

Barents Master's Programme in Environmental Engineering

Report from the Working group

University of Oulu
Archangelsk State Technical University
Narvik University College
Murmansk State Technical University
Murmansk State Pedagogical University
Luleå University of Technology
University of Lapland

Barents Environmental Engineering (BEE) Master's Programme workshop

- Readiness to launch
- Orientations
- Acceptance of curricula
- Course situation
- Selection criteria
- Marketing strategy
- □ Piloting of different distance learning tools

Launch status

- Full members
 - University of Oulu (UOulu)
 - □ Will launch in September 2009
 - Archangelsk State Technical University (ASTU) and Murmansk State Technical University (MSTU)
 - □ Launch subject to receipt of master's degree licensing
 - Courses autumn 2010, licensing and launch 2012
 - Narvik University College (NUC)
 - □ Will launch September 2010
- Associate members
 - Murmansk State Pedagogical University (MSPU), Luleå Technical University (LTU) and University of Lapland (ULapland)
 - □ Can provide courses already in autumn 2009

Orientations in BEE

- UOulu (2009):
 - Clean production
 - Water and environment
- □ NUC (2010)
 - Sustainable energy
- ASTU (2010-2012)
 - Industrial ecology
- MSTU (2010-2012)
 - Environmental protection

Structure of the curriculum

Preparatory Special basic **Theory module** module module 30 p 10 p 20 p (with joint courses) (joint course) (elective) **Advanced** Advanced **Advanced** module I module 2 module 3 Diploma work 10 p 10 p 10 p 30 p (elective) (elective) (elective)

Acceptance of the curricula

- UOulu
 - Curriculum planned
 - Will apply at the Faculty of Technology for its acceptance in March 2009
- NUC
 - Curriculum planned
 - Will apply for accreditation by the end of 2009
- ASTU and MSTU
 - Curriculum planned
 - Have applied to receive M.Sc. license

Course situation

UOulu

- 80% of the courses are existing, 20% new
- 50% of existing courses needed to be translated
- About halfway in both course development and translation

NUC

- 50% of the courses exist and need to be translated
- 50% new and need to be done

ASTU, MSTU

- Most courses existing, need to be translated to English
- Need for teacher workshops
 - Harmonize educational content
 - Share course material

Selection criteria

- □ The BEE working group has agreed on forming a joint selection committee, to be formed by representatives of participating universities
 - One each representatives of the university's faculty administrative office, and an academic member

Roles

- Establish the criteria of selection
 - Educational background
 - Command of English language
 - Motivation letter relevance of the Barents region
 - □ Recommendation letter
 - Weighing of criteria
 - Student selection
- Follow the marketing strategies
- Responsible for and approving application material
- Application open Jan-Feb. 2009
 - To be submitted through Funima

Marketing

- One of the most important factors for young people in the selection of a university and programme is the Internet
 - A www page has been opened for the BEE programme (http://bee.oulu.fi)
 - Universities will link to BCBU and BEE homepages
- Course posters and booklets will be prepared
 - A common BCBU look
- Presence at educational related fairs and events

Course piloting

- During spring 2009, UOulu will organize 2 post-graduate level intensive courses
 - Waste minimization and resources use optimization
 - Advanced separation processes
- □ Both courses are international, and the lecturers are international experts
 - We will tape the lectures and, parallel with the contact teaching, will pilot the distance learning method
- □ The advanced separation process course will further be available as master's level course, and during this pilot phase the course book will also be compiled.

Next steps

- □ Workshop in Narvik (end November)
- □ Agreement on selection criteria
- Finalizing marketing tools
- Marketing the programme
- □ First application call (Jan.-Feb. 2009)
- □ Finalizing course preparation work
- Course piloting
- Putting the Master's Programmes into practice
- □ Next stage: doctoral programmes...(?)