



Knowledge FOr Resilient soCiEty

PhD programmes at Lund University

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PhD programmes

- Third cycle studies in Fire Safety (Division of FSE)
- Third cycle studies in System Safety
 (Division of Risk Management and System Safety)







General Information

	FSE	SS
Since	1988	2005
Status of students	Mostly employed, some industrial PhD-students (employed at a company) and a few scholarship students	
Duration	4 year full time studies or 5 years with 20 % compulsory department duties (e.g. teaching)	
Credits	240 credits (courses: at least 60 credits; thesis: at least 120 credits)	
Thesis type	Paper + kappa (this is a common practice but not a formal requirement)	







Admission requirements

General requirements

- 1. Student must have been awarded a second-cycle qualification (i.e. Master level), or
- 2. has satisfied the requirements for courses comprising at least 240 credits of which at least 60 credits were awarded in the second cycle (i.e. Master level), or
- 3. has acquired substantially equivalent knowledge in some other way in Sweden or abroad

Specific requirements

- 1. a second-cycle degree project of at least 30 credits within the field, or
- 2. a BSc in Fire Protection Engineering amounting to 210 credits.







Teaching/Learning

- PhD Courses
- Supervision (planned formal meetings (2/year))
- Ad-hoc meetings when PhD-student requires it
- Attendance at national and international conferences (writing abstracts, papers and presenting the work)
- Paper writing for publication in international scientific journals
- Placement at another international research institution (not formally required but recommended).







Student training

Not a formal training programme, but there are Ph.D. courses which cover some of the main common Ph.D. subjects

(e.g. Introduction to Teaching and Learning in Higher Education, Ethics, Experimental methods, Scientific Information Management, Academic Writing, Theory of Science and Methodology, etc.)

Subject-related courses







Examination method

- Public viva.
- Each PhD-course has an examiner
- PhD thesis and public defence of PhD-thesis is examined by an examination committee (three persons with recognized competence of which two come from other universities than Lund University).
- Individual papers are reviewed in the regular journal reviewing process; however, formally this is not part of the examination (internal routines for this).







PhD student selection

National and International recruitment

- Local channels of dissemination of PhD openings (i.e. LU website, dissemination of openings on site at LU with students of our own programmes)
- Social Media, Newsletters
- Advertisement through International Associations channels (e.g. IAFSS, etc.) for enhancing international recruitment
- Gender equality (following LU recommendations)







Laboratories

- Two fire labs with state-of-the art fire testing equipment (e.g. Cone Calorimeter, etc.)
- Computer labs
- High-Performance computing capabilities (LUNARC) for simulations
- Virtual Reality Labs
- Cooperation with large fire testing facilities (RISE in Borås)







Research topics (selected)

Fire Safety Engineering

A Model for Heat and Mass Transfer in Timber Structures During Fire

Modeling Fire Growth on Combustible Lining Materials in Enclosures

Simulation of Combustion and Fire-Induced Flows in Enclosures

Experimental and Theoretical Study of Rack Storage Fires

Evaluation and Mitigation of Industrial Fire Hazards

Uncertainty and Risk Analysis in Fire Safety Engineering

Numerical Modeling of Turbulent Combustion and Flame Spread

Demand for Extinguishing Media in manual Fire Fighting

Decision Analysis in Fire Safety Engineering

Flamelet modelling of soot formation in diffusion flames

On the Characteristics of Fires in Tunnels

Determination of Material Properties for Fire Modelling

Experimental measurements of water mist systems and implications for modelling in CFD

Exit Choice in Fire Emergencies

Fire Dynamics of Multi-Room Compartment Fires

Rail Tunnel Evacuation







Research topics (selected)

System Safety

Interorganizational Collaboration In Crisis Response Management

Improving Conditions for Successful Risk Communication in Disaster Risk Management Systems

Development of societal resilience through multi-organizational response preparedness

Connecting Dots: on the Aggregation of Risk Information

Capacity development from different perspectives – in the context of disaster risk reduction

Modelling of critical infrastructure dependencies

Performance evaluation in the context of multi-organizational crisis response

Disaster Exercise Evaluation: improving preparedness?

Command and control in multi-organizational crisis response

Bridging the floods - Social learning to integrate water-environment risks and flood risks for resilient urban water services

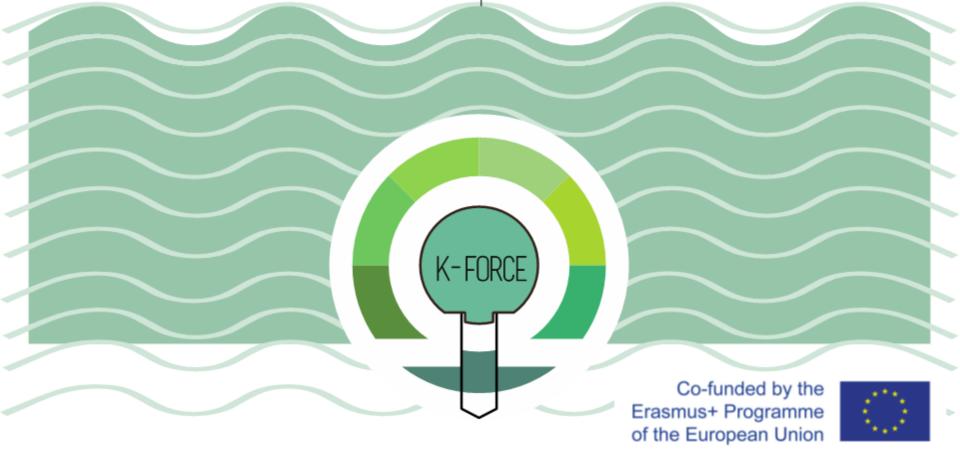
A risk management model for explosive in Sweden

Risk assessment in dynamic decision making

Risk governance and critical infrastructure protection







Thank you for your attention

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