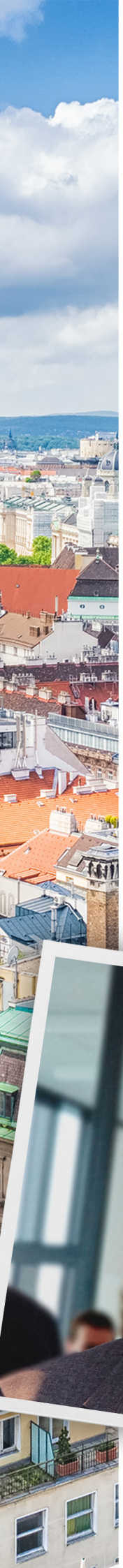
Green.
Building.
Solutions.

TU WIEN · BOKU · THE CLUB OF ROME · oead student housing

Summer University in Vienna

July 15 - August 6
2023

First-hand **ecological knowledge** and **engineering expertise** bundled in a **three-week programme,** taking place at the capital of energy-efficient building**, Vienna.**



What is **GBS**?

Green.Building.Solutions. (**GBS**) is a non-profit academic programme, managed and implemented by **OeAD student housing** - part of Austria's national agency for international mobility and cooperation in education, science and research.

The three-week course takes place in Vienna, Austria and aims to increase knowledge of sustainable construction worldwide, to counteract climate change and resource scarcity. It was initiated to pass on Austrian knowledge about passive house planning, ecological building, and sustainable design strategies to the next generation of green builders.

All study and social activities are carried out in English, making the entire programme accessible for participants from all over the world who speak the English language.

GBS is relevant to students and professionals alike in the fields of architecture and the built environment, including construction management, project management and building engineering.

Environmental, building and acoustics engineers will also find the programme highly beneficial.

This year's programme takes place from **Saturday 15th July to Sunday 6th August, 2023**.

"In 2023, the topics of GBS are more relevant than ever and we're delighted to be welcoming students in Vienna, Austria for the 13th edition of the GBS Summer University. We are bringing together the expertise we've gained over the years, with fresh ideas, concepts and possible solutions to prepare for the future."

- Günther Jedliczka,
CEO - OeAD student housing

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10 reasons
to attend GBS

1
Collaborate with students and professionals from all across the world!

2
Study in Vienna for three weeks, with an additional week of accommodation for FREE

3
Experience living in sustainable student accommodation

4
Learn from academic experts in their field

5
Immerse yourself in new ideas and concepts

6
Learn about the latest developments in green housing/ construction

7
Make friends for life!

8
Be part of an alumni network

9
Entirely taught in the English Language

10
Students receive a certificate of the University of Natural Resources and Life Sciences, Vienna (BOKU) for 7 ECTS.*

*in order to receive the 7 ECTS, the student must apply before April 3, 2023

Don't just take **our word** for it...

"I've found the Green.Building.Solutions. programme to be really informative. I've met so many people from lots of different backgrounds and I've found out how people can come together to make sure that we're building a sustainable future - also it's based in Vienna, which is an absolutely beautiful city full of culture."

- Eloise Kalavsky, Acoustical & Audio Engineering, UK

"The GBS programme provided a lot of information about the different solutions that we have and the excursions allowed us to see these solutions with our own eyes, not just in lectures. GBS is really useful for my future as an architect."

- Kirill Glushenko, Architecture, Russia

"I've really enjoyed the Green.Building.Solutions. programme. It helped me to figure out that I actually want to study architecture and learn more about all the different components and aspects of green buildings. There's everything from biodiversity to climate adaptation, including the landscaping, the materials, and the urban and social planning that we have to think of."

- Sofie Christiane Brøgger Jensen, Environmental Studies & Politics, Denmark

"The Green.Building.Solutions. programme was a great opportunity for me. Although it was quite intense as we had a lot of work to do, it was also a lot of fun. I had the chance to learn new things and exchange ideas from my country with other students from all over the world, as well as seeing how the standard of green buildings is progressing."

- Drilon Buleshkaj, Mechanical Engineering – Thermoenergetics and Renewable Energy, Kosovo

The **modules** you'll take during GBS

GBS is a modular university course held over a period of three weeks. It has an academic workload of **seven ECTS credits**, equalling **175 lecture hours**.

The GBS curriculum has **10 modules**, with module ten consisting of a team project in the third week.

3 WEEKS

175 HOURS

7 ECTS

Module 1
Global Challenges & Role of Buildings

- Building(s) for the future: Challenges and solutions for a sustainable built environment
- Presentation of national Green Building examples of participants
- SDGs. Concepts and applications
- Strategies for microclimatic and carbon resilience in a changing climate
- Experts' talk and discussion: Indoor and outdoor: adaptive or controlled buildings?

Module 2
Socially inclusive & accessible urban spaces

- Planning for social sustainability and implementation
- Introduction to smart cities
- Integrated digital urban planning

Module 3
Renewable energy concepts and strategies

- Urban energy planning
- Positive energy districts
- Heat pumps in green buildings
- Solar Thermal, PV and its applications

Module 4
Introduction to Green Building Design and Passive House Standards

- The Architecture of Green Buildings
- Historical Development and Principles of Passive House Design
- Sustainability assessment & quality assurance of passive houses
- Green Buildings, Passive Houses, Zero Energy, Plus Energy. A Critical Survey
- Experts' talk and discussion: Choosing sustainability in the building sector
- Visit: TUWI and Ilse Wallentin Haus at BOKU Campus
- Vienna Passathon

Module 5
Quality of life in and around buildings

- Climate sensitive design. From weather to comfort within the built environment
- Building physics: building envelope and indoor comfort parameters
- Outdoor comfort
- Daylight & Visual Comfort
- Visit of the Light Lab

Module 6
Strategies for carbon neutrality

- Biomimicry
- Wood as construction material
- Alternative building materials
- Green roofs and green walls

Module 7
Circular Economy in the building sector

- Tackling a Double Challenge – How to Build More While Using Less
- Circular Economy as a strategy for cities
- Experts' talk and discussion: Dismantle and not demolish

Module 8
Economy for sustainable buildings

- Building certification: a survey
- LCA
- Digital Findet Stadt: a network for the digitalization of construction and real estate

Module 9
Software Toolbox (Modelling & Simulation)

- Building Information Modelling
- PV calculation software
- Dynamic Thermal Simulations - e.g. Introduction to IDA ICE
- Workshop: Dynamic Thermal Simulations - Deep Dive

Module 10
Project Work

The final week of GBS is mainly dedicated to a group design project - a real-life case study for a sustainable neighbourhood, to assess how well the students have understood the content of the lectures, exercises, and workshops in the previous two weeks. Content from all nine modules is included in the group project work.

Poster designs are presented to an expert panel, along with a presentation on the final day of GBS. The group presentations are followed by a graduation ceremony.

How the **application** process works

The participation fee, which includes all accommodation and excursions, is **€2,000** for students and **€2,490** for professionals.

There may be an opportunity for students to **obtain a scholarship** – please refer to the next page in this brochure for more information.

Accommodation in a passive house guesthouse of the OeAD student housing for the entire duration of the summer program is included! After the program, participants have the chance to stay one extra week for free.

STEP 1: PREPARATION

Applications are done through our online application form – you will need to create an account in order to do this.

Scan here, or visit: **bit.ly/GBS-Register**

For a successful application, you are required to complete all fields in the form and to upload the following information:

- A motivational statement
- Curriculum Vitae
- Photo of yourself
- A scan or photo of the picture page of your passport
- Grade transcript of home university

STEP 2: CRITERIA AND STEPS

Apart from the necessity of being a registered student, a recent university graduate or a professional in the field of architecture, planning or engineering, the following key elements will be considered:

- Motivation and commitment for participation
- Knowledge of the English language
- Academic standing/work experience
- International experience

APPLICATION DEADLINES:

Students who want to receive a BOKU certificate will need to apply before **April 3rd, 2023**.

General application deadline for scholarships is **April 3rd, 2023**.

Applications for the regular participation are open until June 30th, 2023.

STEP 3: SUBMISSION

After having received your online application, we start the screening process of your documents. If we're missing essential information or need additional data, we will get in touch with you.

We will inform you as soon as possible about the status of your nomination.

AFTER SUBMISSION

If you've been accepted to the GBS Summer University, please send us an email saying that you accept our offer and return a scanned and signed copy of our Waiver of Liability.

There is a deadline of **one week** to confirm our nomination.

The next step is to pay the tuition fee within a given time after your nomination. You'll be asked to send a confirmation of your transaction.

BOKU PRE-REGISTRATION

Once you've been accepted, we kindly ask you to pre-register with our partner, the BOKU University.

This is needed in order to receive the BOKU certificate.

You will again be asked to upload some personal information and a passport photo.

Please also send us a confirmation of your registration at BOKU.

bit.ly/BOKU-Pre-Register

More information on **scholarships**

Outstanding students in need of financial aid can apply for student grants.

With a scholarship, highly qualified students can participate in the GBS for a **reduced fee of €490**.

The requirements are:

- Bachelor-level in a study field related to the build environment
- Academic excellence (grade average, study progress)
- Excellent knowledge of the English language
- Demonstrated experience in architecture, engineering, planning or other relevant fields
- Financial need
- A mandatory follow-up report after the summer university

Scan here to find out more

Examples of previous **Project Design Work**

Interdisciplinary collaboration in multicultural teams
GBS participants get to put theory into practice in their final project work, dealing with a real-life object in the City of Vienna.

This allows participants to apply the relevant knowledge to an integrated planning task in a multidisciplinary peer group of students, all with diverse backgrounds and from disciplines such as architecture, planning, engineering, social sciences and more. The final outcome is a design project, which is presented to a jury on the very last day of the programme.

In 2022 the aim of the group project was to develop a new sustainable residential area in the south of Vienna under the aspects of decarbonization, social inclusion and climate change adaption. The interdisciplinary groups integrated ecological strategies, which were taught in the lectures, and produced high quality project outcomes.

Online project design across time zones
In 2020 and 2021, the teams worked on the **Otto-Wagner-Area**, an important heritage site in Vienna, which will serve as a future campus for the Central European University.

Interdisciplinary, high quality outcomes were produced, while collaborating exclusively online and across several time zones.

In 2020, the task was to turn this historical area into the first Positive Energy University Campus worldwide - a unique challenge well mastered by the students.

Earlier group projects were dealing with the renovation of residential buildings, design of student guesthouses and (re)densification.

Scan this QR code to view the Otto Wagner Booklet of 2020 projects.

Here are some examples of previous GBS students' work

Our **supporters**

Green.Building.Solutions. Summer University is an academic non-profit programme.

We try to keep the costs for participation as low as possible. Students, who are highly qualified but need financial assistance to take part can be supported with a scholarship - **thanks to our funding partners and monetary supporters**.

Our academic partners

Public and network partners

You can find a full list of partners on the website.

We want to reach as many people as possible with an interest in **sustainable architecture** and **construction**.

If you are interested in supporting us on this mission, do not hesitate to **contact us**.

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Green.Building.Solutions. Summer University

OeAD student housing

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OeAD student housing is a non-profit student residence provider and offers accommodations for around 12,000 students annually throughout Austria. With more than 25 years of experience the company is regarded in the construction of passive house design student residences.

oeadstudenthousing.at

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