

1st Level Master in

Fire Safety Engineering



At a glance

ECTS credits: 60
Duration of the course: 1 year (starting from September 2022 to September 2023)
Courses will be taught in: Italian and English
Places available: minimum of 23 and maximum of 35
Campus: Bozen-Bolzano
Tuition fees: 3.500 € per year (+ 151.50 € provincial tax for the right to study)

Description

In a scenario of strong renewal of the building stock, fire safety is one of the most relevant and at the same time one of the most challenging areas of activity in the coming years. The new era in the construction sector, characterised by an increasing drive towards renovation, by building models developed in height and with complex geometries, and by the development and use of new materials with a reduced environmental impact, makes it important to develop and disseminate specific competences according to the different requirements regarding fire design, risk management, escape analysis, and the behaviour of materials when subjected to high temperatures.

It is not only a **matter of ensuring and managing the safety of building occupants** in the event of a fire, but also of **managing the fire risk, minimising the time out of service and facilitating the restoration of the building structure** following a catastrophic event such as a fire (post-fire serviceability, business continuity, and fire resilience). It is important to focus on prevention to reduce the risk and increase the sensitivity of all the actors involved in the life cycle of buildings and the processes underlying them.

In this context, this programme aims to offer the advanced and interdisciplinary preparation indispensable for the integrated management of fire safety.

It is aimed at candidates awaiting employment or already employed as:

- freelance professionals and employees of design, consultancy and service firms;
- employees of companies active in the construction, plant engineering and building materials sector;
- employees of the public administration or research institutes and centres;

and in general to all those who are interested in increasing specific and operational professional skills, on the issues of fire risk prevention, mitigation and management.

Particular attention will be paid to **calculation and simulation methods, the most advanced active and passive prevention systems**, as well as **integrated design and timber building aspects**.

The participants will be able to develop optional traineeship activities in public bodies, companies and/or private firms with proven experience in fire safety issues.

The possibility of recognition of the 120-hour training course within the programme for registration in the Ministry of the Interior's lists of Fire Protection Professionals (Legislative Decree 139/06), as well as for the issuing of professional training credits, is currently being defined.

Structure

The master aims to complete the first-level university education by focusing the **preparation of technicians on the problems and aspects typical of fire engineering**. In particular, the training objectives are those relating to the **four areas of interest typical of fire engineering, i.e., fire science, human behaviour and evacuation, fire protection systems and fire protection analysis**. To these are added legislation and regulations and correct building design, in terms of prevention and not only reaction to fire.

The training offer is articulated on a study path of 1500 hours in total, of which:

- 100 hours of classroom teaching
- 300 hours of distance learning
- 180 hours of guided practice in presence (not in the classroom)
- 320 hours of integrated project
- 600 hours of individual study

The integrated project activity consists of the in-depth analysis of a case study proposed by the lecturers, students or companies in the sector, agreed in advance with the course council.

Students will be divided into groups according to the criterion of complementarity of skills and will tackle an in-depth design task. Part of the project hours will be spent in the classroom and will take the form of case study visits, project finalisation meetings, organised visits to workshops, etc.).

The final paper consists of a presentation of the work carried out in the integrated project activity with particular focus on the activities carried out by the individual candidate.

Lessons

The calendar is designed for working people, facilitating the reconciliation of study and work. Lessons will take place approximately from **September 2022 to July 2023** with the exception of break periods due to public holidays.

Classes will be concentrated on two days of the week, preferably **Friday afternoon 14:00-18:00 and Saturday 09:00-13:00 and 14:00-18:00**.

To obtain the title, a **compulsory attendance of 70% of the planned activities is required**. This percentage must be complied with for each didactic delivery method. Therefore, attendance is envisaged for ten "weekends", eight of which will be devoted to lectures, one to an integrated project/stage and one to discussion of the final paper.

Changes may be made to the teaching calendar due to justified organisational requirements. Any changes to the teaching calendar will in any case be agreed with students and lecturers..

Study Plan - 1st Level Master in Fire Safety Engineering

- 7 CP Fire Science (Heat Transfer - Fire Chemistry - Fire Dynamics)
 - Heat Transfer and Fire Chemistry
 - Fire Dynamics in Enclosures
- 7 CP Human Behavior and Physiological Response to Fire and Egress and Life Safety Design Concepts
 - Human Behavior in Fire
 - Evacuation Analysis
- 4 CP Explosions and Industrial Fire Safety
- 6 CP Active Fire protection Systems
 - Fire Detection and Fire Alarm
 - Fire Control and Suppression
 - Smoke and Heat Ventilation
- 6 CP Structural Fire Protection and Passive Fire protection Systems
 - Structural Behaviour of Elements Exposed to Fire
 - Passive Fire Protection Solutions
- 5 CP Numerical Methods and Computer Fire and Smoke Modeling
- 5 CP Risk Analysis and Management
- 3 CP Building design concepts (Materials and Systems, Building performance and behavior)
- 3 CP Building and Fire Regulations & Standards
- 14 CP Integrated project/stage

Career Opportunities

The programme aims to train fire protection engineering professionals with the possibility of self-employment, as part of the liberal professions, as consultants and experts in fire protection, or employment in companies that produce systems and components or provide consultancy in the same field, or finally in the public administration at the authorities and offices responsible for the subject.



1st Level Master in Fire Safety Engineering

Application and Admission

You can find all you need to know in order to apply and gain admission to this study programme by browsing through the information below.

Deadlines

Application: 26/04/2022 - 18/07/2022 (by 12 noon)

Admission interview: in the period from 20 to 27 July (interviews will be held online)

Publication of the ranking lists: by 29/07/2022

Enrollment: by 22/08/2022 (12 noon)

Start of lectures: autumn 2022

With a condition: activated if the maximum number of enrolments is not reached.

Application: from 22/08 to 09/09/2022 (12 noon)

Admission interview: 15 and 16 September (interviews will be held online)

Publication of ranking list: by 22/09/2022

Enrolment: by 30/09/2022 (by 12 noon)

Start of Lectures: autumn 2022

Places available

The minimum number of enrolled students required for the master to be activated is 23 and the maximum number is 35.

Entry requirements

Applicants with a university degree or other equivalent qualification in agronomy, forestry sciences, engineering, architecture, chemistry and physics or a professional degree for graduate agro-technicians, graduate surveyors, graduate agricultural surveyors, graduate industrial surveyors may be admitted.

However, the council of the master may also accept students with different degrees if they can demonstrate equivalent work experience.

Graduates from foreign universities may also take part if the degree obtained is evaluated as equivalent for the sole purpose of admission to the programme by the Council.

Online Application

Your application must be submitted online through the Application Portal. The deadlines are indicated in the “Deadlines” section.

- You need to create an account and upload a valid ID card or passport (front/back). Please note: if your document is invalid, incomplete or unreadable, you will be excluded from the admission procedure;
- Fill in the online form and upload the attachments listed under “Admission procedure”;
- If you gained your qualification abroad, you must also upload the diploma of your qualification: if you are not yet in possession of the diploma, you’ll need to upload it upon enrolment;
- Complete and submit the online application by the deadline. Once the application has been sent, it cannot be modified. Filled-in forms which have not been sent correctly will not be taken into consideration.

Please note: Mendacious declarations will be criminally prosecuted and will result in the automatic exclusion from the ranking list.

According to current regulations, it is possible to enrol in up to 2 study courses at the same time

Language requirements

Candidates are required to have a good knowledge of Italian and English. Concurrent enrolment in more than one university or in more than one course of study at the same university is prohibited. Dual enrolment in university courses and in academic courses at Higher Institutes of Music and Dance Studies (e.g. Conservatories of Music) is, however, permitted under certain conditions (Ministerial Decree 28/09/2011; further information is available from the Student secretariat).

Students about to graduate are also admitted to the selection process, provided that they are graduated by the enrollment deadline.

You must have a good knowledge of Italian and English. It is not necessary to prove official teaching languages by means of language certificates.

Secure your admission and enrolment

If you have been admitted to more than one study programme, you can secure your admission for a maximum of 2 programmes by paying the designated rate twice. By confirming your place, you renounce admission to the other programmes.

1. Choose the study programme and pay the fees (to secure your admission) in the application portal.

The deadlines are indicated in the “Deadlines” section.

Please note that you do not gain full student status by only paying the tuition fees. This status will only be acquired upon enrolment. If you have secured your admission, there will be no refund of the tuition fees unless you do not pass your secondary school final exam.

The entire fee (including the provincial fees) **will only be refunded** if the Masters programme **will not be activated** due to the insufficient number of enrolled students.

2. Enrol online in the application portal.

The deadlines are indicated in the “Deadlines” section.

Enrolment is recommended as early as possible, so you have the possibility to upload incomplete documents before the deadline.

If you do not meet the enrolment deadline, you will be excluded and the next applicant in the ranking list will be admitted.

Admission with reservation: If you do not have the required academic qualification, you will be given a conditional offer for a study place and you must submit your qualification upon enrolment. If you achieve your qualification after the enrolment deadline, you cannot enrol, and you will lose your place which will be offered to the subsequent applicant in the ranking list.

If you have gained your qualification abroad, you must certify that at the universities in the country where you gained your qualification, you can access to a study programme similar to that chosen at unibz. Therefore you must upload (if not uploaded upon application):

- diploma of your qualification
- official translation of your diploma into Italian (translation is not necessary if it has been issued in German or English)

and one of the following:

- the Diploma supplement, where it must be indicated: that you have achieved at least 180 credit points (ECTS) and that the study title gives access to a Master course. In case of doubt, unibz reserves the right to request the Statement of comparability
- Statement of comparability of your qualification, issued by the Italian Information Centre on Academic Mobility and Equivalence (CIMEA), in the case the Diploma supplement is missing
- declaration of equivalent value of your qualification, issued by the Italian consulate or embassy abroad, as an alternative to the Statement of comparability

Please note that if you do not possess a valid admission qualification, you could be excluded with Rector's decree even after enrolment.

Tuition fees

Tuition fees amount to **€3,500** (+€151.50 for the provincial tax for the right to university study). The amounts are to be paid in a single instalment upon enrolment.

Payment of fees is a prerequisite for enrolment.

If you abandon your studies, renounce them, or are excluded from them, you are not entitled to a refund of the amount paid.

Enrolment fees for each integrated teaching

If you hold one of the qualifications required for admission, you may, as an alternative to the entire master's course, attend individual integrated master's courses for professional training (with possible recognition of professional training credits, CFPs). There is no selection procedure for this purpose.

The maximum number of participants is 10. Study places will be allocated based on the chronological order of arrival of applications (on a 'first come - first served' basis).

You will be able to attend one or more integrated courses, with the relevant modules, and obtain a certificate of attendance if you attend at least 70% of the lectures.

If you pass the relevant examinations, you may also obtain recognition of these examinations should you enrol in subsequent editions of the programme (should they be activated) in the following three years.

Enrolment fees for each integrated teaching are € 400.

To register for individual courses, follow the procedure [here](#).

The Advisory Service provides support regarding your choice of study. In many cases a simple call or a short request is enough to get the relevant information (Tel. +39 0471 012100).

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Opening Hours

Mo, Tue, Wed: 10:00-12:00
Thu: 14:00-16:00

Alternatively, you may call us
throughout the week or book an
online appointment