

Course syllabus

# Examensarbete i brandteknik Degree Project in Fire Safety Engineering

VBRM01, 22,5 credits, A (Second Cycle)

Valid for: 2023/24

**Faculty:** Faculty of Engineering, LTH **Decided by:** Faculty Board for Education

**Date of Decision: 2019-04-24** 

### **General Information**

Compulsory for: BI4

#### Aim

The aim of the degree project is to allow the student to develop and demonstrate the knowledge and skills required to work independently as a Fire Engineer.

# Learning outcomes

*Knowledge and understanding*For a passing grade the student must

• demonstrate in-depth knowledge in the problem area chosen within fire engineering or in a specialist area of study.

Competences and skills

For a passing grade the student must

- demonstrate an ability, in an autonomous manner and critical fashion, to
  exploit and develop methods and techniques in fire protection in construction
  engineering, town planning, risk and crisis management or in the emergency
  and rescue services,
- demonstrate an ability from a holistic perspective to identify, formulate and handle issues in an autonomous and creative manner and be able to evaluate various technical solutions to the problems explored in the degree project,
- demonstrate an ability to plan and execute a degree project within given time limits using relevant methods in a manner conducive to engineering practice,

- demonstrate an ability to integrate knowledge previously acquired in key
  qualifying courses in a critical a systematic manner, both during the course of
  the programme of study and during work on the degree project,
- demonstrate an ability to identify relevant sources of information, carry out information searches, evaluate the relevance of this information and use correct conventions of documentation,
- demonstrate an ability to give a clear account of and discuss orally and in writing. his/her findings and the knowledge and arguments on which these are based, and
- demonstrate an ability to place the problems explored in the degree project in the wider context of the discipline.

Judgement and approach

For a passing grade the student must

 demonstrate an ability to assess his/her own degree project and those of other students with due regard to relevant artistic, scientific, social and ethical aspects.

#### **Contents**

The degree project is an independent project. It is to be executed individually or in groups of two.

The degree project comprises:

- a document describing the goals of the degree project
- a written report in either Swedish or English and with a summary in English
- an oral presentation of the degree project at a public seminar at the Faculty of Engineering and
- an oral critical review of another student's degree project at the public seminar where it is presented.

The document describing the goals of the degree project is to be written at an early stage and must be approved by all supervisors and the examiner. It is to include a description of the problem to solve, the disciplinary foundation and proven experience on which the project is to be based, the main sources of information, and the project's expected contribution to the advancement of knowledge. The document is also to include a general description of the approach, choice of method, resource requirements and time needed. The contents of the document are to be gradually integrated in the written report.

The written report is to describe the degree project and its findings. If two students have collaborated on the project, the contribution of each student must be clearly discernible.

The report is to be made available in a state suitable for examination at least two weeks before the seminar. The department is responsible for providing the requisite number of copies of the report. The seminar can be timetabled for a day that is not within term time if the student, supervisor and examiner are in agreement. It is desirable, but not obligatory, that the report is critically examined by a student also presenting a degree project at the seminar. The same report can be critically examined by several co-students.

#### **Examination details**

**Grading scale:** UG - (U,G) - (Fail, Pass)

**Assessment:** Written and oral examination. For a pass on the degree project, the student must have passed all assessed components. The report is a public document. The assessment may not be based on classified information.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

## **Admission**

#### **Admission requirements:**

- Students admitted to the programme from autumn 2019 may commence work on the degree project when he/she has completed at least 150 higher education credits in completed courses that can be counted towards his/her degree.
- Students admitted to the programme until autumn 2018 may commence work on the degree project when he/she has completed at least 150 higher education credits that can be counted towards his/her degree.
- Students admitted to the programme from the autumn 2015 must have completed the following courses successfully: VBRN60 Fire Protection Systems och VBRN70 Fire Safety Evaluation
- Students admitted to the programme until the autumn 2014 must have completed the following courses successfully: VB054 Fire Engineering Risk Evaluation and VBR082 Active Systems.

In order to commence work on the degree project, the student must demonstrate appropriate knowledge in the field of study covered by the project. It is the responsibility of the examiner to ensure that this requirement is satisfied before work on the degree project can begin.

## **Reading list**

• The course literature and other teaching material that is to be used is to be approved by the supervisor with due consideration taken of the nature of the degree project assignment.

### Contact and other information

**Examiner:** The Head of Department appoints one or more Lecturers at Lund University to act as examiner for each subject undertaken as a degree project. This means that all degree projects including those written by exchange students will be examined at Lund University.

**Further information:** One or several supervisors shall be appointed for each degree project. At least one of the supervisors (the principal supervisor) must be employed as a teacher of Lund University. In addition to the principal supervisor, assistant supervisors may be appointed. The supervisors will provide continuous supervision throughout the work on the project and are to ensure that, among other things, it is possible for the student to complete the project within a period of 15 weeks of full-time study. The student can only request supervision for a period of no more than 12 months.

The student is responsible for registering his or her passed degree project in LUP Student Papers. The degree project is then approved in LUP by the department. The department is responsible for filing the report.

More information is available at https://www.student.lth.se/english/masters-students/degree-project/.