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Knowledge **FOR** Resilient soCiEtY

**PhD programmes at
Lund University**

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LUND UNIVERSITY

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PhD programmes at LU on FSE and DRM&SS

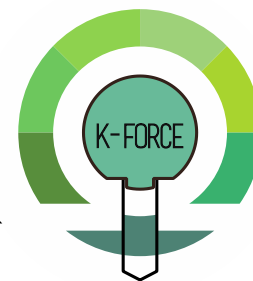


PhD programmes

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



PhD programmes at LU on FSE and DRM&SS



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)	



PhD programmes at LU on FSE and DRM&SS



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).



PhD programmes at LU on FSE and DRM&SS



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)



PhD programmes at LU on FSE and DRM&SS



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)



PhD programmes at LU on FSE and DRM&SS



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



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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





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Thank you
for your attention

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