Programme Study Plan

Societal Risk Management

Programme Code: SARIS
Programme Title: Societal Risk Management
Credits/ECTS: 60/120
Programme Approval: The Programme Study Plan was approved by the Faculty Board for Social and Life Sciences on 22 February 2012 (Reg.no. FAK32012/44) and is valid from the autumn semester of 2013 at Karlstad University.

Language of Instruction: Swedish (Literature in Swedish, other Scandinavian languages, and English)

Degree Level: Master
Degree Type: General (One Year or Two Years)
Prerequisites: Bachelor’s Degree of 180 ECTS credits or equivalent, and upper secondary school level Swedish B/Swedish as a second language B and English A
General Information

Human beings need a sense of coherence and control. This need is manifested in society in various ways. Modern society is built on the idea of controlled development. As a result, policies, strategies, processes and methods aiming to promote order and control have been developed. We need to control various threats to protect human life, central community functions, the natural and the constructed environment against accidents and disasters. A community needs to understand these threats and develop and evaluate various ways to control them. Societal risk management is a field that aims to address these issues.

There are two main traditions in the field of protective intervention. One focuses on the physical environment and technology and aims to lend support to companies and organisations in the private and the public sector to prevent injuries and damages. The other tradition focuses on public health and aims to raise public awareness of risk and safety. Societal planning is an important constituent in these processes. The programme aims to combine these two traditions so that they form a coherent whole.

Legislation and surveillance are two central tools for controlling these processes. Legislation regulating the environment and public health and safety is extensive but we are moving more and more towards general process-based regulations. Therefore, the responsibility to identify problems and formulate action plans is being shifted from a central legislative level to local bodies in the private and the public sector. As a result, there is an increasing need for personnel with the competence to oversee and document risk management processes of this kind. Two examples of such process-based laws are:

- SFS 2003:778 – ‘The Accident Prevention Act
- SFS 2006:544 – ‘The Act regarding actions by county councils and municipalities in case of crises and state of alert’

The study programme Societal Risk Management prepares students for professional employment as well as for research. Students learn about the limitations and possibilities of risk management. Students acquire a broad understanding of the relevant issues and problems. Their understanding should be based on sound general knowledge of protective efforts, be it in the industry or in the protection of the public and the environment.

Students acquire a solid foundation for practical risk management as this is planned, structured, and carried out on different levels in society and in various sectors. Students learn what factors affect risk management and how these factors are influenced by financial operating systems and by differences in outlook and regulations in different areas. Consequently, this Master’s programme opens up a number of career opportunities in the public sector, the industry and other organisations, for example, the position as coordinating manager of threat, risk and crisis issues.

Aims and Learning Outcomes

Chapter 1, §9, of the Higher Education Act (SFS 1992:1434, 2006:173) states that Master level studies should largely build on knowledge acquired at Bachelor level
studies or the equivalent. Master level students are expected to deepen the knowledge, skills and abilities acquired at undergraduate level. Students are also expected to

- further develop their ability to integrate and implement theoretical knowledge in their work,
- develop their ability to deal with complex situations, questions and phenomena, and
- develop their ability to work professionally or in research and development with tasks that require a high degree of independence.

The Higher Education Ordinance (1993:100) lists the national aims and objectives common to all educational programmes, see attachment. For a Master’s degree (60/120 ECTS credits) with a specific specialisation or profile to be awarded, students must meet the national as well as the local requirements.

**Local Objectives of the General Master’s Degree (60 ECTS cr) in Societal Risk Management at Karlstad University**

In addition to the national objectives for a Master’s degree (60 ECTS cr), students must meet the following local requirements:

**Knowledge and understanding**
For a Master’s degree (60 ECTS cr), students must be able to
- demonstrate knowledge and understanding of societal risks related to injuries, accidents and nature, determining factors and changes over time,
- demonstrate knowledge of the conditions for protection and security efforts in society,
- demonstrate knowledge of the method applied for problem inventory and analysis in the risk management field,
- demonstrate knowledge of procedures for intersectoral preventive measures in the community,
- demonstrate some understanding of the theory of science, research ethics and methodology;

**Competence and skills**
For a Master’s degree (60 ECTS cr), students must be able to
- demonstrate ability to identify and describe hazardous conditions for personal injury and environmental disasters and the vulnerability of vital functions in the community and their interdependence,
- demonstrate ability to identify factors and social conditions that are likely to influence safety,
- demonstrate ability to give an account of actors in society, their role and responsibility in risk management,
- demonstrate ability to plan for safety promoting measures in the community,
- demonstrate ability to work intersectorally with different individuals and groups,
- demonstrate ability to identify, assess and evaluate risk in the community,
- demonstrate ability to identify, assess and evaluate the vulnerability of vital systems in society,
• demonstrate ability to identify possible further safety measures.

**Judgement and approach**
For a Master’s degree (60 ECTS cr), students must be able to
• demonstrate ability to analyse and evaluate the quality of key elements of risk management,
• demonstrate ability to assess research methods and their results, their potential and limitations in the field of risk management,
• demonstrate awareness of the ethical aspects of research and development.

**Local Objectives of the General Master’s Degree (120 ECTS cr) in Societal Risk Management at Karlstad University**
In addition to the national objectives for a Master’s degree (120 ECTS cr), students must meet the following local requirements:

**Knowledge and understanding**
For a Master’s degree (120 ECTS cr), students must be able to
• demonstrate deepened knowledge and understanding of societal risks related to injuries, accidents and nature, determining factors and changes over time,
• demonstrate deepened knowledge of the conditions for protection and security efforts in society,
• demonstrate deepened knowledge of the general scientific method,
• demonstrate deepened knowledge of the method applied in the risk management field.

**Competence and skills**
For a Master’s degree (120 ECTS cr), students must be able to
• demonstrate ability to plan, actively participate in and evaluate safety promoting measures in the community,
• demonstrate ability to work intersectorally with different individuals and groups,
• ability to identify, assess and evaluate risk in the community,
• demonstrate ability to identify, assess and evaluate the vulnerability of systems in society,
• demonstrate ability to identify and assess possible further safety measures,
• demonstrate ability to initiate and support processes involving mobilizing people’s own resources to handle different risk situations,
• demonstrate ability to critically and ethically review their own work in the field of societal risk management.

**Judgement and approach**
For a Master’s degree (120 ECTS cr), students must be able to
• demonstrate ability to assess ethical problems and argue for and problematise different issues relating to risks in society,
• demonstrate ability to analyse and evaluate the quality and effect of safety efforts from a broad societal perspective,
• demonstrate ability to evaluate research methods and results, their potentials and limitations in relation to the study of societal risk management.

Independent project/degree project
For a Master’s degree (60 ECTS cr) students must have completed an independent project of at least 15 ECTS cr. in the main field of study.
For a Master’s degree (120 ECTS cr) students must have completed an independent project of at least 30 ECTS cr. (15+15 ECTS cr.) in the main field of study.

Programme Structure
The programme comprises two years full-time study. Course modules run parallel two and two at a slow pace to accommodate full-time as well as part-time students, and to allow for the choice of earning a one-year or a two-year Master’s degree.

The programme is a form of distance learning. Three times a term student groups meet for a two-to-three-day period of instruction on campus in the form of lectures, group work and seminars.

Professional Contact
Several courses include cooperation with various public agencies, especially with the Swedish Civil Contingencies Agency, Karlstad Municipality, the County Board and the Swedish Consumer Agency. Course conveners also take their cues from their own networks and research.

Programme Curriculum
Risk Management can be described as a multi- and interdisciplinary field. Problems and issues in the field are better understood if studied with different theoretical and methodological approaches. About eighty-seven percent of the programme relates to risk management.

The programme includes traditional research methods as well as specific methods for societal risk management studies. The first year includes a 7,5 ECTS credits qualitative research method course as well as 14 ECTS credits subject-specific methods integrated in other courses. These are distributed as follows: Introduction to Societal Risk Management, 3 ECTS credits, Public Safety I: Injury analysis and risk management, 5 ECTS credits, and Natural Disasters management 2, 6 ECTS credits.

Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>ECTS cr.</th>
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<tbody>
<tr>
<td>Introduction to Societal Risk Management</td>
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<tr>
<td>Public safety I: Injury analysis and risk assessment</td>
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<td>Public safety II: Injury prevention and safety promotion</td>
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<tr>
<td>Natural Disasters Management 1</td>
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<td>Natural Disasters Management 2 (full-time)</td>
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Description of courses

Terms 1-2

Introduction to Societal Risk Management

The course is an introduction to the development of the main field of study in the form of discussions of the emergence of different perspectives and on how certain risks can be understood and communicated in terms of injury statistics and in terms of threats (disasters). The course aims to impart a view of the range and complexity of the field. The effects of specialisation and sectorisation in society are treated. Relevant laws are analysed, and the principles of a science report are presented. System theory as applied to evaluation of interventions and accidents is introduced. The course also introduces the organisation and procedures of distance education regarding form and aids.

Public safety I: Injury analysis and risk assessment

The aim of the course is to provide knowledge of analysis and understanding of the problems relating to injury risks of different kinds in society. In effect, the course also introduces quantitative and qualitative risk analysis. Risk as a concept is treated together with central concepts such as accident and injury. Different risk scenarios in society and developmental trends in statistical terms are discussed along with differences between countries and epochs. Methods of risk analysis based on epidemiological method and knowledge of data sources, classification systems and collection methods are taught, as are principles of object-related risk analysis and case study investigation. Societal injury costs are covered and as is knowledge of physiological and psychological qualities that determine the vulnerability to external injury depending on age and sex. Issues related to the course theme are identified and treated by the students in the form of group work and seminars.

Public safety II: Injury prevention and safety promotion

The aim of the course is to provide knowledge of the basic principles of injury prevention and safety promotion in society. The course treats central concepts and definitions in the public safety area. It also deals with the current societal prevention of injury in high-risk areas and to vulnerable categories, such as traffic, work, children, elderly people, consumers, fire, violence and suicide. General theories and models for systematic risk management are discussed with an emphasis on public safety.
important aim is that students develop skills in planning injury prevention and safety promotion efforts in society.

Managing Natural Disasters 1 and 2
The first of the two courses on natural disasters deals with threats caused by extreme conditions in air, ground and water. The focus is on environmental accidents in Sweden causing extensive damage to the infrastructure and/or the environment. Comparisons with other countries are made.

Course 1 draws on scientifically tested frames (e.g. the PAR-model) to describe vulnerability to natural disasters to enable the study of risk in a national and international perspective. The link between risks and risk-reducing efforts are illustrated in different perspectives ranging from underlying factors related to political systems and economic welfare to uncertain local conditions.

External climate variables are linked to future climate change prognosis and their likely consequences.

Course 2 course centres on how Sweden and different societies in the world manage the different risks of environmental disasters today and in a changed climate. Students are expected to give an account of how societies organise against natural disasters and of laws and methods used to reduce damages and increase individual safety and societal functions. Community precaution and prevention before/during/after an event are studied along with possibilities and limitations of warning systems and prognosis.

Risk and vulnerability analysis as a basis for municipal policy and action documents are examined. Accountability and regulations are studied. Students are expected to critically reflect on how rules and methods are used in different sectors of society and on different views on new risks and threats in a changing climate and/or dynamic social development.

Qualitative method
The course deals with the research process and its stages with a focus on the qualitative approach. Different qualitative methods and their applications are treated. The importance of gender studies to the development of qualitative method is discussed. Quality and validity in qualitative research, writing science articles and frame stories and research ethics are included.

Degree project 1
The Degree projects should deal with one of the aspects of risk management treated in the programme. The Degree project (15 ECTS cr.) is carried out in the latter part of term 2. The project is individually planned, carried out and presented in the written form. It should be firmly related to risk management theory.

Terms 3 and 4
Risk Management: Governance and management
An overview of potential forms of management and different ways of organising risk governance and management is provided. Special terminology, such as network, democracy, technocracy and power exercise are discussed.

Students learn to describe and analyse: How several political institutions collaborate to create change in policy and implementation; The role of the state, municipality, agency, NGO, industry, media and citizen in the policy and implementation process; How are decision-makers influenced by different agenda-setting strategies? How do civil actors exert influence? Special attention is paid to the complexity of the policy field with governance problems at many levels (e.g. the UN, the EU, regional and municipal actors) with cross-sectoral politics and with new public-private partner constellations.

Economic risk analysis
The course comprises the following components: The basics of microeconomic theory; Theories on decision-making under risk and uncertainty; Different risk measurements; The choice of risk-reducing measures using different decision criteria; Cost-benefit analysis; Estimation of risk in monetary values; The relationship between measure and effect.

Sustainable development in a safety perspective
The course deals with sustainable development in a risk management perspective. Risk management issues in society are problematised from an economic, ecological and social dimension. The term development can be defined in several ways but often it contains an element of positive change, whereas a successful result of risk management is that nothing will happen.

The international perspective is also treated and the situation in the third world where welfare for the individual involves risk and safety aspects. Environmental disasters and future effects of climate changes are serious threats to sustainable development. Risk management in the third world is often associated with efforts to reduce poverty and bad living conditions and is a vital part of sustainable development promotion.

The relation between the three over-lapping concepts safety, health and the environment (SHM) is discussed. The advantages of integrating the three areas are studied and also the potential conflicts that this may give rise to. SHM is also studied as a basis for management and governance systems.

Risk perception and risk communication
The aim of the course is to provide knowledge of human perceptions of and reactions to different types of risks and the effects of different types of influence. The focus is on the basic theories of risk perception, the factors governing the perception and assessment of risk, differences in perception depending on gender, roles etc. as well as the relation between attitudes to risk and safety and behaviour. Also treated is communicating risks from a receiver perspective with an emphasis on ethical considerations. An important course objective is that student develop understanding of the causes of different reactions and behavioural patterns at the individual and group
levels, and that they develop abilities to analyse possible effects of different means of communication.

*Risk management in the community*
The course begins by describing structures and hierarchies of societal functions and responsibilities. The course also describes the roles of regional and local actors in risk management, for example, the county council, municipality, industry, organisation and individuals. Moreover, the course covers the principles regulating the development and implementation of community action plans for increased safety. Special emphasis will be given to conditions and forms for intersectoral organisation and to the importance of reinforcing intersectoral and cross-sectoral efforts at the local level.

*Quantitative method*
The theory, methods and tools of the categorisation of observations (data) and the analysis of correlations, patterns, explanation and significance are treated. Data and methodology are examined and assessed depending on the required degree of support, reliability and relevance that the students’ research questions give rise to.

*Degree project 2*
The project is carried out in the latter part of term 4. The project is individually planned, carried out and presented in the written form, and firmly related to risk management theory. It can constitute a separately completed thesis project of 15 ECTS cr. or a thesis project of 30 ECTS cr, which is based on the research plan proposed in the course *Degree project 1*.

**Degree**
Upon completion of the two-year programme (120 ECTS credits), students are awarded a Master of Social Science (120 credits). Major: Societal Risk Management

Upon completion of the one-year programme (60 ECTS credits), students are awarded Master of Social Science (60 credits). Major: Societal Risk Management

**Transfer of Credits**
Students have the right to transfer credits from other universities in Sweden or abroad. The recognition of previous education as credit for part of a course is subject to approval by the examiner. The recognition of previous education as credit for an entire course is subject to approval by the Office for Student Services.

**Additional Information**
Local regulations for the Bachelor’s and Master’s level at Karlstad University stipulate the rights and obligations of staff and students.
Programme Study Plan: Master programme Societal Risk Management 120 ECTS cr. Effective from 2012 autumn admission.

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<thead>
<tr>
<th>First year</th>
<th>V 35</th>
<th>V 45</th>
<th>V 4</th>
<th>V 14</th>
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<td>Quantitative method (7,5 hp)</td>
<td>Degree project II, in Societal Risk Management (15 hp)</td>
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<tr>
<td>Risk Management; Governance and management (7,5 hp)</td>
<td>Sustainable development in a safety perspective (7,5 hp)</td>
<td>Risk management in the community (7,5 hp)</td>
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Attachment 1

National Objectives of the General Degree of Master (One Year)
(Higher Education Ordinance, SFS 1993:100, System of Qualifications)

Knowledge and understanding
To earn a Master’s degree (one year), students should be able to demonstrate
- knowledge and understanding of the main subject area, including general knowledge and a more in-depth understanding of selected areas,
- insight into current research and development, and
- in-depth understanding of relevant research methods.

Skills and abilities
To earn a Master’s degree (one year), students should be able to demonstrate
- the ability to integrate knowledge and to analyse, assess and deal with complex phenomena, problems and situations, even when having access only to a limited amount of background information,
- the ability to work independently in identifying and formulating problems, and the ability to plan and carry out tasks and assignments within a given deadline,
- the ability to communicate and interact with various groups in presenting and discussing information and conclusions both orally and in writing, and
- the skills required to take active part in research and development or to work in other areas of the chosen field.

Judgement and approach
To earn a Master’s degree (one year), students should be able to demonstrate
- the ability to make appropriate judgements in the main field of study with respect to relevant scientific, societal and ethical aspects, and an awareness of ethical issues in research and development,
- insight into the possibilities and limitations of scientific research, the role of science in society, and our responsibility for its use,
- the ability to identify their own need for further knowledge and training.

National Objectives of the General Degree of Master (Two Years)
(Higher Education Ordinance, SFS 1993:100, System of Qualifications)

Knowledge and understanding
To earn a Master’s degree (two years), students should be able to demonstrate
- knowledge and understanding of the main subject area, including broad knowledge as well as a considerable in-depth understanding of selected areas, together with further insight into current research and development, and
- further understanding of relevant research methods in the field.

Skills and abilities
To earn a Master’s degree (two years), students should be able to demonstrate
• ability to critically and systematically integrate knowledge and to analyse, assess and deal with complex phenomena, problems and situations, even with limited information,
• ability to work independently in identifying and formulating problems, and the ability to plan and carry out and evaluate qualified tasks using adequate methods within a given deadline, thus contributing to knowledge development,
• skills in communicating with various groups in a dialogue when presenting and discussing information, argument and conclusions both orally and in writing, nationally and internationally and
• the skills required to take active part in research and development or to work in other areas of the chosen field.

Judgement and approach
To earn a Master’s degree (two years), students should be able to demonstrate
• the ability to make appropriate judgements in the main field of study with respect to relevant scientific, societal and ethical aspects, and an awareness of ethical issues in research and development,
• insight into the potential and limitations of scientific research, the role of science in society, and our responsibility for its use,
• the ability to identify their own need for further knowledge and take responsibility for their own knowledge development.