INTERNATIONAL MASTER OF SCIENCE IN FIRE SAFETY ENGINEERING

PROGRAMME JOINTLY OFFERED BY GHENT UNIVERSITY, LUND UNIVERSITY, THE UNIVERSITY OF EDINBURGH

120 ECTS CREDITS - LANGUAGE: ENGLISH

WHAT

The Master of Science is an ideal specialisation programme for holders of a bachelor's or master's degree in (electro-) mechanical or civil engineering. There is a strong European tendency to move from prescriptive towards performance-based fire safety designs. This goes hand in hand with a strong need for advanced knowledge in the multidisciplinary field of Fire Safety Engineering (FSE). The students will be well prepared for professional activities within this evolving field of FSE, as they will obtain a broad high level knowledge as a benefit from the joint expertise of three partners all of which have a leading role in FSE research and education in Europe. The IMFSE students will learn how to:

- master the scientific knowledge to understand, critically evaluate and analyse the phenomenon fire and its consequences;
- critically evaluate and judge risk with respect to fire and explosions,
- compute and design different types of fire protection concerning structures, passive fire protection, detection and suppression;
- judge the human behaviour in case of fire;
- communicate and collaborate with colleagues within the multidisciplinary domain of Fire Safety Engineering.

STRUCTURE

The two-year course consists of four semesters of 30 credits each. The mobility structure, with possible change in study location after each semester, gives the students the opportunity to gain from the strengths and expertise of each of the three universities.
The first semester, covering basic topics in fire safety engineering, is taught in Ghent or Edinburgh. All students spend the second semester in Lund, with emphasis on enclosure fire dynamics, risk analysis and human behaviour. The third semester is again taught in Ghent (for general FSE) or Edinburgh (with focus on fire and structures engineering in the context of FSE). The fourth semester is devoted to the master's dissertation, hosted by one or more of the seven universities (the three full partners and the four associated partners).

Master's Dissertation

The master's dissertation is a requirement for every candidate to obtain a master's degree and is supervised by at least one of the three partner universities. It consists of a critical analysis of the topic, formulated into an original piece of research work. It aims to develop and strengthen the research capacity skills of the students. The student defines his/her own topic or selects one from a topic list.

LABOUR MARKET

The masters can find a job as fire safety engineer:

- in fire protection consultancy companies;
- in design bureaus for structural stability and/or technical equipment of buildings;
- in architect bureaus;
- in fire prevention services of larger cities;
- as responsible person for fire prevention in industry;
- in prevention departments of fire brigades;
- in fire protection equipment industry;
- as fire experts in insurance companies;
- as fire experts in governmental agencies;
- in standard testing laboratories;
- in environmental impact assessment consultancies;
- in health and safety organisations;
- in research and education institutes.

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TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

1 **Na onderzoek van de bekwaamheid van de student om de opleiding te volgen:**
- Een diploma van een bacheloropleiding in het academisch onderwijs
- Een diploma van een opleiding 'Bachelor of Science in de ingenieurswetenschappen' (met inbegrip van 'architectuur')

ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

Information on admission requirements and the administrative procedure for admission to this Erasmus+ study programme, can be found on the following page: https://imfse.be/.

Additional information:
Bachelors or Masters in: architecture, civil engineering, electrical engineering, electromechanical engineering, chemical engineering, engineering physics, materials science, urbanism and spatial planning.
Other degrees on the basis of a study of individual skills (e. g. fire safety consultants, fire prevention officers, fire brigade officers, building designers, building services engineers, architectural practitioners).

LANGUAGE REQUIREMENTS

Language requirements Dutch: no language requirements

Language requirements for this study programme differ from the required standard level for English taught study programmes as specified in the Ghent University Education and Examination Code:
English: IELTS Academic module 6.5 (with 6.0 in each section) / TOEFL IBT: 92 (with at least 20 in each section) / Cambridge-ESOL: Certificate in Advanced English (CAE) Grade B - Pearson PTE (Academic) test, with an overall minimum score of 62 (with a minimum of 56 in each part, and a minimum of 61 for writing)
- Cambridge Certificate of Proficiency in English (CPE), grade C (CAE) - Trinity ISE II Certificate with 'distinctions' in each of four parts

See: http://www.ugent.be/en/education/degree/practical/requirement/languagerequirements/proficiency/remarks.htm

PRACTICAL INFORMATION

Study programme
studiekiezer.ugent.be/international-master-of-science-in-fire-safety-engineering-en/programma

Information sessions
Graduation Fair
afstudeerbeurs.gent/en/students/further-studies

Enrolling institution
Ghent University, Lund University, The University of Edinburgh

Information on enrolment at Ghent University.

Application Deadline (for International degree students)
The Erasmus+ master's programmes have a specific application procedure.

Tuition fee
More information is to be found on: www.ugent.be/tuitionfee

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