



Oulu University of Applied Sciences School of Engineering, Oulu & Raahе Campus





Oulu University of Applied Sciences School of Engineering & Other Schools

Rector's Office
Jouko Paaso

School of
Vocational
Teacher
Education

Asko
Karjalainen

School of Health
and Social Care

Kari Virolainen

School of
Renewable
Natural
Resources

Jukka Tikkanen

School of
Engineering
Oulu Campus
Raahe Campus

Jyrki Laitinen

School of
Business and
Information
Management

Päivi Vesala

School of Music,
Dance and
Media

Riitta
Tötterström





Oulu University of Applied Sciences

- 9,000 students including
 - 230 international degree students and
 - 230 exchange students from ca. 50 countries
- 1,800 annual intake
- 1,400 students in adult education
- 1,200 completed degrees annually
- 600 students in the School of Vocational Teacher Education
 - 200 complete the pedagogical studies annually
- Employment rate of graduating students 70%





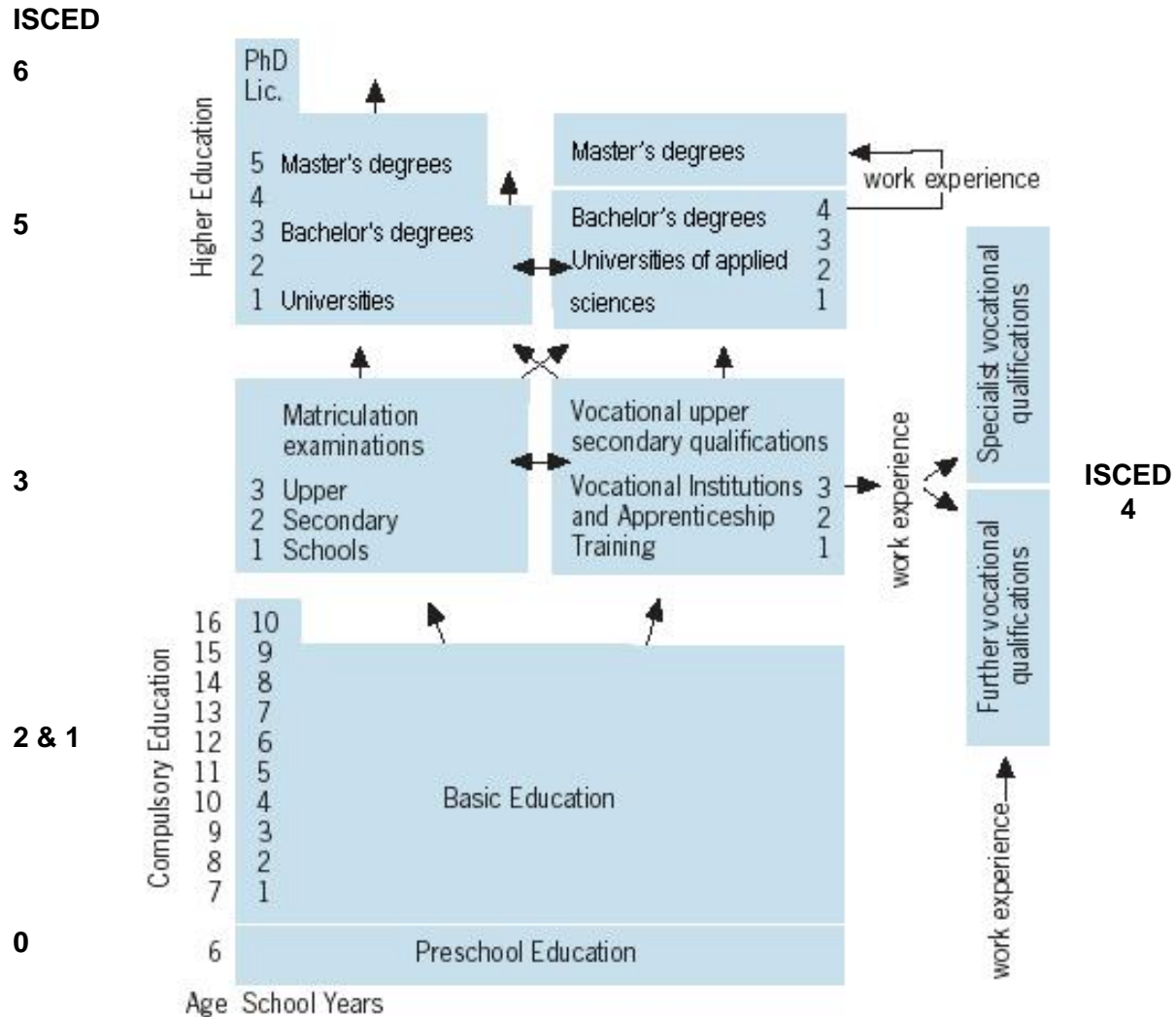
Oulu University of Applied Sciences

- 800 teachers and other staff members
 - In addition, over 100 visiting lecturers and experts from abroad
- 30 Bachelor's degree programmes, of which 4 in English
(Business Information Technology, International Business, Information Technology in Raahel & Oulu)
- 10 Master's degree programmes, out of which 2 in English
(Industrial Management, Information Technology)
- € 55 million annual turnover



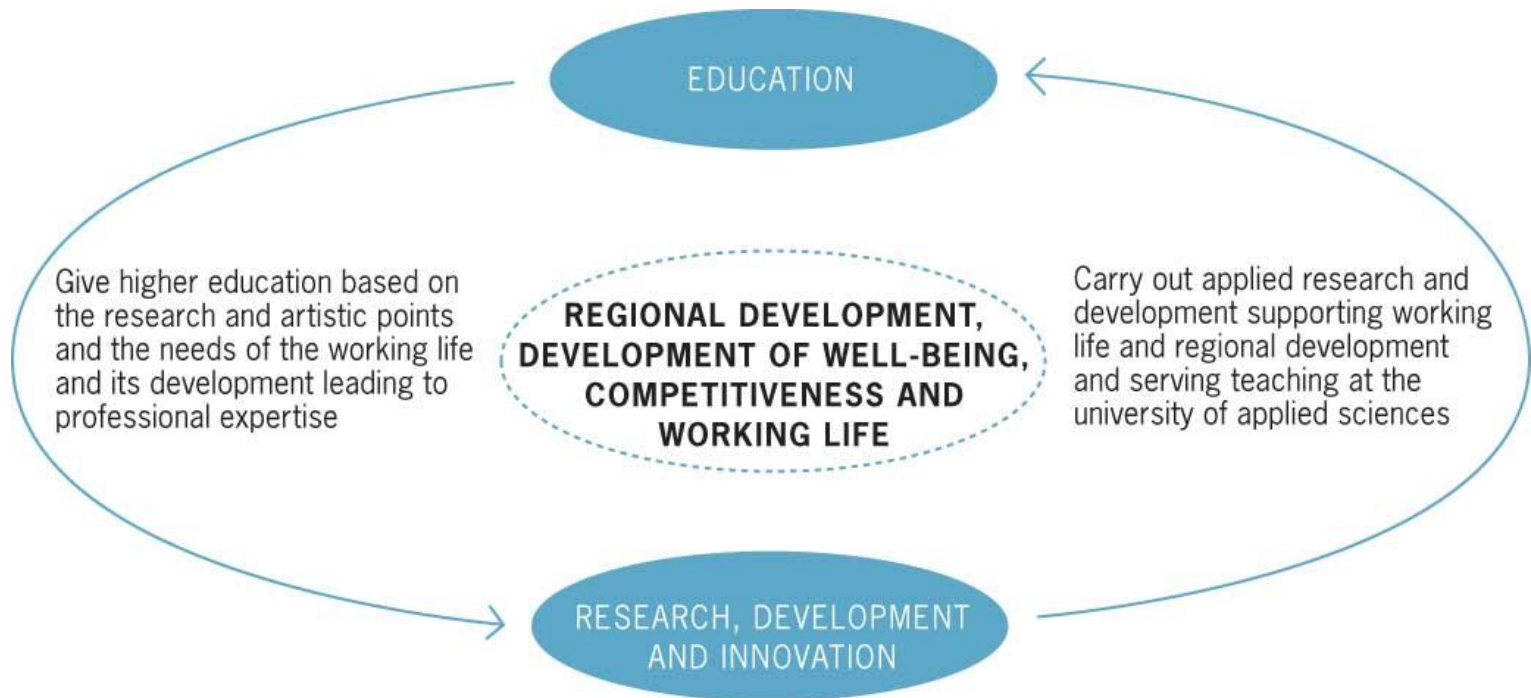


Universities of Applied Sciences in the Finnish Education System



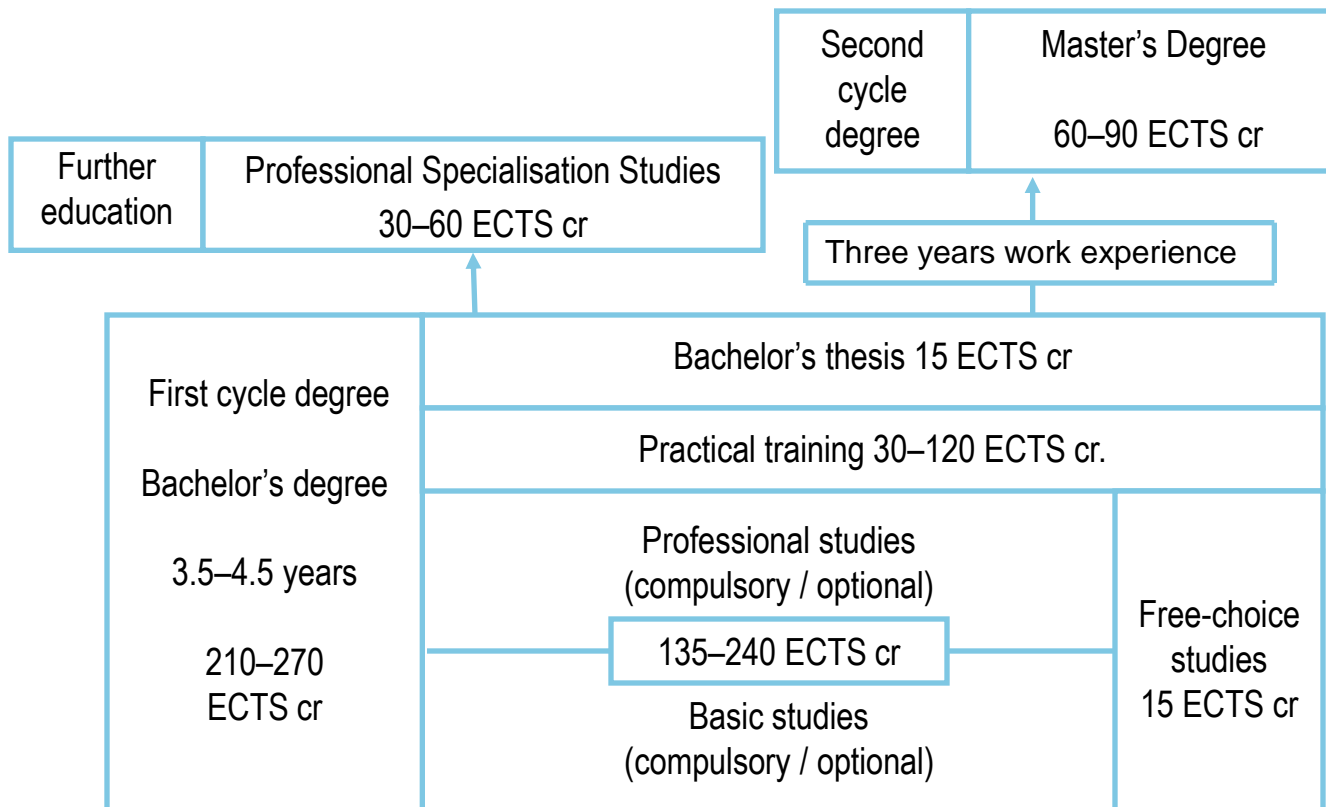


Tasks of the Universities of Applied Sciences





Structure of Studies





School of Engineering

Oulu Campus



Students: 2000

Staff: 150

Raahe Campus



Students: 600

Staff: 50





Degree Studies (Oulu Campus)

Bachelor Studies

There are eight different degree programmes leading to a Bachelor of Engineering (BEng) degree:

- Automation Engineering (Finnish)
- Building Services (Finnish)
- Civil Engineering (Finnish)
- Construction Management (Finnish)
- Information Technology (Finnish)
- Information Technology (English, 1st year 2011-2012)
- Mechanical and Production Engineering (Finnish)
- Medical Engineering (Finnish)

There is also an opportunity to study for the Bachelor of Laboratory Sciences (BLabSc):

- Laboratory Sciences (Finnish)





Degree Studies (Oulu Campus)

Master Studies (MEng)

- Civil Engineering (Finnish)
- Industrial Management (English)
- Information Technology (English)

Professional Specialisation Studies (Oulu Campus)

- Business Engineering (English)





Automation Engineering (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Option: Project Engineering

[Description & Curriculum](#)

Automation engineering deals with the automatic control of devices, machines and processes. It is an interdisciplinary field of study that is extensively utilised by production industry.

Students of this degree programme are familiar with different automation applications such as process industry, automatic production lines, power station processes and ocean liner control systems.





Degree Studies (Oulu Campus)

Building Services (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Option: HVAC Engineering

Description & Curriculum

Professional studies cover topics such as heating and energy technology, indoor climate and ventilation technology, cooling technology, water supply and sewerage technology and building automation.

Students can specialise in the HVAC planning, contracting, building maintenance and automation in their third year of study.

Issues connected with HVAC equipment and processes are taught in a modern special laboratory and with reference to systems in use in actual properties.





Degree Studies (Oulu Campus)

Civil Engineering (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Options: House Building Engineering, Municipal Engineering

[Description & Curriculum](#)

Students qualify to work as civil engineers in the national as well as the international construction industry. Graduates of this degree programme work in the fields of design, management, research & development as well as in sales and marketing.





Degree Studies (Oulu Campus)

Civil Engineering (Finnish)

Master of Engineering, MEng, 60 ECTS credits (1-2 years)

[Description & Curriculum \(only in Finnish\)](#)

The Master's Degree Programme in Civil Engineering is planned to meet the development needs of working life and can be completed in all the options of Civil Engineering: Structural Engineering; Building Construction and Renovation; Construction Technology and Management as well as Environmental and Municipal Engineering.

The Degree Programmes in Civil Engineering are actively involved in different international projects in order to ensure that the education remains closely in line with the international construction trends.





Degree Studies (Oulu Campus)

Construction Management (Finnish)

Bachelor of Engineering, BEng, 210 ECTS credits (3.5 years)

Master Builder

Options: House Building Engineering, Municipal Engineering

[Description & Curriculum](#)

Students will qualify to work, especially, in Northern Finland's construction industry as experts in the fields of construction work management and site practices. The degree programme's objective is that graduates will be eligible to take over supervising tasks in construction projects that are based on common building acts and land-use plans.





Degree Studies (Oulu Campus)

Information Technology (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Options: Electronics Design and Testing, Software Development,
Wireless Telecommunication

Description & Curriculum

Educates students for the needs of international working life and to become engineers that have the kind of skills and flexibility needed in the rapidly changing field. The graduates work in the fields of R&D, product design and management.

Depending upon the course selection, the students will acquire deeper knowledge of such topics as real-time software and embedded systems, microelectronics, telecommunications and RF-technology or measurement technologies of electronics production and process industries.





Degree Studies (Oulu Campus)

Information Technology (English)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

[Description](#), Curriculum (available later / upon request)

Starts in autumn 2011

The degree programme focuses mainly on software development, web-technologies, user experience and business studies. It encompasses the major frameworks and software architectures on the Internet today. Course work provides comprehensive training for professional working on e-commerce, enterprise applications, and interactive websites.

Students take part in software and business projects and learn problem solving in real environments in companies. Collaborative distance learning methods and techniques are used during projects to give tutorial assistance. Multiculturalism and English as a working language are adopted on our international campus.





Degree Studies (Oulu Campus)

Information Technology (English)

Master of Engineering, MEng, 60 ECTS credits (1.5 - 2 years)

[Description & Curriculum](#), [Web Site](#)

The Degree Programme in Information Technology is strongly oriented towards working life. It deepens and widens students' professional skills. The degree consists of 30 credits of theoretical studies and a Master's Thesis of 30 credits. The Master's Thesis is a research or development project carried out in relation to working life.

Studies cover such topics as research and development methods, innovation activities, entrepreneurship, wireless communications and related software technology. Studies can be completed partly according to a personal study plan.





Degree Studies (Oulu Campus)

Laboratory Sciences (Finnish)

Bachelor of Laboratory Services, BLabSc, 210 ECTS credits (3.5 years)

Options: Biotechnology, Laboratory Analytics

[Description & Curriculum](#), [Web Site](#), [Equipment](#), [Services](#)

The degree programme responds to the challenges of the changing society and internationalisation in the laboratory sector.

Graduates of the programme are employed in demanding quality control, product development, research, production expert and laboratory supervisor duties in laboratories in industry, research institutes and public administration. The laboratory sector also offers work opportunities in sales and marketing duties.





Degree Studies (Oulu Campus)

Mechanical and Production Engineering (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Options: Energy Technology, Machine Automation Engineering, Production and Logistics, Production Economics, Vehicle and Transportation Engineering

Description & Curriculum

The degree programme educates engineers that, in addition to their other skills, have a good knowledge of information technology, production development and its various tools.

Moreover, the studies provide skills in electronic and automation systems connected with mechanics, expenditures, quality control and foreign languages needed.





Degree Studies (Oulu Campus)

Mechanical and Production Engineering (English)

Master of Engineering, MEng, 60 ECTS credits (1.5 - 2 years)

[Description & Curriculum](#), [Web Site](#)

The Degree Programme in Industrial Management is strongly oriented towards the working life. It deepens and widens students' professional skills. The degree consists of 30 credits of theoretical studies and a Master's Thesis of 30 credits that is essentially related to a research or development project tied closely to the needs of students' own working environment and employer. Business operations skills and mechanical engineering technologies are emphasised in the theoretical studies. Studies can be completed partly according to a personal study plan.





Degree Studies (Oulu Campus)

Medical Engineering (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Options: Home Care Technology, Hospital Technology

Description & Curriculum

Oulu region is strongly engaged in the development of well-being technology and business. The Degree Programme in Medical Engineering responds to the development challenges and provides expertise of the field, aiming at educating internationally competent actors who recognise the potential technology within the social and health care.

The graduates are experts in information technology while also being familiar with the functions of the social and health-care sector.





Professional Specialisation Studies (English)

Business Engineering, 30 ECTS credits

[Description & Curriculum](#), [Web Site](#)

The aim of the studies is to educate engineers to work in the various fields of business environment. It provides students with expertise required for working in international companies.

The main focus of the course is on the skills needed for utilising the results of technical work on the export market. Topics included are e.g. marketing, export, strategic management, communication skills and cultural differences in business.

Study period: Annually from September to February

Further information: www.oamk.fi/tekniikka/business





Degree Studies (Raahe Campus)

Bachelor Studies

There are three different degree programmes leading to a Bachelor of Engineering (BEng) degree:

- Information Technology (Finnish)
- Information Technology (English)
- Mechanical and Production Engineering (Finnish)

In addition, there are two degree programmes leading to a Bachelor of Business degree (BBA):

- Business Economics (Finnish)
- Business Information Systems (Finnish)





Degree Studies (Raahe Campus)

Information Technology (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Option: Information Security Technology

Description & Curriculum

The degree programme concentrates on embedded computer technology and provides the rapidly growing field of telecommunications and electronics with highly competent graduates. The programme devotes a significant amount of time to practical laboratory work, using professional applications and equipment. The Option of Information Security Technology is focused on the security of software. The student will specialize in design and implementation of secure and robust mobile and ubiquitous applications.





Information Technology (English)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)
Mobile technologies, Embedded real-time Software / Hardware

Description & Curriculum

The programme is intended for both Finnish and international students who wish to pursue an international career in the field of computer engineering. During the first and second year the student achieves mathematical, scientific and business competence to solve technical problems. In professional studies the student acquires basic knowledge and skills in hardware and software. Engineering skills become deeper during the third and fourth year.





Degree Studies (Raahe Campus)

Mechanical and Production Engineering (Finnish)

Bachelor of Engineering, BEng, 240 ECTS credits (4 years)

Option: Production and Metal Engineering

Description & Curriculum

The objective of the programme is to train engineers that, in addition to mechanical engineering skills, have a good knowledge in information technology and product development, basic knowledge in company logistics and expenditures, the command of foreign languages required in this profession. The engineers also have to meet the needs of the people involved in technological applications. The graduates work in diverse positions as experts and managers in different fields of industry.





Degree Studies (Raahe Campus)

Business Economics (Finnish)

Bachelor in Business Administration, BBA, 210 cr (3.5 years)

Option: Broadly-based Business Studies

Description & Curriculum

The degree programme provides students with diversified business competence. In addition, the students learn to use information technology as a tool of communication and business. Studies comprise marketing, financial administration, corporate communications, national economy and corporate law. Students also acquire the skills in languages, information technology and other supporting subjects that are needed in demanding tasks related to business economics.





Degree Studies (Raahe Campus)

Business Information Systems (Finnish)

Bachelor in Business Administration, BBA, 210 cr (3.5 years)

Option: Information Systems in Digital Media and Electronic Business

Description & Curriculum

The degree programme forms a strong competence basis for information systems, content production of digital media, and information management. The education also offers skills required by responsible and systematic project operation. Students learn to develop business processes and utilise information technology when searching for solutions. A graduate from Raahe has proficiency in many fields of information technology, and is qualified to carry out different tasks relating to software development, design, and content production.





Education, Research, Development & Innovation (Oulu & Raahe Campus)

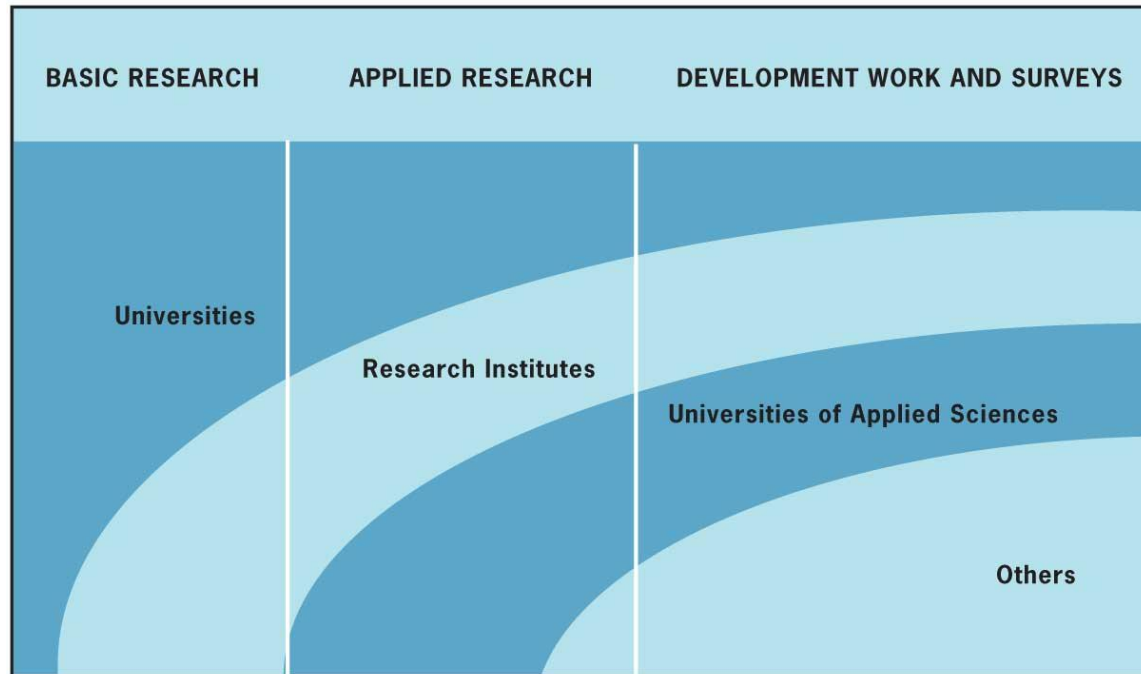
The Oulu and Raahe region is globally renowned for its technology expertise, and the education and RDI activities of the School of Engineering promote employment and prosperity in Northern Finland.

There is close cooperation with companies, technology research centres and the University of Oulu. These connections to industry offer the students an opportunity to gain valuable work experience and establish firm contacts with employers during the period of study.





University of Applied Science's Role in RDI





International Activities (Oulu & Raahe Campus)

The School of Engineering (Oulu & Raahe Campus) cooperates with more than 50 foreign higher education institutions in over 20 different countries.

The campi are actively involved in different international education and research projects.

Student and staff mobility is very active (Oulu Campus app. 60, Raahe Campus app. 15-20 incoming and outgoing students/year).

In addition to high technology and high academic level, the foreign visitors are attracted by snowy winters, bright summers, thousands of lakes, the Northern lights, Santa Claus and real Finnish sauna.





Study Opportunities in English (Oulu Campus)

For exchange students:

- Professional Specialisation Studies
 - Business Engineering, 30 ECTS
- Selection of courses in the degree programmes
- Project work opportunities in the laboratories
- [List of English-medium courses and study possibilities](http://www.oamk.fi/tekniikka/english/studies/english/)
<http://www.oamk.fi/tekniikka/english/studies/english/>

For degree students

- Degree Programme in Information Technology (Beng, 1st year in 2011-2012)
- Degree Programme in Industrial Management (MEng)
- Degree Programme in Information Technology (MEng)





Study Opportunities in English (Raahe Campus)

For exchange students:

- Selection of courses in the degree programme of Information Technology
- Project work opportunities in the laboratories
- [List of English-medium courses and study possibilities](http://www.oamk.fi/tekniikka/english/studies/english/)
<http://www.oamk.fi/tekniikka/english/studies/english/>

For degree students:

- Degree Programme in Information Technology (BEng)





For more information:

[Oulu Campus](#)

www.oamk.fi/tekniikka/english

[Raahe Campus](#)

www.oamk.fi/raahe/english

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<http://www.oamk.fi/kalvot>

Information Sheet:

http://www.oamk.fi/tekniikka/english/about_us/

