

Study Manifesto

MASTER 2nd LEVEL IN “BEE – Building, Energy and Environment. CasaClima”

Academic year 2018/2019

Course outline

Faculty	Science and Technology (Free University of Bozen-Bolzano)
Length	1 year
Credit points	60 (based on the European Credit Transfer System)
Languages used in teaching	Italian, English
Admission	See “Admission requirements” (page 4)
Language requirements	good language proficiency in English and Italian
Study places	Min. no. = 13; max. no. = 30
Selection procedure	Academic qualification, other evaluable titles and interview
Application deadline	30 November 2018
Enrolment deadline	19 December 2018, noon
Tuition fees	5.000 Euro (excepted the provincial tax for the right to study and the revenue stamp)
Classes start	End of November 2018 online course <i>BEE-Basic</i> January 2019 classes

subject to change

THE MASTER 2ND LEVEL:

“BEE – Building, Energy and Environment. CasaClima”

The Master aims to provide professionals who work with the design, diagnosis, management and redevelopment of the energy and environmental performance of buildings with the tools to enhance their professional skills concerning the requirements for occupants’ well-being, technological solutions and their proper use, and the optimization of planning for the sustainable use of resources. The Master is a highly specialized course and is the product of a joint initiative between the Faculty of Science and Technology and the ClimateHouse Agency of the Autonomous Province of South Tyrol.

The Master aims to improve the educational background of postgraduates coming from engineering and architecture. These postgraduates may not have any professional experience or they may already be self-employed or employed in companies specializing in consulting and planning, in industries in the construction sector or in the thermal energy sector, in public or private institutions, or in any other company that works in the field of energy efficiency and the environmental quality of buildings.

The Master aims to create professionals who are able not only to design, implement, evaluate, manage and upgrade the energy and environmental performance of buildings, but also able to deal with their behaviour, from single-room environments to entire buildings. Particular attention is paid to the diagnosis, management and energy recovery of existing buildings and the design of buildings with very different uses.

Accordingly, the Master aims to:

- provide specialized training in a sector of great social, scientific and occupational significance with a specific value for the local area;
- facilitate the inclusion or improve the position in the labour market of the Master’s participants;
- be a beacon of excellence for higher education in the field of thermo-physical and environmental planning of buildings;
- improve the connection between research and training;
- establish joint projects between the University and the productive sectors interested in the transfer of technology innovation in this context.

Structure

The Master consists of 60 credits: 40 credits are provided in the classes and 20 credits are provided through the online course that consists of five MOOC (Massive Open Online Course). The online course will be available on the Italian universities platform Eduopen <https://learn.eduopen.org/> and will offer introductory contents named BEE-Basic title. After these courses the student must pass the final exam at unibz.

If a student has already done the online course and passed the exam at unibz, credits recognition is possible.

Teaching load

The BEE-Basic online course can be followed by the applicant, according to the indications on **Eduopen** platform. There is a period of attendance in assisted mode¹ (tutored) and a self-study period (self-paced). The online course can be followed before (tentatively in January / February) or after (tentatively in September) the enrolment to the Master. If a student has already done the online course, and passed the final exam at unibz before the enrolment to the Master, credits recognition is possible. Information regarding the online path MOOC and their deadlines are available on the platform of the Italian universities Eduopen <https://learn.eduopen.org/>

Classes will take place from January 2019 to December 2019 and consist of a total of 500 teaching hours.

The classes will be arranged also according to the needs of the applicants.

Contents

The contents of the Master’s classes modules are divided into three teaching formats (Fundamental Modules – MF, Exercise Modules – ME, Application Modules – MA) and into the three main topic area:

- BEE-In
- BEE-Tech
- BEE-Sustainable .

Languages used in teaching

The languages used in teaching are Italian and English. Each course is held in just one of the two official languages, but the lecturer has the right to use the other language for certain parts of the course.

¹ The assisted mode provides for the possibility of being followed by an online tutor to carry out planned activities. To tutor you can ask for clarification.

Teaching staff

The teaching staff comprises university lecturers, professionals and experts from Italy and abroad who are active in the sector and who have many years of experience working in this sector.

Fixed intake

For the 2018/2019 academic year, the minimum number of study places necessary for activating the course is 13. The maximum number of study places is 30.

In addition, each module of this second-level master's degree can be attended for the purposes of professional development by a maximum of 20 external participants. There is no selection procedure for this purpose and the study places will be allocated following a "first come, first served" basis.

Participants of the single module can ask for an attendance certificate only if they attend **at least 70%** of the lessons offered.

The amount of enrolment fee for each course module is of **200 Euro**.

Requirements for graduation

In order to qualify for graduation, participants must:

- have followed the online course and passed the final exam;
- attend class modules MF (Fundamental Modules), ME (Exercise Modules) and MA (Application Modules), to the extent of at least 70% of the hours offered for these activities;
- pass the tests for the individual topic areas;
- do a design practice for the dissertation of the final exam;
- be admitted to the final exam;
- discuss their dissertation.

STUDY PLAN

This second-level Master provides **60 credit points (CP)** corresponding to 1,500 hours, of which:

20 CP – provided through the online course that consists of 5 MOOC

40 CP – offered by the Free University of Bolzano

Online course (20 CP):

Teaching	Teaching unit	Credit points
BEE-Basic	Comfort	CP 20
	Building physics	
	Certification	
	Simulation	
	Design	

Modules offered at unibz (40 CP):

Teaching	Teaching unit	Teaching format	Credit points
BEE-In: Indoor environment for the building occupants	Fundamentals of climatology and meteorology for urban design	MF	CP 8 (92 hours)
	Fundamentals of technical physics	MF	
	Fundamentals and parameters of thermal-hygrometric comfort	MF, ME, MA	
	Fundamentals and parameters of visual comfort	MF, ME, MA	
	Fundamentals and parameters of acoustic comfort	MF, ME, MA	
	Fundamentals of indoor air quality: parameters and fundamentals	MF, ME, MA	
	Elements of design	MF, ME	
	Opaque components: characteristics and performance	MF, ME	
	Transparent components and solar shading systems: characteristics and performance	MF, ME, MA	

BEE-Tech: Technologies	Building's envelope: winter and summer performance	MF	CP 16 (204 hours)
	Fundamentals of bio-climatic design	MF	
	Fundamentals of building's design: technical details	MF, ME	
	Heating and cooling systems (generation, storage, supply, emission, regulation)	MF, ME, MA	
	Renewable energy supplied systems	MF, ME, MA	
	Lighting systems applications	MF, ME, MA	
	Electric systems	MF, ME	
	Building automation systems	MF, ME	
	Infrastructures (network, smart grids)	MF, ME	
BEE-Sustainable: Sustainable use of natural	Building energy labeling: simplified calculation methods	MF, MA	CP 16 (204 hours)
	Environmental certification and LCA	MF	
	Simulation, monitoring and energy audit	MF, ME, MA	
	Fundamentals of engineering economy, financial analysis and management of projects	MF, MA	
	From BIM to BEM	MF	
	Building site management and logistics	MF	
	Energy refurbishment and technical-economic optimization	MF, MA	

The Master is divided into three types of modules:

- theoretical modules (Fundamental Modules - MF)*;
- practical modules (Exercise Modules - ME): analysis modules for real-world applications or design and/or business solutions that may involve the participation of designers and/or companies *;
- applicative modules (Application Modules – MA): modules where cooperation is created with the experience of the ClimateHouse Agency, which will involve the analysis of various certification protocols promoted by the ClimateHouse Agency, the verification of real projects that have already been certified and visits to construction sites.*

The design practice of the final dissertation is developed in collaboration with the ClimateHouse Agency and under the supervision of a designer or a designer staff and provides support and mentoring by students in projects that are underway and selected by the Agency relating to new buildings or those undergoing renovation. In teams of three or more, where members are preferably of a mixed composition regarding their training and skills (architecture and engineering), students will work together and with the designers themselves, identifying and analysing alternative/integrative improvements for the project under examination through a process of technical and economic evaluation leading to the identification of improvement approaches and to quantify their effectiveness.

ADMISSION REQUIREMENTS

You are eligible to enrol for the Master if you possess one of the following qualifications:

- a) ex D.M. 270/04: master's degree in the following subject areas
LM-4 (Architecture and architectural engineering),
LM-23 (Civil engineering),
LM-24 (Building engineering),
LM-30 (Energy and nuclear engineering),
LM-31 (Engineering management),
LM-33 (Mechanical engineering),
LM-35 (Environmental and land engineering);
- b) ex. D.M. 509/99: postgraduate degree in the following subject areas
4/S (Architecture and architectural engineering),
28/S (Civil engineering),
33/S (Energy and nuclear engineering),
34/S (Engineering management),
36/S (Mechanical engineering),
38/S (Environmental and land engineering);
- c) University degree awarded following the law prior to D.M. 509/99 in a Faculty of Architecture, Architectural Engineering, Energy and Environmental Engineering and Engineering Management.

Or

- d) University degree in a different subject area to those above, or another qualification obtained abroad and recognised as being suitable by the Master's Coordination Committee for the sole purpose of applying for this course.

You must have a good knowledge of Italian and English.

LANGUAGE PROFICIENCY

It is not necessary to present language certificates to confirm knowledge of the official teaching languages. However, it is highly recommended a good command of Italian and English.

ONLINE APPLICATION

Your application is submitted online through the application portal available at <https://aws.unibz.it/exup/it>. You need to create an account, fill in the form online and upload the documents required as an electronic file. **Please note:** Mendacious declarations will be penalised by criminal penalties and will result in the automatic exclusion from the ranking list.

Deadline	Begin	End
Application session	2 July 2018	30 November 2018

ATTACHMENTS

Evaluation can then only take place on the basis of the documents you have uploaded by the deadline. If your application is incomplete, you will be excluded from the admission procedure.

You have to upload:

- a passport-size colour photo;
- a photocopy of a valid identity card or passport (front/back); attention: if your document is invalid, incomplete or unreadable, you will be excluded from the admission procedure.
- the attachments listed in the section entitled "Selection procedure";

If you have a qualification from abroad you have to upload:

- the diploma of your qualification: if you are not yet in possession of the diploma, you can upload it upon enrolment at the very latest;
- an official translation of the qualification into Italian (not necessary for qualifications in German or English);
- the Diploma supplement, where it must be indicated:
 - that the student has 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 further documents (e.g. declaration of equivalent value);
- the declaration of equivalent value of the applicants qualification, in the case the Diploma supplement is missing. Those not yet in possession of the declaration can upload it upon enrolment at the very latest;
- the valid permit to stay for Italy (only for non EU-citizens legally resident in Italy) – see below.

What is the declaration of equivalent value

If you have a qualification from abroad you must certify that your qualification would grant you entry to a similar university course in the country where you achieved this qualification.

For that reason you must:

- apply for the "dichiarazione di valore" (declaration of equivalent value) at the Italian consulate or embassy abroad (the declaration must be applied for as soon as possible since it can often require long processing times);
- upload the declaration upon enrolment at the very latest, together with the other relevant documents.

Application by non-EU citizens

- **If you have a valid permit to stay in Italy** (see article 39, paragraph 5 of decree no. 286 of 25.07.1998: "**permesso di soggiorno**" for work, family reasons, political or humanitarian asylum, religious reasons), you apply directly to the University, as described above and must submit a copy of your valid permit to stay. A permit of stay for study reasons, or a visa for tourism, is not sufficient. If the permit deadline has expired, a renewal request must also be attached. **NB:** if you do not provide the permit for one reason or another, you will be automatically considered a non-EU citizen living abroad and therefore subject to the admission procedure through the Italian authorities acting in your country of origin.

- **If you are resident abroad**, you must carry out the **enrolment procedures both through the Italian authorities** (consulate or embassy) in your country **and directly with the University**. The deadlines imposed by the Italian Ministry of Education, Universities and Research (www.study-in-italy.it) must be respected. Should you not follow this procedure with your local Italian consulate, the application that you delivered direct to the University will be declared null and void. Please note that non EU-citizens resident abroad can apply for one course only!

SELECTION PROCEDURE

The Selection Committee draws up a ranking list based on the following criteria:

- degree mark/grade, worth up to 20%;
- other qualifications (publications, professional experience, research activities, specialisation courses), worth up to 20%;
- interview, worth up to 60%.

In the application portal, you must upload:

- the academic qualification:
 - if the qualification was awarded in Italy: diploma supplement or substitute declaration issued as per D.P.R. no. 445/2000 concerning holding a degree, containing the final mark/grade, the list of exams sat, their marks and pass date, the number of credits, the scientific subject sectors and the total number of hours per course;
 - if the qualification was awarded abroad: diploma supplement or certificate of the foreign qualification (which should be translated into English if it is in a language other than Italian, German or English), containing the final mark/grade, the list of exams sat, their marks and pass date, the number of credits and the total number of hours per course. It is important that you attach the declaration of equivalent value or a document issued by your own university which states what the minimum and maximum pass marks are in order to be awarded the qualification;
- an updated detailed CV (signed and dated) of your scientific and/or professional experience.

A committee will assess the applicants.

The date of the interviews will be communicated with e-mail at the end of application process.

ADMISSION RANKING LISTS

The Selection Committee will only evaluate the documentation uploaded in the portal by the application deadline and will be drawn up the admission ranking lists.

The rank list will be published on the website <https://www.unibz.it/en/applicants/ranking-lists/> and is only valid for the academic year for which it has been drawn up. Publication: likely by 11th December 2018.

ENROLMENT

If you have been admitted to more than one degree course, you can only confirm a study place in one of them. With this confirmation you refrain from the admission to the other degree courses and lose the right to move up in the other ranking lists.

For enrolment you need to:

1. **pay the first instalment of University fees** (2.661,50 Euros)
2. **in the Application Portal**, choose the course and upload **the payment receipt** (to be guaranteed a place on the course). Please note that payment will only be accepted once the receipt has been uploaded in the Portal - it is not enough just to make the payment.

Deadline	19 December 2018, 12:00 noon
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If you do not respect this deadline, you will automatically lose your place and there will be a period where applicants for the 1st session on the waiting list will be able to enrol.

Please note that payment does not allow you to receive student status, which will be acquired upon enrolment. If you have a guaranteed study place but you do not enrol, there will be no refund of the University fees unless, in the event of non-EU applicants resident abroad, you do not receive the necessary documents from the Italian authorities in your country.

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.

3. **in the Application Portal, enrol online.**

Deadline	19 December 2018, 12:00 noon
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Enrolment is recommended as soon as possible, so that you have the possibility to upload missing documents by the deadline.

If you do not respect the deadline for enrolment, you will lose your study place, which will be offered to the subsequent applicant in the ranking list.

If you have gained your qualification abroad you must upload (if not uploaded upon application):
<ul style="list-style-type: none">• diploma of your qualification
<ul style="list-style-type: none">• official translation of your diploma into Italian (translation is not necessary if the certificates have been issued in German or English)
<ul style="list-style-type: none">• the Diploma supplement, where it must be indicated:<ul style="list-style-type: none">• that the student has achieved at least 300 credit points (ECTS) and• that the study title gives access to a second level Master course.In case of doubt, unibz reserves the right to request further documents (e.g. declaration of equivalent value)
<ul style="list-style-type: none">• the declaration of equivalent value of your qualification, in the case the Diploma supplement is missing. If you are not yet in possession of the declaration, you can upload it upon enrolment at the very latest.

At the beginning of the academic year, you have to submit the originals of the above mentioned documents to the Student Secretariat.

If you are a non-EU citizen resident abroad:
If you are admitted to the course you applied for (check the admission ranklists), the Italian Authorities in your country will issue you with the entry visa for studies/university: this will allow you to arrive in Italy to sit any entrance tests you have to take, and to enrol for the course that you have pre-enrolled for, after passing the selection procedure.
According to Italian law, within 8 working days of your arrival in Italy, you must have applied for the permit to stay: as soon as you arrive you should go to the Advisory Service and you will be given all the information so that you can start this procedure.
Once you will obtain your permit of stay for Italy (permesso di soggiorno), you have to deliver it to the Student Secretariat personally or via e-mail.

TUITION FEES

Enrolment taxes and fees for the 2018/2019 academic year amount to **5.161,50 €**.

Deadlines for payment	1st instalment (2.677,50 €)*	2nd instalment (2.500 €)
	19.12.2018	31.03.2019

*The first instalment includes the provincial tax for the right to study of 145,50 € and a revenue stamp of 16 €.

The first instalment must be paid in order to enrol.

Delayed payment of the second instalment will result in a fine being levied. If you have not paid your taxes or other fees, you will be unable to take exams.

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

PARTICIPANTS OF SINGLE CLASSES MODULES

The programme offers a maximum number of 20 places for participants of single classes modules as a professional training.

Participants can attend single class modules and receive an attendance certificate only if they attend the module **at min. 70%**.

The amount of the tuition fee for one single course module is **200 €**.

You can enrol using the form for applying to single subject courses available on:

<https://next.unibz.it/en/applicants/single-subject-courses/>

Non-EU applicants with valid permit to stay for Italy (see article 39, paragraph 5 of decree no. 286 of 25.07.1998,) must submit a copy of the document called "permesso di soggiorno" (for work, family reasons, political or humanitarian asylum, religious reasons). A permit of stay for study reasons, or a visa for tourism, is not sufficient. If the permit deadline has expired, a renewal request must also be attached.

ADVISORY SERVICE

The Advisory Service informs you about the faculties and the study programmes and provides support regarding your choice of study at the InfoPoints in Bozen-Bolzano and Brixen-Bressanone (by appointment). In many cases, a simple ring or an email is enough to get the requested information. Addresses and telephone numbers can be found on the last page of this Manifesto.

STUDENTS WITH DISABILITIES OR LEARNING DISORDERS

Students with disabilities:

- Support during the admission procedure: please inform us about your disability through the Application Portal by uploading a medical certificate within the application deadline. The Advisory Service will arrange the support according to your needs so that you can sit the admission exams without difficulty. For further information, please contact the Advisory Service (address and other details can be found on the last page).
- Support while you study: please contact the Advisory Service to discuss any further support you may need throughout your time at the University.
- Exemption from tuition fees: please read the paragraph entitled "Tuition Fees".

Students with learning disorders (law n.170/2010):

- Support during the admission procedure: please inform us about your learning disorder through the Application Portal and upload a certificate that documents your learning disorder (diagnosis) within the application deadline. You are entitled to receive 30% extra time for written entrance examinations. For further information, please contact the Advisory Service (address and other details can be found on the last page). The certificate provided must have been issued by an institution recognised by your national health service and the diagnosis submitted cannot be accepted if it is more than 3 years old.
- Support while you study: please contact the Advisory Service to discuss any further support you may need throughout your time at the University.

Other forms of support are offered by the School and University Welfare Office of the Autonomous Province of Bozen-Bolzano (address and other details can be found on the last page).

STUDY GRANTS AND STUDENT ACCOMMODATION

The School and University Welfare Office of the Autonomous Province of Bozen-Bolzano (Amt für Hochschulförderung - Ufficio per il Diritto allo Studio universitario) can be contacted for:

- **Accommodation:** you can apply from Tuesday, **22 May 2018**. For information on the exact time, please refer to the services portal of the School and University Welfare Office at <http://www.provincia.bz.it/diritto-allo-studio>. The assignment of accommodation in student hostels follows a first-come, first-served policy. You can find further information on the same portal from mid-April;
- **Study grants:** For further information, please contact the above-mentioned office, the "Südtiroler HochschülerInnenschaft" (sh.asus) or the Movimento Universitario Altoatesino (MUA). MUA and sh.asus also offer a support service for filling in applications. Students from non-EU countries will be eligible for these study grants only after one year of regular residence in South Tyrol;
- **Refund of the provincial tax.**

Addresses and telephone contacts are indicated on the last page of this Manifesto

2018/2019 ACADEMIC CALENDAR

Application	02.07 – 30.11.2018
Online course	End of November 2018
Assessment (interviews)	From 3.12.2019 to 7.12.2018
Ranking list	11.12.2018
Payment of the 1st instalment of fees	by 19.12.2018
Enrolments	by 19.12.2018

FOR FURTHER INFORMATION:

WHO?	WHAT?	WHERE?	WHEN?
Advisory Service Tel. +39 0471 012 100 study@unibz.it	General information and course guidance, foreign students and students with disability or learning difficulties, accommodation	At Bozen/Bolzano: Universitätsplatz/Piazza Università 1 Building A – 1 st floor Office A1.01 Infopoint	Tue + Thu 14:00 - 16:00 Wed + Fri 10:00 - 12:30
		At Brixen/Bressanone: Regensburger Allee/Viale Ratisbona, 16 2 nd floor Office 2.12	by appointment
Student Secretariat Tel. +39 0471 012 200 student.secretariat@unibz.it	Online application, enrolment, tuition fees	Bozen/Bolzano Universitätsplatz/Piazza Università 5 Building B – 1 st floor Office B1.10	Mon + Wed + Fri 10:00 - 12:00 Tue + Thu 14:00 - 16:00
Faculty of Science & Technology Tel. +39 0471 017 000 science.technology@unibz.it	Admission procedure, ranking lists, didactics	Bozen/Bolzano Universitätsplatz/Piazza Università 5 Building K – 3 th floor	Mon + Tue 10:00 - 12:00 Thu + Fri 14:30 - 16:30
Language Centre Tel. +39 0471 012 400 language.centre@unibz.it	Online upload of language certificates, enrolment to language assessment tests, language courses	At Bozen/Bolzano: Universitätsplatz/Piazza Università 1 Building A – 1 st floor Office A1.01 Infopoint	Tue + Thu 14:00 - 16:00 Wed + Fri 10:00 - 12:30
		At Brixen/Bressanone: Regensburger Allee/ Viale Ratisbona, 16 2 nd floor Office 2.12	by appointment

<p>Amt für Hochschulförderung / Ufficio per il Diritto allo Studio universitario Office for School and University Assistance Tel. +39 0471 412 941/ 412 927 hochschulfoerderung@provinz.bz.it</p>	<p>Grants, accommodation in student halls</p>	<p>Bozen/Bolzano Andreas-Hofer-Straße/Via Andreas Hofer, 18 2nd floor Office 213, 216 (Grants) Office 214 (Student halls)</p>	<p>Mon + Tue + Wed + Fri 09:00 - 12:00 Thu 08:30 - 13:00 / 14:00 - 17:30</p>
<p>South Tyrolean student association (sh.asus) Tel. +39 0471 974 614 bz@asus.sh</p>	<p>General information, support in filling out the application forms for grants</p>	<p>Bozen/Bolzano Kapuzinergasse/Via dei Cappuccini 2 Ground floor</p>	<p>Mon - Thu 09:00 - 12:30 / 14:00 - 17:00 Fri 09:00 - 12:30</p>