

Master's Programme in Fire Safety Technology

- Programme code: TABRT
- Scope: 120 credits
- Cycle: Second
- Approved by: Klas Ernard Borges
- Validity: 2022/2023
- Date of approval: 22 February 2022

In addition to the syllabus, general regulations and information for the Faculty of Engineering apply to this programme.

1 Aim and outcomes

1.1 Aim

The Programme is an Erasmus+ Joint Programme carried out by Lund University, Ghent University, The University of Edinburgh, and Polytechnic University of Catalonia in Barcelona.

The major educational objectives of the Programme are for IMFSE graduates to:

- Be able to critically evaluate and construct original, performance-based, fire safe designs.
- Understand the complexity and evolution of design tools, and the limitations of current understanding.
- Understand the current research trends and be able to subsequently perform scientific (PhD level) research in the domain of FSE.
- Gain an awareness of the professional context and the current challenges in FSE.

- Be able to make assessments in the field of FSE, taking into account relevant scientific, social and ethical aspects, and demonstrate an awareness of ethical aspects of research and development.
- Be able to clearly present and discuss conclusions and the knowledge and arguments behind them, in dialogue with different groups, orally and in writing, in national and international contexts.

1.2 Outcomes for a Degree of Master of Science (120 credits)

(Higher Education Ordinance 1993:100)

Knowledge and understanding

For a Degree of Master of Science (120 credits) the student shall

- demonstrate knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrate specialised methodological knowledge in the main field of study.

Competence and skills

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information,
- demonstrate the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake advanced tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work,
- demonstrate the ability in speech and writing both nationally and internationally to report clearly and discuss his or her

conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and

- demonstrate the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

Judgement and approach

For a Degree of Master of Science (120 credits) the student shall

- demonstrate the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical issues and also to demonstrate awareness of ethical aspects of research and development work,
- demonstrate insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and
- demonstrate the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

1.3 Further studies

Students who have achieved a second cycle exam (Master of Science) will have general entry requirements for third cycle educations.

2 Programme structure

The program includes 90 credits compulsory courses and a degree project (30 credits).

2.1 First semester - Ghent or Edinburgh

For information about the curriculum: www.imfse.be

2.2 Second semester - Lund

The courses are listed in the timetable.

2.3 Third semester - Ghent or Edinburgh

For information about the curriculum: www.imfse.be

2.4 Fourth semester

The last semester consists of the degree project (30 credits) conducted in Ghent, Edinburgh, Lund or Barcelona or at one of the associated universities; University of Queensland Australia, ETH Zürich Switzerland, University of Maryland USA, University of Science and Technology of China.

3 Specific admission requirements

Admission to the program is made by Ghent University. See www.imfse.ugent.be.

3.1 Admission requirements

To be eligible for the Master programme in Fire Safety Technology applicants are required to have Bachelor of Science in Engineering. English 6.

4 Degree

4.1 Degree requirements

For a Degree of Master of Science (120 credits) students must complete courses comprising 120 credits, including a degree project worth 30 credits. 90 credits must be second-cycle credits, including the degree project.

4.1.1 Degree project

The degree projects included in the programme are listed in the timetable.

4.2 Degree and degree certificate

When students have completed the degree requirements, they are entitled to apply for a certificate of a Degree of a Master of Science (120 credits). Main Field of Study: Fire Safety Technology.