POSTGRADUATE STUDIES IN FIRE SAFETY ENGINEERING

60 ECTS CREDITS - LANGUAGE: ENGLISH

WHAT

We can engineer the built environment to limit the likelihood of catastrophic fires occurring. The shift from a prescriptive approach towards performance-based fire safety designs creates a growing demand for advanced expertise in the multidisciplinary field of fire safety engineering. Now, climate change and the global transition toward more sustainable ways of living are increasing fire risks, making fire safety engineering more essential than ever.
Fire safety engineering is the application of engineering principles, rules and expert judgement based on a scientific understanding of fire. Fire engineers study fire and its phenomena as well as its effects on the built environment and human behaviour, to identify and quantify the risks. By implementing the principles of performance-based design, they optimize fire protection measures to safeguard life, the environment, property, and cultural heritage.
Fire safety engineering students will learn:

- the nature and characteristics of fire and its spread
- how structures, materials and people behave in the event of a fire
- how to evaluate, quantify and mitigate fire risks
- how to design fire detection, ventilation and suppression systems
- how building design interacts with firefighting and rescue operations
- how to analyse fire incidents and which lessons to draw from them

Find out more about Fire Safety Engineering in our FSE Q&A series.

STRUCTURE

The Postgraduate Studies in Fire Safety Engineering is a two-year, English-taught programme designed for students with an engineering background. As a part-time programme (30 credits per year), it offers professionals the opportunity to combine work and study. Courses are scheduled as much as possible on the same days, so course attendance can be scheduled efficiently. Participants can decide to spread the completion of the programme over more than two years as well. The programme consists of 11 general courses, 9 credits of elective courses and a dissertation project.

LABOUR MARKET

With this degree the participant gains valuable knowledge to work in the field of fire safety consultancy, fire prevention, fire brigading, building design, building services engineering and architecture.

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TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

1 **Rechtstreeks:**

a opleidingen nieuwe structuur:
- Master in de ingenieurswetenschappen: architectuur
- Master in de ingenieurswetenschappen: bouwkunde
- Master in de ingenieurswetenschappen: chemische technologie
- Master in de ingenieurswetenschappen: elektrotechniek
- Master in de ingenieurswetenschappen: materiaalkunde
- Master in de ingenieurswetenschappen: toegepaste natuurkunde
- Master in de ingenieurswetenschappen: werktuigkunde-elektrotechniek
- Master of Chemical Engineering
- Master of Civil Engineering
- Master of Electrical Engineering
- Master of Electromechanical Engineering
- Master of Engineering Physics
- Master of Sustainable Materials Engineering
- Master of Textile Engineering

b opleidingen oude structuur:
- Burgerlijk bouwkundig ingenieur
- Burgerlijk elektrotechnisch ingenieur
- Burgerlijk ingenieur-architect
- Burgerlijk materiaalkundig ingenieur
- Burgerlijk natuurkundig ingenieur
- Burgerlijk scheikundig ingenieur
- Burgerlijk textielingenieur
- Burgerlijk werktuigkundig-elektrotechnisch ingenieur

2 **Na onderzoek van de bekwaamheid van de student om de opleiding te volgen:**

a opleidingen nieuwe structuur:
- Een diploma van een opleiding 'Master of Bioscience Engineering' leidend tot de titel van 'bio-ingenieur'
- Een diploma van een opleiding 'Master of Science in de bio-ingenieurswetenschappen' leidend tot de titel van 'bio-ingenieur'
- Een diploma van een opleiding 'Master of Science in de industriële wetenschappen'
- Een diploma van een opleiding 'Master of Science in de ingenieurswetenschappen' leidend tot de titel van 'burgerlijk ingenieur' (met uitzondering van architectuur)
- Een diploma van een opleiding 'Master of Science in Engineering' leidend tot de titel van 'burgerlijk ingenieur' (met uitzondering van Architecture)
- Master in de architectuur
- Master of Architectural Engineering

b opleidingen oude structuur:
- Architect
- Een diploma van 'Burgerlijk Ingenieur' (met uitzondering van 'Burgerlijk Ingenieur-Architect')
- Een diploma van 'Industrieel Ingenieur'

ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

Bachelors or Masters in: architecture, civil engineering, electrical engineering, electromechanical engineering, chemical engineering, engineering physics, materials science, industrial engineering and operations research, 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).

Information on admission requirements and the administrative procedure for admission on the basis of a diploma obtained abroad, can be found on the following page: www.ugent.be/prospect/en/administration/enrolment-or-registration.

LANGUAGE REQUIREMENTS

Language requirements	Dutch: no language requirements English: CEFR level B2

PRACTICAL INFORMATION

Study programme

studiekiezer.ugent.be/postgraduate-studies-in-fire-safety-engineering-en/programma

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FACULTY OF ENGINEERING AND ARCHITECTURE

2026-27

Information sessions

EVOLV

evolv.gent/en/students/further-studies

Enrolling institution

Information on enrolment at Ghent University.

Application Deadline (for International degree students)

Before the application can be started up, you need to be pre-academically selected by the programme coordinator.

Tuition fee

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

Contact
MFSE office
09 264 89 03
mfse@ugent.be

Learning path counsellor
studietrajectir.ea@ugent.be

Contact (for international degree students)
International Relations Officer
+32 9 264 36 99
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www.ugent.be/ea/nl/faculteit/onderwijsondersteuning/oplir/fse

GHENT UNIVERSITY

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