Master in Energy Engineering 2022/23

At a glance

Degree class: LM-30
ECTS credits: 120 ECTS
Duration of the course: 2 years
Courses will be taught in English
Optional courses will be offered in Italian and German
Places available: 45 EU + 5 Non-EU
Campus: Bozen-Bolzano and Trento
Tuition fees: € 1350 per year
Course description
This course is the result of the increasing spreading of technologies connected with the spread generation and the optimized management of energy and the consequent increasing demand of engineers able to develop and propose efficient and innovative technological solutions to deal with the issues deriving from the progressive depletion of fossil non-renewable sources and the environmental impacts due to the use of energy. The course contents focuses on the issues of energy efficiency in buildings and in productive cycles, the energy production from middle-small sized plants of renewable sources, which have a reduced environmental impact and serve customers in the surrounding areas.

Structure of the course
The professional profile of this master is thought to meet the needs of design skills to be applied to small to medium size energy production plants, in particular to applications of renewable sources combined heat and power in district heating, and to energy efficient industrial systems and buildings. Energy conversion, energy distribution and energy utilisation systems are the main areas of interest.

The environmental sustainability of the energy utilisation and the reduced exploitation of natural resources will be the common basis for the different disciplines involved: electrical engineering, technical physics and building physics, fluid machines, industrial engineering.

Students must obtain at least 120 CP, of which at least 42 CP obtained at the Free University of Bozen-Bolzano and at least 33 CP obtained at the University of Trento. In addition to the mandatory subjects, a range of optional courses will be offered.

Exchange programmes and internships
Currently we offer exchange programmes partner universities all over the world. This study programme does not involve a compulsory internship. You can still choose to carry out a voluntary internship and choose from the long list of Italian and foreign businesses unibz is partnered with.

Double Degree Programmes (Erasmus Mundus)
We offer a Double Degree programme within Erasmus Mundus Joint Master ME3+ in Management and Engineering of Environment and Energy. This master is aligned with the European Green Deal strategy and is an integrated and innovative programme combining Energy and Environmental Process Engineering together with Management, Social Sciences and Information and Communication Technology.

This master is jointly offered with IMT Atlantique (France), BME Budapest University of Technology and Economics (Hungary) and University of Borås (Sweden). At graduation, students obtain both the degree (Laurea Magistrale) awarded by unibz and the corresponding "graduate" degree awarded by IMT Atlantique.

Employment prospects
The course aims at training experts able to deal with the various aspects of planning, implementing and managing the integrated energy systems, such as production plants supplied from renewable sources, low energy consumption buildings and networks able to transport electric and thermic energy from the production site to the local consumption sites.

Energy engineers work as independent professionals or in public and private companies, industries of the energetic and thermo-energetic sectors and public and private utilities. Graduates might be admitted to PhD programmes in the field.

Well prepared and ready for the job market. On the website of AlmaLaurea you can check statistical data about graduates’ satisfaction and their employability.
Master in
Energy Engineering

2022/23
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 and important dates

Early Bird Application
Application: 01/03 - 28/04/2022 (by noon local time)
Language exams: 17 - 18/03/2022 (registrations 1 - 10/03/2022) and 13 - 14 and 19 - 21/04/2022 (registrations 24/03 - 05/04/2022)
Admission procedure and publication of ranking lists: by 17/05/2022
Payment of the 1st instalment of the tuition fees: by 27/05/2022 (by noon local time)
Enrolment: 13/07 - 28/10/2022 (by noon local time)

Late Application (only for EU citizens)
Application: 19/05 - 23/08/2022 (by noon local time)
Language exams: 27/06 - 02/07/2022 (registrations 19/05 - 20/06/2022) and 25/07/2022 (registrations 08 - 18/07/2022)
Admission procedure and publication of ranking lists: by 06/09/2022
Payment of the 1st instalment of the tuition fees: by 13/09/2022 (by noon local time)
Enrolment: 27/07 - 28/10/2022 (by noon local time)

Preparatory courses and Freshers Days
Mathematics pre-course: 22/08 - 02/09/2022
Intensive language courses: 05 - 23/09/2022 (Monday to Friday, 8 h/day)
Freshers Days: 26 - 27/09/2022

1st semester
Classes: 26/09 - 23/12/2022
Exams (extraordinary session): 15 - 23/12/2022
Holidays: 24/12/2022 - 08/01/2023
Classes: 09/01 - 21/01/2023
Exams: 23/01 - 18/02/2023

2nd semester
Classes: 27/02 - 06/04/2023
Holidays: 07/04 - 10/04/2023
Classes: 11/04 - 10/06/2023
Exams (extraordinary session): 17 - 27/05/2023
Exams: 12/06 - 08/07/2023

Autumn session
Exams: 28/08 - 30/09/2023

Available places
EU citizens and citizens given parity of treatment
Early Bird Application: 25
Late Application: 20
Non-EU citizens (living abroad)
Early Bird Application: 5

The programme will only be offered if a minimum of 12 newly enrolled students is reached.

Entry requirements
In order to gain admission to this programme you need one of the following qualifications:

1. a bachelor degree in the Italian degree classes L-7 (Civil and Environmental Engineering) or L-9 (Industrial Engineering) of M.D. 270/04 or in the classes 8 or 10 of M.D. 509/99 or an equivalent qualification gained abroad

2. another degree and a minimum number of ECTS credit points achieved in the previous career as follows:

**Minimum 24 ECTS credit points in the following areas:**
MAT/03 Geometry
MAT/05 Mathematical Analysis
MAT/07 Mathematical Physics
MAT/08 Numerical Analysis
MAT/09 Operational Research
SECS-S/02 Statistics for Experimental Research and Technology

**Minimum 16 ECTS credit points in the following areas:**
CHIM/03 General and Inorganic Chemistry
CHIM/06 Organic Chemistry
CHIM/07 Chemical Fundamentals of Technology
FIS/01 Experimental Physics
FIS/03 Physics of Matter
ING-IND/22 Material Science and Technology

**Minimum 36 ECTS credit points in the following areas:**
ING-IND/08 Fluid Machines
ING-IND/10 Industrial Technical Physics
ING-IND/11 Environmental Technical Physics
Minimum 9 ECTS credit points in the following areas:
ICAR/08 Mechanics of Structures
ING-IND/14 Mechanical Design and Construction of Machine

The Admissions Committee will check these requirements to determine whether the contents and courses attended in your previous career are equivalent to the disciplinary fields mentioned above.

If you have gained a foreign qualification, the correspondence of credit points awarded to scientific disciplinary sectors will be based on the contents of the exams passed in your previous study career.

The minimum average grade in the bachelor (not including the final exam) is 22/30 (Italian system).

If you have not yet graduated at the time of application:

Until your graduation, you will be admitted conditionally. You must have achieved your degree by the enrolment deadline, otherwise you will be excluded.

To be admitted you must fulfil the language requirements indicated in the section “Language requirements”.

Language requirements

The official teaching language is English and the following language requirements apply:

Entry level (to gain admission)
English: B2
2nd language: A1
3rd language: no level required

The levels of the Common European Framework of Reference apply.

You can upload language certificates to the application portal (in the section “upload language certificates” and/or “enrol for language exams”) after you have created an application in the section “create/manage applications”.
- In case your final certificate has been awarded by an **Italian** public institution, you need to submit a self-declaration.
- In case your final certificate has been awarded by a **foreign** public institution, you need to upload diploma scanned copy of the original.

**You can demonstrate language proficiency through:**

1. **the main teaching language in your final high school year** if English (recognised as C1)
2. **a bachelor or master degree** in English (recognised as C1). unibz graduates must upload the language certificates obtained and/or declare that they have passed language exams at the unibz Language Centre (B2, B2+ or C1)
3. **a recognised language certificate** [see the list of recognised certificates: https://www.unibz.it/it/services/language-centre/study-in-three-languages/](https://www.unibz.it/it/services/language-centre/study-in-three-languages/) If you cannot upload the certificates, you can send them by e-mail as PDF files or deliver them in person to the Language Centre by the application deadline (see “Deadlines” section).
4. **language exams organised by the unibz Language Centre.** You can register for these exams online through the application portal [in the section “enrol for language exams”] after you have filled out your application in the section “create/manage applications”.

The registration periods are indicated in the “Deadlines” section. If you start your application outside a language exams registration period, you must return to the portal during one of the periods indicated above in order to register for an exam.

Information regarding the structure of the language proficiency exams, their duration, their administration, and typical processing time for the publication of the results can be found on the following webpage: https://www.unibz.it/it/services/language-centre/language-exams/.

**NOTE:** In case not already certified, the required A1 level in the second language (German or Italian) is verified by the Admissions Committee during the interview.

**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.
EU-Citizens and equivalent
You might apply for more than one study programme. If you are excluded in the first session, you might apply again in the second one.

Considered as equivalent are:

1. Citizens from Norway, Iceland, Liechtenstein, Switzerland, San Marino and the Vatican City State;
2. Non-EU citizens with a valid permit to stay in Italy (see article 39, paragraph 5 of decree no. 286 of 25.07.1998: "permesso di soggiorno" (residence permit) for work, family reasons, political or humanitarian asylum, religious reasons). In this case, you apply directly to the University as described above and must submit a copy of your valid permit to stay. A permit to stay for study reasons or a visa for tourism is not. If the permit has expired, you must attach a renewal request. Please note that if you do not upload the permit in the application portal, you will be automatically considered a non-EU citizen living abroad and therefore subject to the admission procedure through the Italian authorities in your country of origin.

Non-EU-Citizens (living outside of Italy)
Only one application period is offered. After the deadline it is not possible to apply anymore. Application fee: € 30.

Once the ranking list has been published, if you have gained admission, secure it by paying the first instalment and then start your visa application on the Universitaly portal. The application on Universitaly is mandatory, otherwise you will not be allowed to enrol. On Universitaly you can apply for one study programme only.

Admission procedure
Admission is based on academic qualifications and an interview to determine the adequacy of your personal preparation in relation to the master’s learning objectives.

In the application portal, you shall upload:

Qualification:

- if graduated in Italy: diploma supplement or self-declaration (following the Italian D.P.R. no. 445/2000) of the degree awarded with the exams passed (if graduated) or with the exams passed and any exams to be taken before graduation (if not graduated yet);
- if graduated abroad: diploma supplement or final degree certificate with exams passed (if graduated) or transcript of records (if not graduated yet) in Italian, German or English.

The above must contain the following information: final grade, exams passed with grade and date of passing, credit points, scientific fields (the latter only for Italian titles).

For qualifications obtained abroad, also: scale of grades awarded by the university of provenance (with a minimum final grade to obtain the qualification and a maximum final grade achievable).

The Faculty reserves the right to request a description of the contents of the courses and/or teaching hours where necessary.
The ranking lists are created based on the following criteria:

- **Study curriculum 0-65:** Evaluation of the first level education (i.e. grade point average and class qualification, professional experience and educational background) and coherence with the master’s learning objectives
- **Language certifications of a higher level than the minimum required 0-10**
- **Interview 0-25**

The interview can be done in person or via Skype call (only upon a reasonable request sent by the candidate) and aims at taking a deeper look at your personal skills and background with respect to the master’s learning objectives.

**Please note:** mendacious declarations will be sanctioned by criminal law and will result in your automatic exclusion.

Candidates awarded a score of **50/100 or more** will be declared eligible for the programme and ranked accordingly.

In case of candidates having the same score, priority will be given to the youngest applicant.

**Ranking list**

The Admission Committee will only evaluate the documents uploaded in the portal by the application deadline. The ranking list with the admitted students will be published here: and are only valid for the respective academic year.

**Secure your admission and enrolment**

If you have been admitted to more than one study programme, you can only secure your admission in one of them. Doing so you refrain from the admission to 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.

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

   For EU citizens and citizens given parity of treatment only: any remaining places of the early bird application, will be offered in the late application.

   **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 or, in the event of non-EU applicants living abroad, you do not receive the documents necessary for enrolment from the Italian authorities in your country.

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. **Advice:** If you achieve your qualification after the enrolment deadline, you should not pay the tuition fees to confirm the study place. You will be able to submit a late enrolment request and, only if there are study places still available, you can enrol by 16 December 2022.

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), if 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.

**If you are a non-EU citizen living abroad:**

If you are eligible for admission (check the ranking lists) and have also applied on Universitaly, the Italian Authorities in your own country will issue you the entry visa for studies/university.

This will allow you to arrive in Italy to enrol for the study programme that you have applied for, after passing the admission procedure.

According to Italian law, within 8 working days of your arrival in Italy, you must have applied for the residence permit: as soon as you arrive, get in touch with the Advisory Service and you will be given the necessary information for starting the procedure.

Once you will obtain your residence permit (permesso di soggiorno), you have to hand it in at the Student Secretariat personally or via e-mail.

**Students intending to transfer from another Italian University to unibz** must submit to the Student Secretariat - at the beginning of the academic year - a copy of the transfer application presented at the university of provenance.
Tuition fees

Fees amount to € 1348.50

- **1st instalment** (€ 748.50)*: includes the provincial tax for the right to study of € 148.50 and a revenue stamp of € 16.
- **2nd instalment** (€ 600): must be paid by 31 March 2023.

Delayed payment of the second instalment will result in a fine being levied. If you have not paid the tuition fees, you will be unable to take exams and will not be able to transfer to other universities or other study programmes.

If you drop out of a programme, interrupt your studies or are excluded from studies, you are not entitled to reimbursement of the fees.

Exemption from the tuition fees (and the provincial tax) is granted to:

- Students with a disability recognized under article 3, paragraph 1, of Law No 104/1992, or with a disability up to or exceeding 66%: the disability certificate, issued by the health authorities, must be handed in at the beginning of the academic year.
- Foreign students who have been granted a scholarship from the Italian government.

Students who benefit from a scholarship granted by the Autonomous Province of Bozen-Bolzano are entitled to receive a refund of the tuition fees.

Recognition of credit points from previous studies

Credit points from previous university studies can only be recognised after enrolment if the exams taken at the university of provenance are equivalent in content to those offered at unibz. You can fill out the application after enrolment.

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).
Advisory Service
Universitätsplatz 1 - piazza
Università, 1
Italy - 39100, Bozen-Bolzano
Tel +39 0471 012100
Fax +39 0471 012109
apply@unibz.it

Opening Hours
At present only via telephone
Monday through Thursday:
08:30-12:30 and 14:00-17:00
Friday: 08:30-12:30

Alternatively, you may book an online appointment

Subject to change.
Latest update: 06.12.2021