1 Aim and outcomes

1.1 Aim
This internationally oriented master’s programme aims to develop the knowledge, skills and judgement of students in the field of water resource management. On completion of the programme, students will be able to work in the water resources sector and be able to deal with matters relating to water resource management in a professional manner.

The Master of Science in Water Resources aims to:
- offer a broad programme of study which covers the most important aspects of water resources;
- highlight the need to treat water resources in an integrated manner;
- give the students the opportunity to specialise in a chosen field of water resource management;
- offer access to current knowledge about and relevant methods of water resource management;
- impress on the students the importance of a scientific approach;
- take advantage of the opportunities available in a multinational group of students.

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 so contribute to the formation of knowledge as well as the ability to evaluate this work;
- 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 critically and systematically integrate knowledge of water resources from several perspectives and to 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 and 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 to report clearly and so contribute to the formation of knowledge, as well as the ability to evaluate this work;
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

1.3 Specific outcomes for a Degree of Master of Science (120 credits)
For a Degree of Master of Science (120 credits) students shall:
- demonstrate knowledge and understanding in the field of water resources, 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 field of water resources.

Competence and skills
For a Degree of Master of Science (120 credits) students shall:
- demonstrate the ability to critically and systematically integrate knowledge of water resources from several perspectives and to 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 and 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 to report clearly and so contribute to the formation of knowledge, as well as the ability to evaluate this work;
- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

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For a Degree of Master of Science (120 credits) students shall:
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- 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) students shall:
- demonstrate the ability to critically and systematically integrate knowledge of water resources from several perspectives and to analyse, assess and deal with complex phenomena, issues and situations even with limited information;
1.4 Further studies
On completion of the second-cycle degree, students have basic eligibility for third-cycle studies.

2 Programme structure
The programme consists of compulsory courses comprising 45 credits, elective courses comprising 45 credits and a degree project worth 30 credits.

2.1 Courses
The courses included in the programme are indicated in the timetable. All courses are taught in English. 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 in civil engineering, environmental engineering or equivalent, including courses in mathematics/calculus, hydraulics/fluid mechanics and geology. Students must also have documented proficiency in English corresponding to at least English 6 in Swedish upper secondary school.

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. Students who wish to include in the degree courses not listed in the timetable must submit an application to this effect to the relevant programmes board.

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: Water Resources Engineering.