# Master Programme in Disaster Risk Management and Climate Change Adaptation

Programme code: TAKAK Scope: 120 credits Cycle: Second Approved by: Educational Programmes Board C Validity: 2015/2016 Date of approval: 15 April 2015 In addition to the syllabus, general regulations and information for the Faculty of Engineering apply to this programme.

## 1 Aim and outcomes

#### 1.1 Aim

This internationally oriented master programme aims to provide students with comprehensive knowledge as well as pragmatic skills and abilities in disaster risk management, climate change adaptation and capacity development, in order for them to be able to contribute to a more resilient and sustainable society. The programme aims to provide qualifications for both professional activities in society and for research (third cycle) studies. The master programme in Disaster Risk Management and Climate Change Adaptation aims to meet the needs of qualified professionals who can

- promote societal resilience through use of concepts, methods and tools within disaster risk management and climate change adaptation;
- utilize and contribute to research in this field;
- work with capacity development for disaster risk management and climate change adaptation in local, national and international settings.

# 1.2 Outcomes for a Degree of Master of Science (120 credits)

(Higher Education Ordinance 1993:100)

#### Knowledge and understanding

For a Degree of Master of Science (120 credits) the student shall

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

#### Competence and skills

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

#### Judgement and approach

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

# **1.3** Specific outcomes for a Degree of Master of Science (120 credits)

#### Knowledge and understanding

For a degree of Master of Science in Disaster Risk Management and Climate Change Adaptation students shall

- demonstrate knowledge and understanding of the role of societal resilience for sustainable development through specialised knowledge in disaster risk management, climate change adaptation and capacity development
- demonstrate knowledge and understanding of how different processes of change, such as climate change, demographic trends and increasing complexity of society, affect disaster risk and our ability to manage it
- demonstrate knowledge and insight into current research and development work in disaster risk management and climate change adaptation, and
- demonstrate specialised methodological knowledge in the field of disaster risk management and climate change adaptation.

#### Competence and skills

For a degree of Master of Science in Disaster Risk Management and Climate Change Adaptation students shall

- demonstrate the ability to critically and systematically integrate knowledge about hazards, vulnerabilities, capacities and processes of change and assess and deal with their interdependencies even with limited information
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss the conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrate the skills required for participation in multidisciplinary research and development work in disaster risk management and climate change adaptation or autonomous employment in some other qualified capacity in the pursuit of a resilient and sustainable society.

#### Judgement and approach

For a degree of Master of Science in Disaster Risk Management and Climate Change Adaptation students shall

- demonstrate the ability to make assessments in the field of disaster risk management and climate change adaptation informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

#### **1.4 Further studies**

On completion of the second-cycle degree, students have basic eligibility for third-cycle studies.

### 2 Programme structure

The programme comprises 60 credits of compulsory courses and 30 credits of elective-compulsory/optional courses and a degree project of 30 credits which is to reflect the scope of the programme.

#### 2.1 Courses

The courses included in the programme are indicated in the timetable. In addition to these courses, students are entitled to accreditation of 7.5 credits of courses in Swedish (organised by Lund University for exchange students).

# 3 Specific admission requirements

#### 3.1 Admission requirements

A Bachelor's degree with relevance to the applied education.

## 4 Degree

#### 4.1 Degree requirements

For a Degree of Master of Science (120 credits) students must successfully complete courses comprising 120 credits, including a degree project worth 30 credits. 75 credits must be second-cycle credits, including the degree project.

#### 4.1.1 Degree project

For a Degree of Master of Science (120 credits) students must complete an independent project (degree project) of no less than 30 credits as part of the course requirements. The degree project must be completed in accordance with the valid course syllabus and must deal with a relevant subject.

#### 4.2 Degree and degree certificate

When students have completed all the degree requirements, they are entitled to apply for a degree certificate for a Master of Science (120 credits). Main Field of Study: Disaster Risk Management and Climate Change Adaptation.