Green. Building. Solutions.

Summer University in Vienna

July 16 – August 7
2022

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 16th July to Sunday 7th August, 2022.

We're happy to be back in person!

"In 2022, we're delighted to be welcoming back students in person to Vienna, Austria. Now in its 12th year, we are set to deliver our most exciting programme to date, bringing together the expertise we've gained over the years, with fresh ideas and concepts to prepare for the future!"

- Günther Jedliczka,
CEO - OeAD student housing

student housing

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 until April 4, 2022

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

"I've gained a lot from GBS. It's been really nice to work with so many people from different cultures, and it's been a massive benefit to learn how other countries are working with passive houses. This is exactly what I want to do in the future, so it's helped me enormously."

- Leah Gowing, United Kingdom

"I would highly recommend GBS to students and even professionals, as I'm a certified professional in passive house but even I've learnt a lot! This programme is not just for learning, it's also a social programme because now I have friends from all different countries."

- Muslim Mohammed, Iraq

"I enjoyed the group project work. It was the first time I have worked together with construction engineers and it was very interesting."

- Georgia Kougioumoutzi, Greece

"The world has many different concerns, including flash flooding, famines and extreme temperatures - and GBS gave us the inspiration to help address the challenges."

- Fabian Rojas, Argentina

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 **nine modules**, with module nine consisting of a team project in the third week.

3 WEEKS

175 HOURS

7 ECTS

Module 1
Global Challenges & Role of Buildings

- Sustainability and biodiversity: from restorative to regenerative
- Climate goals 2030: Importance of renovation and energy efficiency (Paris, Green Deal, SDGs)
- Architecture for 2050 - Carbon resilience in a changing climate

Module 2
Introduction to Green Building Design and Passive House Standards

- The Architecture of Green Buildings
- Historical Development and Principles of Passive House Design
- Evolution and internationalization of the Passive House Standard
- Tours and excursions to passive house examples
- Panel Discussions with experts of Green Building

Module 3
Quality of life in and around buildings

- Daylight & Visual Comfort
- Thermal comfort - requirements and strategies
- Green roofs, green walls and interior greening
- Landscaping for people and planet
- Microclimate and outdoor comfort
- Green infrastructure in cities

Module 4
Socially inclusive & accessible urban spaces

- Planning, democracy, rights for public space
- Socioeconomic factors of sustainable urban planning
- Urban Co-creation in the Digital Age
- Visit and presentations of best practice examples such as OeAD GreenHouse and PopUp dorms, Bike and Rails Co-Housing

Module 5
Circular Economy in building sector

- Circular Economy as a strategy for cities
- Material streams management, reuse, recycle
- Natural materials and sustainable construction
- Tackling a Double Challenge – How to Build More While Using Less
- Site visits: e.g. TÜWI and Ilse Wallentin Haus at BOKU University

Module 6
Energy concepts & technologies

- Positive Energy Districts
- Urban energy planning and integration of renewables
- Innovative cooling processes
- Heat pumps in green buildings
- Solar Thermal, PV and its applications
- Visits: TU Wien's Plus-Energy Office High-Rise Building

Module 7
Software Toolbox (Modelling & Simulation)

- Building Information Modelling - Static and Dynamic
- Dynamic Thermal Simulations - e.g. Introduction to Polysun and IDA ICE
- Workshop: Dynamic Thermal Simulations - Deep Dive

Module 8
Economy for sustainable buildings

- Building certification
- Building renovation as a market opportunity
- Attractive sustainable real estate
- Green Finance and investments

Module 9
Project Work

The final week of GBS is 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 three 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.

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 4th**, 2022.

General application deadline for **scholarships** is **May 2nd**, 2022.

Applications for the regular participation are open until June 30th, 2022.

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

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 on 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

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.

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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MIX
From responsible sources

Green.Building.Solutions. Summer University

OeAD student housing

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gbsvienna

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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