



LUNDS UNIVERSITET
Lunds Tekniska Högskola

Course syllabus

Räddningstjänstförlagd ingenjörspraktik Engineering Internship Course at the Rescue Service

VBRG90, 15 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED BI/RH

Date of Decision: 2023-03-24

General Information

Elective for: BI4, RH4, BR4

Language of instruction: The course will be given in Swedish

Aim

The purpose of the course is to give the student knowledge and understanding of the technical, theoretical and practical issues in a municipal rescue service from an engineer's perspective. During the internship, the student will implement previously acquired theoretical and practical knowledge in realistic conditions within the rescue service, which will provide insight into the purpose of their own programme and the need for and understanding of continued studies. The course is to provide an overall understanding of the requirements and skills that are expected within a municipal rescue service that are not of a strictly technical nature, but often directly connected to the professionally active engineer, in other words an understanding of what the programme provides and does not provide. The course also aims to give the student an overall insight into how a rescue service can conduct work on issues such as external analysis, ethics, sustainable development, safety and work environment. During the internship, the student will also develop their ability to act as a contributing staff member.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- describe how previously acquired theoretical and practical knowledge is applied in the rescue service

- demonstrate their ability to tackle an engineering-related problem relating to the rescue service
- independently collect information on the laws and rules that govern the rescue service's work and the section of the law within which a fire safety engineer operates in a municipal rescue service
- independently collect information on how the selected internship host is organised and how work on issues such as external analysis, ethics, sustainable development, safety and work environment is conducted.

Competences and skills

For a passing grade the student must

- describe the fire safety engineer's role in the municipal rescue service
- apply theoretical and practical knowledge in the area
- systematically identify, formulate and analyse complex rescue service-related issues
- plan and carry out duties within given timeframes
- give an account of their conclusions, in writing and orally, and discuss them and the knowledge they are based on, linked to knowledge acquired from previously studied courses in the programme
- demonstrate an ability for independent work, under supervision and with delimited duties
- demonstrate the ability to cooperate within a team

Judgement and approach

For a passing grade the student must

- give an account of their ability to adopt an independent and reflective approach in relation to the rescue service organisation and the stakeholders the student met during the internship
- demonstrate insight into, and describe their need for, further knowledge and propose how, and in what way, their expertise is to be developed
- reflect on and demonstrate insights into the engineer's role in the rescue service
- reflect on and demonstrate insights into the link between education and professional life.

Contents

In terms of content and subject matter, the course is designed in the form of an internship plan in consultation between the student, the supervisor at LTH and the supervisor at the internship host. The internship plan is approved by the examiner.

- About the engineer's professional role: participation in duties, under supervision, that are relevant for engineers in the municipal rescue service
- About the rescue service organisation: which laws and rules govern the rescue service's work
- About the rescue service organisation: the different roles in the rescue service and how these work together
- About the rescue service organisation: how the rescue service can be organised, how work is conducted on external analysis, ethics, sustainable development, safety, work environment and similar
- General engineering skills: written and oral communication, how to be a contributing staff member, e.g. how to cooperate with other professional stakeholders

Examination details

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

Assessment: Written weekly reflections on specific themes. Weekly reflections are submitted to the LTH supervisor during the course at predetermined times. Written internship report: an account of the internship and the duties carried out. Written internship report: one or more examples of what has been carried out within the framework of the advanced, and to some extent independent, duties that the internship host has provided (e.g. analysis in connection with an inspection or investigation, assessment of case/event). Internship duties may not include confidential material. In addition, an attendance certificate from the supervisor at the internship host, stating the scope and orientation of the internship, is to be submitted. An oral seminar, which is planned to take place close to the end of the course.

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.

Parts

Code: 0123. **Name:** Internship, Reflections and Report.

Credits: 10,5. **Grading scale:** UG. **Assessment:** grade of Pass for weekly reflections, internship report, internship duties as well as complete attendance certificate

Code: 0223. **Name:** Seminar.

Credits: 4,5. **Grading scale:** UG. **Assessment:** grade of Pass for seminar participation

Admission

Admission requirements:

- At least 150 approved credits from the compulsory courses in years 1 to 3 of the Fire Safety Engineering programme or the Master of Science in Engineering programme Fire Protection Engineering

The number of participants is limited to: No

Selection: Completed university credits within the programme.

Reading list

- Lag (2003:778) om skydd mot olyckor. 2003.
- Handbok - Innehåll och struktur i kommunernas handlingsprogram enligt lagen om skydd mot olyckor, MSB,.
- Fredrik Hedenius, Martin Persson, Frances Sprei, : Hållbar utveckling – nyanser och tolkningar. Studentlitteratur, ISBN: 978-91-44-16115-0.
- Current action programme from the internship host.
- Course literature and other study resources to be used are decided by the supervisor, taking into consideration the nature of the internship host.

Contact and other information

Course coordinator: Nils Johansson,

Further information: The student finds their own placement at an internship host. The registration is done on a specific registration form that constitutes a three-party contract

between LTH, the student and the internship host. A risk analysis regarding the work environment at the internship host is to be enclosed with the registration. The examiner at LTH approves the internship, which encompasses the placement, the supervisor at the internship host, the internship plan and the internship duties. During the internship period, the student's internship will be conducted under the terms and conditions that prevail at the workplace in question and the student will have defined duties. The student follows the normal working hours at the internship host according to the agreement. The right to supervision applies only during the semester in which the student is admitted. The head of department appoints one or more teaching staff members at Lund University as examiner. The supervisor cannot be an examiner. The student is to enclose the attendance certificate from the supervisor at the internship host. This document is also to show the internship's scope and orientation. The course is offered on a full-time basis during the spring semester, autumn semester and summer. The course begins with an introductory meeting before the student starts the internship period at the internship host. The course corresponds to 10 weeks of full-time study, of which the internship period is to be 8 weeks of full-time internship, i.e. 40 full-time working days. The course is 400 hours of which 320 hours are to be at the internship host. Teaching takes the form of projects at the selected workplace. Attendance is compulsory during the internship period. Participation in the introductory meeting and final seminar is compulsory. During the entire course, including the period at the internship host, time is to be allocated for weekly reflections and internship report. In the event of illness during the internship period, the examiner is to be informed. The examiner determines if the period of absence is reasonable in proportion to the duration of the course. The examiner is also to be informed in the event of other unforeseen events at the rescue service. The examiner determines if it is possible for the student to complete the course under the new circumstances.