Barents Cross-Boarder University Meeting of the Rectors, Arkhangelsk, October 14, 2008 Report from the University of Oulu





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UNIVERSITY OF OULU

http://www.oulu.fi



The University of Oulu is one of the most northern universities in Europe. The University of Oulu has three focus areas, i.e. information technology, biotechnology, and northern and environmental issues.

The University of Oulu will be developed as an international science university in collaboration with research institutes and companies.

New in Finland: University law in 2010, funding from the Ministry of Education

New at the University of Oulu: New strategy in 2010, Auditing in 2009, Quality system, Administrative structure, Board of the University of OULU



Implementation of the Bologna process; Situation in Finland

- All students accepted to Finnish Universities starting fall 2005 will first do their three-year Bachelor's degree followed by a two-year Master's degree
- First students have started in Master's programs in fall 2008
- Most of the existing Bachelor's & Master's programs are based on the curricula of the previous five-year Master's programs and are carried out in Finnish
- The number of Master's degree programs is increasing as well as the number of those implemented in English





BCBU Master's Degree Programs

- Master's Program on Circumpolar Health and Wellbeing; coordinator University of Oulu, starts in spring 2009
- Barents Master's Program on Environmental Engineering; coordinator University of Oulu, starts in fall 2009
- Master's Degree Program in Software and Systems
 Development in Global Environment; coordinator University
 of Oulu, starts in fall 2010
- Master's Program on Comparative Social Work; coordinator University of Lapland, starts in fall 2009

Finnish Ministry of Education has accepted in 2008 these programs to be included in the Decree on the Master's programmes





Master's Program in Circumpolar Health and Wellbeing

http://arctichealth.oulu.fi/suomi/maisterikoulu.html

- A multidisciplinary two-year program approaching circumpolar health and wellbeing as a holistic phenomenon
- Knowledge and skills in the field of health care and wellbeing in Northern environment
- An exchange period at one of the partner universities
- Students with Bachelor's Degree in health or social sciences (or equivalent)

- 1. University of Oulu (coordinator):
 Thule Institute, Centre for Arctic Medicine,
 Faculty of Medicine, Dept of Health Sciences
- 2. Center for Health Education, Greenland
- 3. Luleå University of Technology, Sweden
- 4. Northern State Medical University, Russia Pomor State University, Russia
- 5. NORUT Social Science Research (Norway)
- 6. University of Lapland, Finland
- 7. University of Manitoba, Canada
- 8. University of Southern Denmark, Denmark







Barents Master's degree program on Environmental Engineering

http://bee.oulu.fi/

- Main responsibility: Faculty of technology, Process and Environmental Engineering Department (PYO) at the University of Oulu
- Developed together with the Thule Institute and PYO
- Partners from the Barents region: Archangelsk, Murmansk, Narvik, and Luleå
- Discussion also started with universities is Iceland and Peru
- Curriculum development & course planning in progress, student recruitment in spring 2009, teaching will start in fall 2009













Master's Degree Programme in Software and Systems Development in Global Environment GSD



- Main responsibility: Faculty of Science, Department of Information Processing Science at the University of Oulu
- Russian partners: PomorSU, KSPU, PetrSU, MSTU
- Theme is focused on Software and Systems Development in Global Environment
- Curriculum development and course planning is in progress, teaching activities are started on spring 2009 with courses from UOulu and PomorSU, next courses from PetrSU, KSPU, MSTU earliest in autumn 2009
- Existing cooperation partner LUT (Luleå University of Technology)
- Additional international partners from Japan (Hokkaido University) and China, South Korea, Europe





- In research programs and projects
- In PhD programs and graduate schools



- Bologna third cycle: from B.Sc. to PhD
- Research orientation in the Master's level programme (e.g. in the BEE programme), e.g.
 - Research methodology
 - Research ethics
 - Experimental design
 - Scientific writing
- DynaME and VALUE graduate







DynaME Dynamic Models for People and Ecosystems in the Changing Environment

PhD Graduate School for Northern and Environmental Issues

Adaptation

Climate change

Atmospheric processes Extreme events Natural variability Anthropogenic effects

Mitigation

Technological change

Natural resource management

Production systems

New technical solutions

Built environment

Dynamic Models for People and Ecosystems in the Changing Environment

(DynaME)

Control

Ecosystem change

Natural resources Ecosystems and biodiversity Ecosystem services Land use

Adjustment

Socio-economic and cultural change

Human-environment resilience, responses, and adaptations Economy

Language and communication Health and wellbeing



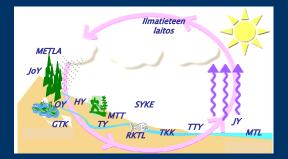


VALUE – Doctoral School in Integrated Catchment and Water Resources Management

Integration of changes in land-use, environmental changes, climate change, and ecological interaction at a catchment level

- IWRM (Integrated Water Resource Management), WFD (Water Framework Directive)
- National water program
- Research program on the management of water resources
- Strategies and focus areas of the universities and research institutes

Methods and technologies to manage water resources in a comprehensive and balanced manner



To secure different water usage requirements, nature biodiversity, preservation of water resources as well as businesses, economy, and health

- Land-use
- Environmental changes
- Climate change
- Engineering, ecology, sociology, economy, and environmental health
- Capacity building

Watershed processes and integrated modeling

- Prevention of non-point pollution and eutrofication of the Baltic Sea
- The impacts of land-use in catchment-level processes, run-off, was-out rates, and ecology
- Integrating empirical basic research, , monitoring results, and modeling

VALUE - themes

Interdisciplinary basis for policymaking on watersheds and water resources

- •Multicriteria analysis
- •Interactive planning and design
- Environmental impact analysis (EIA)
- •Impact analysis in strategic level
- •Supporting methods for decision-making

Grounds, methods, and tools for land-use, management, and protection of watersheds

- Cost-efficient and precise techniques in water supply and treatment, and in land-use
- New methods for water conservation
- Methods to evaluate, monitor, and manage benefits and losses
- Ways to integrate different actors in catchment-level planning





Oulanka Research Station, http://cc.oulu.fi/~oba/



Oulanka Research Station's modern research and educational facilities provide an inspiring environment not only for researchers and teachers, but also for organizers of courses, seminars and conferences.







Our deepest gratitude for the cooperation and the warm atmosphere when working together!

Thank you!

