

Master's programme in Information Systems

Petrozavodsk 6.-7-11.2006



Information Systems

Agreements on group work 7.11.2007

- 1) **Master's programs partners:** UOulu and PomorSU
associated partners: KSPU, MSTU (not yet confirmed)
- 2) **Steering group:**
UOulu: Kari Pankkonen, Jouni Similä, KSPU: Andrei Ahayan,
Svetlana Markelova, PomorSU: Ludmina Haimina, Natalia
Didkovskaya
- 3) **Academic coordinators:** Information technology
(UOulu: Kari, KSPU: Svetlana, PomorSU: Ludmila
4. Questionnaire (missing or unclear information):
PomorSU: OK, KSPU: on progress, MSTU: to be updated
5. **Responsibilities and timetables:**
PomorSU: Description of the courses (30% share) 15.12.2006
PomorSU: Master program curricula (in english) 15.12.2006
KSPU: module description (in english) 15.12.2006

General goals

- Joint understanding and agreement on the cooperation between the partner universities
- Adapting the Bologna process between partner universities
- Necessary administrative actions at collaborating universities
- Description of objectives, topics and contents for cooperation
- Project plan and applying resources for the project
- Developing joint courses for collaborative studies
- Student and teaching staff exchange
- Targeting to Dual Degree/Joint degree

Curriculum Structure

Guidelines

- ✓ General structure follows the European Union guidelines (Bologna Agreement)
- ✓ 3+2 years framework, 3 years for bachelor and additional 2 years to master of science degree
- ✓ Specified using the European Credit Transfer System
- ✓ ECTS is approximately 27 student working hours
- ✓ Based in Finland on Information Systems Curricula
- ✓ International multidisciplinary optional studies

Curriculum Structure

Information processing science at UOulu

Master's of Science degree 120 ECTS

Mandatory studies:	95	Optional study modules (specialization studies in one of the topics)	25
<u>Information systems program studies:</u> <ul style="list-style-type: none"> - Object oriented analysis and design - Interaction Design - Information Systems Design - Information Systems Design Methods - Web Information Systems Design - Data Base Systems - Information Systems Theory 	41	2) Mobile services (UOulu) 3) Information Security (UOulu) 3) Geoinformatics (UOulu) 4) Legislation (ULapland) 5) Environmental technology (UOulu)	
Project II and Project Seminar	14	6) Information Systems and Technology (PomorSU) 7) Theory and Technology of distance pedagogical interaction (KSPU)	
Research Methods	5		
Master's Thesis & Research Seminar	35		

Single mandatory/optional courses can be replaced by corresponding courses from partners university.

Project II can be done at partner University or as joint project (international student group)

International Master Programme in Informational Systems

Mandatory Courses : Information systems 56 ECTS

- Project II 14 ECTS, Research methods 5 ECTS, Pro gradu thesis 35 ECTS, Research seminar 2 ECTS

Optional modules: University of Oulu

1) Information systems Module (25ECTS), set of the following courses

- Object oriented analysis and design, User interaction design, Information systems design, Web Information systems design, Data base systems, Information systems design methods, Information systems theory

2) Mobile services Module (25 ECTS)

3) Information Security Module (25 ECTS)

3) Environmental technology Module (25 ECTS)

4) Geoinformatics Module (25 ECTS)

University of Lapland

5) Legislation Module (5-10 ECTS)

Russian Universities

KPU: “Theory and Technology of distance pedagogical interaction”

MSTU: “Informatics and computer engineering”

PSU: Information Security (22ECTS), Special modules (10ECTS) Information Systems and Technology

Summary A combination of above modules, 120 ECTS (= two years studies)

Bridging and orientation studies in the beginning maximum 60 ECTS (= one years studies)

Educational goals₁

- ✓ Changes take place first inside the Information and Communication Technology (ICT) industries.
- ✓ Demands on Competitiveness in Europe
- ✓ New funding is used to develop new courses and convert existing course materials suitable for exchange (English language, digital contents, videoconference formats, etc.).
- ✓ Each university benefits from the cooperation because it opens them new opportunities for teaching
- ✓ But does not restrict their freedom or tie up resources except joint planning and coordination.

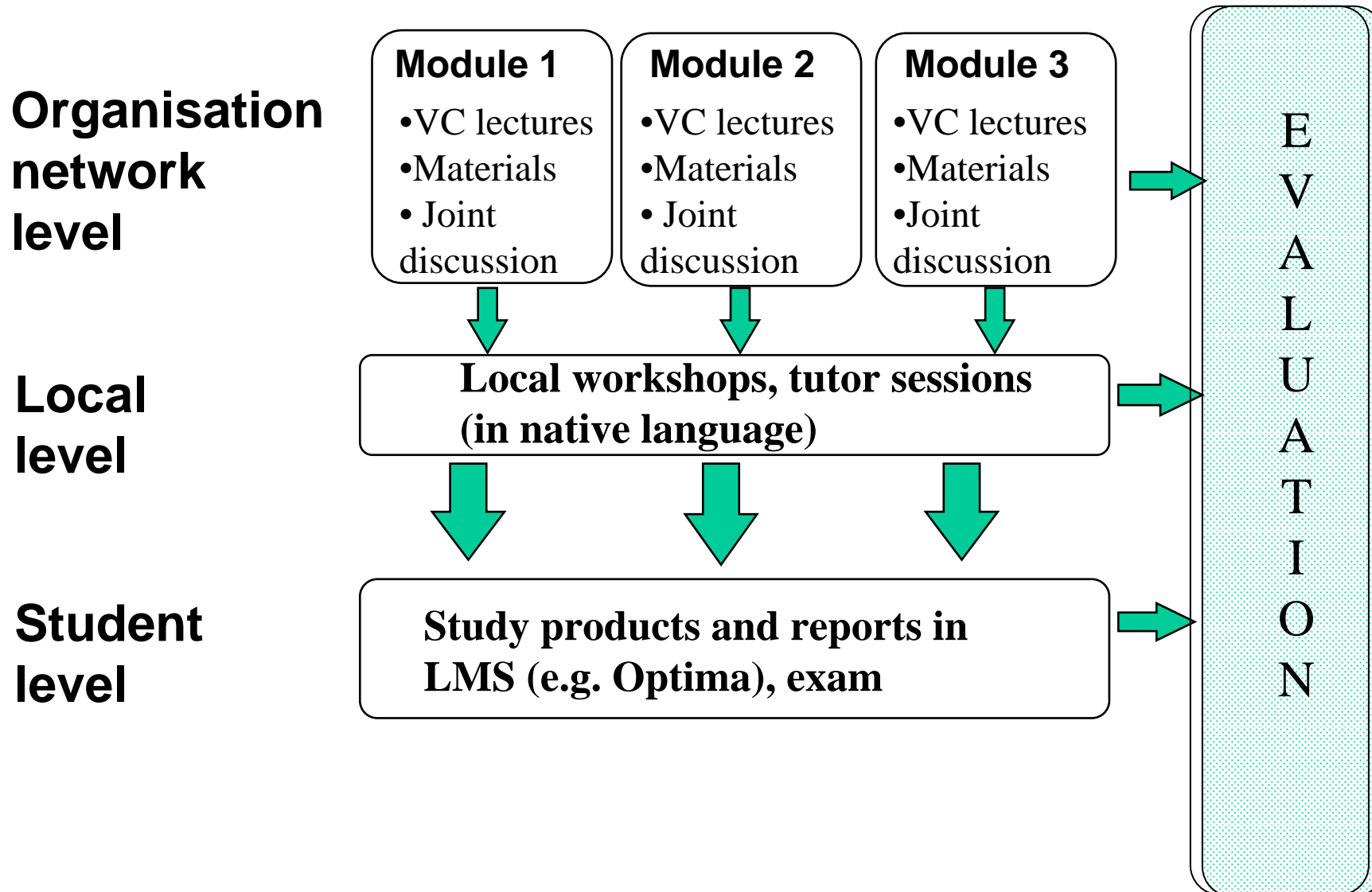
Educational goals₂

- ✓ There will be some changes in the positioning of the whole university institution
- ✓ Work orientation will be more emphasized. Curriculum structure will be changed to the two-tier model. In the renovation professional capabilities of the students will have to be taken into consideration.
- ✓ Software development is very much a human-oriented and resource-oriented process.
- ✓ Due to the nature of software work in the IT education and research even more emphasis will have to be put in communication, cooperation and critical thinking.
- ✓ Instead of automation of software development it is even clearer that now and in the future software work will be human and resource oriented.

Educational goals₃

- More interactive learning situations
- More versatile/efficient use of learning environment
- Digital hypermedia based learning material
- More efficient development and use of learning technology
- Active support for the learner
- Virtual learning environments (rooms), piloted in Master's programmes (national/international)

Example of Study model



Contact info

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