



Knowledge **FO**r Resilient so**CI**Ety

PhD studies in FSE at Lund University

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LUND UNIVERSITY

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Introduction – PhD Studies



- 4 years period as standard.
- A fifth year is possible if the students perform educational tasks (max 20%)
- Combination of courses and research (min. 60 credits courses – min. 120 research) Total min 240 credits
- One main supervisor and at least one co-supervisor is recommended





- Doctoral thesis may be in the form of a monograph, or a collection of articles and a summary,
- Must be equivalent to at least 80 weeks' full-time work.
- The articles must have a quality required for publication in international journals.



Introduction – PhD Defence



- The thesis is defended at a public viva or "disputation".
- The public defence of the doctoral thesis is a scrutiny of the scientific work presented and the publications included therein by an external examiner (opponent)
- A jury of at least three members gives the final approval



Major research areas



- Fire performance based design of buildings
- Fire modelling: experimental validation and use for FSE
- Fire development
- Human behavior in fire
- Extinguishing systems
- Fire rescue services



Quality and process documentation



- Two major documents to ensure quality:
 - General study plan for each topic
 - Individual study plan for each students
- Higher Education Ordinance (HEO) requires the process which is a national requirements
- Only certain parts are given



General Study Plan - Content



- Subject Description
- Objectives third-cycle studies
- Learning outcomes
- General and specific admission requirements
- Selection of candidates
- Degree requirements
- Course component
- Thesis





- Knowledge and understanding
 - demonstrate broad knowledge and systematic understanding of the research field as well as advanced and up-to-date specialised knowledge in a limited area of this field
 - demonstrate familiarity with research methodology in general and the methods of the specific field of research in particular





- **Competence and skills**
 - demonstrate the capacity for scholarly analysis and synthesis as well to review and assess new and complex phenomena, issues and situations autonomously and critically
 - demonstrate the ability to identify and formulate issues with scholarly precision critically, autonomously and creatively, and to plan and use appropriate methods to undertake research and other qualified tasks within predetermined time frames and to review and evaluate such work





- **Competence and skills**

- demonstrate through a thesis the ability to make a significant contribution to the formation of knowledge through his or her own research
- demonstrate the ability in both national and international contexts to present and discuss research and research findings authoritatively in speech and writing and in dialogue with the academic community and society in general
- demonstrate the ability to identify the need for further knowledge
- demonstrate the capacity to contribute to social development and support the learning of others both through research and education and in some other qualified professional capacity





- Judgement and approach
 - demonstrate intellectual autonomy and disciplinary rectitude as well as the ability to make assessments of research ethics
 - demonstrate specialised insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used



General Study Plan – Courses



- General courses – research methods, ethics, etc.
- Elective courses
 - basic combustion and fluid physics
 - models of fire growth and fire spread
 - models of fire extinguishing
 - models for evacuation in the event of fire
 - human behaviour
 - methods of risk analysis and decision-making



Individual study plan



- Living documents which records all events under the studies.
- Is a way to guarantee quality but also a way to protect the PhD student
- Updated at least once a year through a meeting with supervisors and students but also a check with a independent observers at the division



Individual study plan – Content (main parts) - 1



- Information on student, supervisor, co-supervisors, mentor, local responsible etc.
- Information on admission, planned date of exam
- Funding
- Planned and actual degree of activities
- Outlines of the thesis project



Individual study plan – Content (main parts) - 2



- Information about courses, planned, conducted etc.
- Planned and completed work of thesis and or publications
- Any explanations if the plan is not followed
- Training in Higher education teaching and learning
- Departmental duties



Individual study plan – Content (main parts) - 3



- Linking activities to the learning outcomes – how will they be achieved
- Participation in conferences
- Supervision resources
- Resources (workspace, materials, test facilities)
- Performed risk assessment for the students



Conclusions



- A number of administrative processes are introduced in the general and individual study plan.
- They might feel as administrative but when used in a good way they assure quality, protection of the student and supervisor in case problems arise during the studies.
- Studies in Sweden are longer than in many





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Thank you
for your attention

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