term you have been nominated.

(4) Send your application during the application period! Applications received beyond the deadlines won't be accepted!

The application period for exchange students in the autumn term and academic year is 1 April - 31 May,

and for the spring term 15 September - 31 October.

Please note that you must submit your application completely online through Oulu UAS'

Exchange Student Application System (ESA), including all required information in the ESA text fields and attachments:

<http://u.oamk.fi/exchangeapplication>

• Personal & Home Institution Information (via ESA text field)

• Curriculum Vitae (including a valid phone number or skype ID etc.) (via ESA attachment)

• Cover Letter (via ESA attachment)

• Learning Agreement (via ESA attachment)

• Transcript of Records in English and ECTS (via ESA attachment)

• Application for Accommodation (via ESA text field)

• Additional Information (only for projects and LAB, see (5) for more details) (via ESA attachment / text field etc.)

(5) If you are applying for a project work / **LAB**, you **must** provide the following additional information by means of ESA and e-mail. **Applications without the required additional information won't be processed!** See also <http://u.oamk.fi/engineeringprojectworkguidelines>

(5.1) Cover Letter (via ESA):

- Personal background and motivation for a project work / **LAB**
- Academic/vocational education, i.e. level and field of current studies, e.g. 3-year Bachelor in Computer Sciences
- Previous work and internship experience
- Topic suggestions or given topics of project works in study fields at Oulu UAS' School of Engineering
- Interests related to the given or suggested project work topics and study field(s)
- Skills and level of knowledge related to the given or suggested project work topics and study field(s):

N.B.! You must self-evaluate and rate your skills and level of knowledge according to the scheme mentioned below.
Please include this information also in your Curriculum Vitae, e.g. when you list Java skills/knowledge or something the like:

Basic – requires learning/teaching
Good – able to work after little learning
Fluent – able to work with instructions
Excellent – able to work independently

- Scope of the project work in ECTS credits, as indicated in the exchange programme option and wished by you
- Name and contact information (e-mail, phone number) of a supervising teacher in your home university

Additional information from LAB applicants in the Cover Letter and as an Attachment (Portfolio):

• Attach a **portfolio** if applying to a **LAB**. A portfolio is a documentation of sample works showing the applicants' interests and giving proof of skills and knowledge in relevant areas. A portfolio may include, e.g., documentation on the applicants' previous or ongoing projects, in **Dev LAB** especially, programming, entrepreneurship, business, social & health care, environment, tourism, team work, etc.

(5.2) Learning Agreement (via ESA):

- Scope of the project work in ECTS credits, e.g. 15 ECTS cr
- Code of the project work, for a 15 ECTS project work: T000315 (the last two digits refer to the workload in terms of ECTS cr)

(5.3) Transcript of Records (via ESA):

- Transcript of Records in English. A transcript of records is a certified copy of your previous studies, including ECTS credits and grades.

Department of Information & Communication Technology

Oulu Dev LAB (*)

The programme needs to be taken on the whole (mandatory) due to pedagogical and organisational reasons! Only Finnish course is optional.

Course descriptions available at

<http://u.oamk.fi/devlab>

Code	Course	Autumn 2015 ECTS cr	Spring 2016 ECTS cr
<u>YY00BH40</u>	LEAD- Solution Development	Not offered	10
<u>YY00BH41</u>	LAB Solution Development and Entrepreneurial Mindset 1	Not offered	10
<u>YY00BH42</u>	LAB Solution Development and Entrepreneurial Mindset 2	Not offered	10
Courses also available, if timetables match:			
<u>Y00022E</u>	Finnish Survival Course	Not offered	3
		0	33

(*) Dev LAB is a non-degree programme offered by Oulu UAS in the spring term, 7 January - 17 June 2016.

Dev LAB is facilitating business-driven project works in multidisciplinary teams by which students develop their own technological products (demos) and/or services in areas such as health & social care, well-being, digital services, environment and tourism etc. The student teams are guided by academic/professional staff.

Students who have a background in programming (especially for applicants from ICT), graphic design, business, or health and social care may apply to the programme as exchange students.

Department of Information & Communication Technology

Exchange Programme Information Technology (Bachelor, 2nd year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (2nd year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T789503D	Statistical Methods and Optimization	3	Not offered
T789803D	Vibrational Motion and Waves	3	Not offered
T789206D	Usability Basics	6	Not offered
T789106D	User Interface Design	6	Not offered
T789306D	Animation	3	Not offered
T789903D	Internet Protocols	3	Not offered
T790203D	Entrepreneurship	3	Not offered
T740303D	Software Production	Not offered	3
T788806D	Software Design	Not offered	6
T789303D	Interactive Multimedia Programming	Not offered	3
T789406D	Software Development Project 2	Not offered	6
T791003D	Information Security Engineering	Not offered	3
T790003D	PHP Frameworks	Not offered	3
T789203D	Usability Testing	Not offered	3
T790403D	Business Implementation	Not offered	3
Courses also available, if timetables match:			
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T000103	Intercultural Competencies	3	3
		39	42

Department of Information & Communication Technology

Exchange Programme Information Technology (Bachelor, 3rd year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (3rd year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T788803D	Mobile Internet Programming	3	Not offered
T789203D	Usability Testing	3	Not offered
T790203D	Entrepreneurship	3	Not offered
T790303D	Analysing Business Opportunities	3	Not offered
T790403D	Business Implementation	3	Not offered
T790006D	Java EE Server Programming	6	Not offered
T790206D	ASP.NET Applications	6	Not offered
T708104D	Project Studies 2 (Requirements C#, Game Programming with Unity, must be taken with PS3)	4	Not offered
T708205D	Project Studies 3 (Requirements C#, Game Programming with Unity, must be taken with PS2)	5	Not offered
Y00044F	Demola Project (* N.B.! Check information below!)	3 to 10	3 to 10
T746110D	Company-Oriented Product Development Project 1 (** N.B.! Check information below!)	Application	10
T790406D	Planning of Internet-based Business Project	Not offered	6
T708306D	Project Studies 4	Not offered	6
Courses also available, if timetables match:			
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T000103	Intercultural Competencies	3	3
		48	34

(*) Demola Project (<http://oulu.demola.fi>) is a business-driven demo project by which students learn project, teamwork and presentation skills and can contribute professionally in a multidisciplinary and multicultural team in English to the demo project process and outcome. The course timing and work involves a Demola application at the beginning of the term, then selection with possible interviews, kickoff meeting, demo project planning and implementation, and presentation and reporting at the end of the work period. Prerequisite for participation is being selected to a project team in Demola where students' skills (ICT, entrepreneurship etc.) are required and they will benefit from the whole process. If you wish to apply to this course, you must mention your reasons and interests as well as relevant skills in your ESA online application's Cover Letter and Curriculum Vitae. Please note that the ECTS cr scope depends on the workload during the demo project work. In case a student does not get selected to a Demola Project despite considerable efforts, the Department of ICT will make arrangements to offer a suitable project work, e.g. T000310 Project Work, 10 ECTS cr. When applying, follow the project work guidelines and application procedure!

(**) Company-Oriented Product Development Project 1 is a course is carried out in companies. It is only available for students coming already in autumn and staying for the entire academic year. Students follow an additional application and admission process during the autumn term. If students are selected by companies, then this course will be carried out in the spring term depending on the company schedules and project work topic. In case a student does not get selected to a company-oriented project despite considerable efforts, the Department of ICT will make arrangements to offer a suitable project work, e.g. T000310 Project Work, 10 ECTS cr. When applying, follow the project work guidelines and application procedure!

Department of Electrical and Automation Engineering

Exchange Programme Electrical & Automation Engineering (Bachelor, 3rd/ Autumn 2015 Spring 2016)

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (3rd/4th year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T115103	Laboratory Exercises in the Field of the Automation Information Technology	3	Not offered
T135106	Process Automation, Laboratory	6	Not offered
T615105	Building Automation Project (*)	5	5
T000305	Project Work (*)	5	5
T000303	Project Work (*)	3	3
T000315	Project Work (*)	15	15
Courses also available, if timetables match:			
XTELE03	English Language in Engineering (will be tailored based on level and available courses)	3	3
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T790203D	Entrepreneurship	3	Not offered
T000103	Intercultural Competencies	3	3
		55	43

(*) N.B.! When applying, follow the project work guidelines and application procedure!

Can be chosen only in one term!

Department of Mechanical Engineering

Exchange Programme Mechanical Engineering (Bachelor, 2nd/3rd year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (2nd/3rd year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Courses	ECTS cr	ECTS cr
T310503	Autodesk Inventor (Optional CAD)	3	Not offered
T310903	Plant Simulation	3	Not offered
T312803	Production Planning	Cancelled	Not offered
T318603	Prototype Engineering (Rapid Prototyping)	3	Not offered
T000305	Project Work (*)	5	5
T000310	Project Work (*)	10	10
Courses also available, if timetables match:			
XTELE03	English Language in Engineering (will be tailored based on level and available courses)	3	3
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T000103	Intercultural Competencies	3	3
T790203D	Entrepreneurship	3	Not offered
		42	30

(*) N.B.! Can be also extended up to 15 ECTS cr as one project, if interests and resources match. When applying, follow the project work guidelines and application procedure! Available in the field of mechanical design, machine automation, automotive engineering, production development or simulation. Can be chosen only in one term!

Department of Civil Engineering

Exchange Programme Civil Engineering (Bachelor, 2nd/3rd/4th year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (2nd/3rd/4th year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T528405	Finnish Construction Industry	5	5
T528603	Property and Facility Management in Theory and Practice	3	3
T535705	Water and Environmental Management	5	5
T529203	Infrastructure Construction Engineering	3	3
T528303	Basic Course in Geotechnics and Foundation Engineering	3	Not offered
T530303	Network Water Distribution System Simulation and Construction (if continued in spring then 6 ECTS cr)	3	Not offered
T528503	Basics of Road Construction and Transportation Engineering	Not offered	3
T528803	Concrete Structures 1	Not offered	3
T528903	Wooden Structures 1	Not offered	3
Courses also available, if timetables match:			
XTELE03	English Language in Engineering (will be tailored based on level and available courses)	3	3
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T790203D	Entrepreneurship	3	Not offered
T000103	Intercultural Competencies	3	3
		40	40

Department of Energy Technology

Exchange Programme Energy Technology (Bachelor, 3rd/4th year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (3rd/4th year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T620303	Measurements in Heating, Plumbing and Air Conditioning Plants 1 (2nd/3rd/4th year)	3	Not offered
T620403	Measurements in Heating, Plumbing and Air Conditioning Plants 2 (2nd/3rd/4th year)	3	Not offered
T630009	Energy Technology Project (3rd/4th year) (*) N.B.! In spring: needs to be taken together with T619505 Hybrid Systems, 5 ECTS cr	9	9
T619505	Hybrid Systems (N.B.! Needs to be taken with T63009 Energy Technology Project)	Not offered	5
T310203	3D CAD 1	3	Not offered
5Y00BC61	Fuels and Combustion	3	Not offered
5G00BC60	Corrosion Chemistry	Not offered	5
T528405	Finnish Construction Industry	5	5
Courses also available, if timetables match:			
XTELE03	English Language in Engineering (will be tailored based on level and available courses)	3	3
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T790203D	Entrepreneurship	3	Not offered
T000103	Intercultural Competencies	3	3
		44	39

(*) N.B.! When applying, follow the project work guidelines and application procedure! Can be chosen only in one term!

Exchange Programme Laboratory Sciences (Bachelor, 3rd year)

Autumn 2015 Spring 2016

N.B.! Courses may only be chosen once from this exchange programme and at this Bachelor level (3rd year)!

Course descriptions available in most cases by clicking and following the course code link!

Code	Course	ECTS cr	ECTS cr
T000320	Project Work (in the area of biotechnology or laboratory analytics) (*)	20	20
Courses also available, if timetables match:			
XTELE03	English Language in Engineering (will be tailored based on level and available courses)	3	3
Y00022E	Finnish Survival Course	3	3
XBCS100	Introduction to the Circumpolar World	6	6
T790203D	Entrepreneurship	3	Not offered
T000103	Intercultural Competencies	3	3
		38	35

(*) N.B.! When applying, follow the project work guidelines and application procedure! Can be chosen only in one term!