



## EMFIRE11.1 General Courses

*Subscribe to 90 credit units from no less than 2 and no more than 3 modules from the following list. Subject to approval by the faculty. In accordance with the mobility scheme of the student.*

### EMFIRE11.1.1 General Courses Ghent University

*Subscribe to no less than 30 and no more than 60 credit units from the following list. Subject to approval by the faculty.*

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Explosions and Industrial Fire Safety	Filip Verplaetsen TW14	6		1	1		45	180
2	Fire Dynamics	Tarek Beji TW14	6		1	1		60	180
3	Fire Research Seminar	Bart Merci TW14	3		1	1		30	90
4	Thermodynamics, Heat and Mass Transfer	Georgios Maragkos TW14	6		1	1		60	180
5	Material Behaviour at Ambient and Elevated Temperatures	Bart Merci TW14	3		1	1		15	90
6	Active Fire Protection I: Detection and Suppression	Christian Gryspeert TW14	6		2	1		60	180
7	Active Fire Protection II: Smoke and Heat Control	Bart Merci TW14	6		2	1		60	180
8	Fire Safety and Legislation	Jan De Saedeleer TW14	3		2	1		15	90
9	Passive Fire Protection	Emmanuel Annerel TW14	3		2	1		30	90
10	Performance-Based Design	Patrick van Hees TW14	6		2	1		30	180

### EMFIRE11.1.1.1 In-depth Structural Engineering Elective Courses Ghent University

*Subscribe to no less than 3 and no more than 9 credit units from the following list. Subject to approval by the faculty.*

*Each student takes the course Design for Structural Fire Resistance (E051512), either in year 1 or in year 2.*

*Students without the prerequisite structural/civil engineering background take Analysis of Structures (E051511) in year 1 and Design for Structural Fire Resistance (E051512) in year 2. They can also choose Applications of Advanced Structural Fire Engineering (E051620) as an extra elective in year 2.*

*Students with the necessary initial competences choose Design for Structural Fire Resistance (E051512) in year 1 and subscribe to Applications of Advanced Structural Fire Engineering (E051620) in year 2.*

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Analysis of Structures	Ruben Van Coile TW14	3		1	1		30	90
2	Design for Structural Fire Resistance	Emmanuel Annerel TW14	3			1		30	90
3	Applications of Advanced Structural Fire Engineering	Ruben Van Coile TW14	3		2	1		30	90

### EMFIRE11.1.1.2 Broadening Elective Courses Ghent University

*Subscribe to no more than 3 credit units from the following list. Subject to approval by the faculty.*

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Introduction to Entrepreneurship	Petra Andries EB23	3			1		15	90
2	Turbomachines	Joris Degroote TW08	6			1		60	180
3	Modelling of Turbulence and Combustion	Bart Merci TW14	3			1		15	90
4	CFD for Fire Safety Engineering	Tarek Beji TW14	3			1		30	90
5	FSE Based Firefighting	Karel Lambert TW14	3			1		22.5	90
6	Data-Driven Management of Fire Incidents	Steven Verstockt TW06	3			1		30	90

## EMFIRE11.1.2 General Courses The University of Edinburgh

Subscribe to no less than 30 and no more than 60 credit units from the following list. Subject to approval by the faculty.

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Fire Science and Fire Dynamics	Ricky Carvel EDINBU01	9		1		1	33	270
2	Fire Safety Engineering	Stephen Welch EDINBU01	9		1		1	22	270
3	Research Methods for Engineers	Antonis Giannopoulos EDINBU01	6		1		1	22	180
4	Structural Mechanics	Luke Bisby EDINBU01	6		1		1	22	180
5	Finite Element Analysis for Solids	Pankaj Pankaj EDINBU01	6		2		1	41	180
6	Fire Science Laboratory	Stephen Welch EDINBU01	6		2		1	66	180
7	Fire Investigation and Failure Analysis	Rory Hadden EDINBU01	6		2		1	33	180
8	Structural Design for Fire	Angus Law EDINBU01	6		2		1	22	180
9	Fire Safety, Engineering and Society	Graham Spinardi EDINBU01	6		2		1	33	180

## EMFIRE11.1.3 General Courses Lund University

Subscribe to 30 credit units from the following list. Subject to approval by the faculty.

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Risk Assessment	Håkan Frantzich LUND01	8		1		2	74	240
2	Advanced Fire Dynamics	Nils Johansson LUND01	9		1		2	50	270
3	Human Behaviour in Fire	Enrico Ronchi LUND01	8		1		2	48	240
4	Simulation of Fires in Enclosures	Jonathan Wahlqvist LUND01	5		1		2	25	150

## EMFIRE11.2 Master's Dissertation

Subscribe to 30 credit units from the following list. Subject to approval by the faculty.

The student can take the Master's Dissertation at one of the partner universities, in accordance with his/her mobility scheme.

No.	Course name	Lecturer (dept.)	CRDT	Ref	MT1	MT2	Semester	Contact	Study
1	Master's Dissertation		30		2		2	75	900

### Teaching languages

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the course name, using the following ISO codes:

bg: Bulgarian    de: German    es: Spanish    ja: Japanese    pl: Polish    sh: Croatian/Serbian    zh: Chinese  
cs: Czech    el: Greek    fr: French    nl: Dutch    pt: Portuguese    sl: Slovene  
da: Danish    en: English    it: Italian    no: Norwegian    ru: Russian    sv: Swedish

### Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2.

When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.

When a semester is shown in brackets, the course is not offered this year in the specific offering.

The offering frequency and first year of offering are indicated by the following codes:

a: bi-annually    c: annually, from 2022-2023    f: annually, from 2023-2024    i: annually, from 2024-2025  
b: tri-annually    d: bi-annually, from 2022-2023    g: bi-annually, from 2023-2024    j: bi-annually, from 2024-2025  
e: tri-annually, from 2022-2023    h: tri-annually, from 2023-2024    k: tri-annually, from 2024-2025