# Department of Computer and Systems Sciences



# Education plan

for

Master's Programme in Information and Communication Technology for 120.0 Higher Education Development Credits

Masterprogram i informations- och kommunikationsteknik för utveckling 120.0 ECTS credits

Programme code: SIKTO
Valid from: Autumn 2009
Date of approval: 2008-12-11

**Department:** Department of Computer and Systems Sciences

#### **Decision**

# Prerequisites and special admittance requirements

A Bachelor's degree or a degree equal to 180 ECTS. A minimum of 90 ECTS of that degree should be in computer science, systems science, informatics, or information systems. English B or equivalent.

## **Programme structure**

Program is web based and flexible study pace is applied.

#### Goals

Knowledge and understanding

For master's degree, the student shall

- •demonstrate knowledge and understanding within computer- and systems sciences, including both broad knowledge in the field and substantially in-depth knowledge of certain parts of the field and insight into current research and development;
- •demonstrate in-depth knowledge of methodology within computer and systems sciences;
- •demonstrate knowledge and understanding of the significance of information technology for sustainable development in developing regions from the perspectives of individuals, organisations, and societies;
- •demonstrate knowledge and understanding of the conditions and prerequisites concerning the application of ICT in developing regions.

# Skills and abilities

For master's degree, the student shall

- •demonstrate an ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, issues and situations, even with limited information;
- •demonstrate an ability to critically, independently and creatively identify and formulate issues, plan and carry out qualified assignments with relevant methods and within specified time frames, thereby contributing to the development of knowledge and to evaluate this work;
- •demonstrate an ability to clearly present and discuss their conclusions and the knowledge and arguments behind them, orally and in writing, in dialogue with different groups, both nationally and internationally; •demonstrate the skills required to either participate in research and development work or to work independently in other qualified activities;

•demonstrate ability to collaborate in development projects including participants with heterogeneous backgrounds.

Ability to make assessments and have an ethical approach

For the master's degree, the student shall

- •demonstrate insight of the possibilities and challenges of science, its role in the society and the responsibility that people have for its application;
- •demonstrate ability to identify personal needs for further knowledge and to take responsibility for personal knowledge development;
- •demonstrate insight of the roles of ICT and knowledge in development collaboration and of the responsibility of people for how these are applied.

#### Courses

- •Information and communication technology for development I, 22,5 ECTS
- •Scientific communication and methodology, 7,5 ECTS
- •Information and communication technology for development II, 30 ECTS
- •Specialisation in one area of ICT for development, 30 ECTS: E-business, E-governance, E-health, E-learning
- •Master's thesis, 30 ECTS

# Degree

Program leads to a Master's degree in computer and systems sciences.

# Misc

Student who has enrolled to the program and has not finalised the program within the planned two years, can apply to finalise the program even after that the education plan is no longer valid.

Thereby the limitations mentioned in the course syllabi are valid.