

ANNUAL REPORT  
2022/23



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# FOREWORD

Each academic year brings new challenges, and in the last few years, this couldn't have been more true. The pandemic, international conflicts, and economic trends have changed the parameters of our work. In light of this situation, an excellent team is all the more valuable.

The content of our annual report, which we now publish in magazine format, shows that even in challenging times, great results can be achieved and important successes can be celebrated. Our university of applied sciences has evolved brilliantly. In the areas of teaching and research, we're addressing some of the major challenges of our time, supported every day by a modern administrative organization.

We hope that the following pages will convey the reasons why we all—both employees and students—take great delight in helping to keep writing the success story of UAS Technikum Wien.

Vienna, December 2023

**Florian Eckkrammer**  
Managing Director

**Johannes Höhrhan**  
Managing Director



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Managing Directors of UAS Technikum Wien:  
Florian Eckkrammer (above) and Johannes Höhrhan (below)



© JAKOB POLACEK







# Introducing The University

**FACTS.** For almost 30 years, UAS Technikum Wien has been educating the top technical executives for industry and has been an expert research partner to companies and organizations.

**U**AS Technikum Wien is Austria's university of applied sciences for technology and digitalization. Since it was founded in 1994, it has produced over 17,000 graduates. We currently offer 30 Bachelor's and Master's degree programs that prepare our graduates for top jobs in business and industry.

## TEACHING

We do everything in our power to remove any obstacles here at UASTW. To ensure our students keep pace with the demands of their studies, we provide them with the opportunity to brush up on their knowledge before their courses start. We offer warm-up courses in subjects such as mathematics, physics, and engineering to ensure they can hit the ground running when they start their programs. And we also continue to provide the best possible support throughout their studies. Following graduation, the broad portfolio of continuing education options at Technikum Wien Academy ranges from one-day seminars to four-semester Master's degree programs.

## RESEARCH

Our university provides research expertise to a range of partner companies, organizations, and institutions. These activities range from innovation checks for small- and medium-sized enterprises to transnational EU projects. UAS Technikum Wien has bundled its research capabilities into five key areas:

- Automation & Robotics
- Embedded & Cyber-Physical Systems
- Data-Driven, Smart & Secure Systems
- Renewable Energy Systems
- Tissue Engineering & Molecular Life Science Technologies

## FUTURE

Technology currently dominates our daily lives—from smartphones, social media, and self-driving cars to electric mobility and digitalization in industry. This is why many young people are aware of and interested in studying technology-related subjects. In the meantime, industry is crying out for graduates from a variety of technological fields. After all, the biggest problems of our age—from climate change to pandemics—heavily depend on technological solutions. ■

Our main location  
on Höchstädtplatz,  
1200 Vienna

# The year in Time Lapse

## BEST OF 2022/23.

Events, awards, and other highlights.  
These are the occasions that shaped the last  
academic year at UAS Technikum Wien.



### OCTOBER 11

Back in person  
for the first time,  
over two days,  
and with 106  
companies, the  
UASTW company  
fair was a huge  
success.



SEPTEMBER

OCTOBER

### OCTOBER 5

A US delegation  
from the Faculties of  
Electronic Engineering  
& Entrepreneurship,  
Computer Science &  
Applied Mathematics,  
and Life Science  
Engineering visited  
Harvard Medical  
School, MIT, Tufts,  
Kettering University,  
and Iowa State  
University.

### SEPTEMBER 5

In the robotics labs,  
a Robotics Summer School  
took place in partnership  
with the Austrian Society for  
Measurement, Automation,  
and Robotics Technology  
(GMAR) and IEEE  
Austria Section.

22







## OCTOBER 24

Project meeting for the RE-OPEN European university network at UASTW.



## DECEMBER 14

The launch of the Inclusion International project, which is funded by the City of Vienna, took place at the Transilvania University of Brasov in Romania, with a focus on supporting technologies, civil society, and digital inclusion.

## NOVEMBER 16

150 visitors at Meet the Future of IoT on the topic of IoT development time frames.



NOVEMBER



DECEMBER

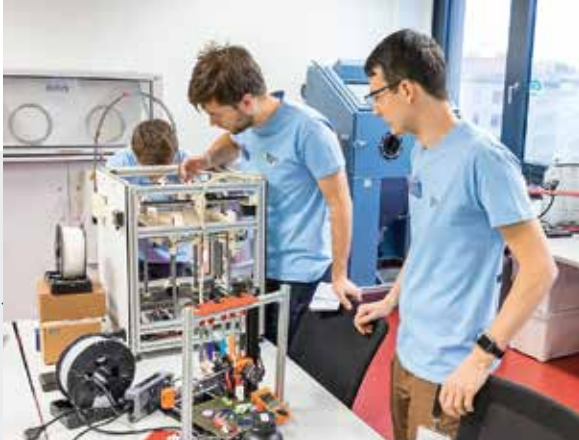
## NOVEMBER 23

Visit to the Sports Engineering, Biomechanics & Ergonomics Competence Center at MIUN in Sweden. The highlight? Tests in the wind tunnel.



## NOVEMBER 29

Dominik Widhalm was the first person to graduate from the Joint Doctoral College for Resilient Embedded Systems with Vienna University of Technology.



## JANUARY 30

Start of the cross-border project week for the PrepaCare (XR) research project, which aims to improve learning, teaching, and training in the healthcare sector through new concepts and technologies.

## JANUARY

## JANUARY 31

Conclusion of the new Workflow Integration lecture series as part of the Biomedical Engineering Bachelor's degree programs.



## FEBRUARY

## FEBRUARY 27

Launch week for the Technology in a Smart Society Blended Intensive Program (BIP), attended by students on the Computer Science and Mechatronics/Robotics Bachelor's degree programs at Lapland UAS in Finland. Back in the winter semester, the Cooperative International Student Project that's part of the Renewable Energies Bachelor's course was run for the fifth time and also forged ahead with its partners in Finland.



## MARCH 22

The Faculty of Computer Science & Applied Mathematics was announced as the second-best department in Austria by "Industriemagazin".

## MARCH

## MARCH 28

40 partner businesses attended the company fair for the integrated work-study Computer Science Bachelor's degree program



## MARCH 23

Power electronics workshop with software company Plexim.

## MARCH 17

Kari Kapsch became the new president of UAS Technikum Wien (read more on page 16).

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## MARCH 5

Information systems graduate Nico Wollner attended the Young Energy Researcher Conference in Wels with his Master's thesis entitled "User Interface Development of an Application to Support Energy Communities".





23

**MAY 2**

Spring meetings of the Smart Grids technology platform at Energy Base and the Austrian Institute of Technology.

MAY



KRISCHNAN\_ZEILLER\_AIT

**MAY 11**

The Meet the Future of IoT event series heard about "mioty – Next Generation Wireless IoT Standard", sponsored by the Fraunhofer Institute, the ifm Group, and Radio Technikum.

**MAY 12**

SanusX eHealth hackathon in collaboration with the Faculties of Computer Science & Applied Mathematics and Life Science Engineering.

**JUNE 26**

Silicon Valley Summer School in the home of the likes of Google and Apple (see the International section).

JUNE

**JUNE 27**

Four-day study trip for students from the Faculty of Computer Science to various IT companies in Bratislava.

**JUNE 10**

200 visitors at the open day at the energy research park in Lichtenegg.



© DANIELA MATEJSCHKE

**JUNE 1**

The Virtual Technologies & Sensor Systems Competence Center and the InviS project were represented on a stand at the EiT Manufacturing CLC East Manufacturing Day in Aspern, Vienna.

**JULY 12**

180 new beginner places for UAS Technikum Wien, with the expansion of universities of applied sciences in 2023/24 adding 350 new places in Austria. Federal Minister for Education Martin Polaschek selected UAS Technikum Wien as the venue for a press conference about the allocation of places.

JULY



# “WE ARE PROBLEM SOLVERS FOR BUSINESS AND INDUSTRY”

**INTERVIEW.** Managing Director Florian Eckkrammer talks about what UAS Technikum Wien does to help companies find and train technical specialists.

**For businesses, the search for well-trained specialists continues to be difficult. How can UAS Technikum Wien act as a problem solver for companies, business, and industry in this regard?**

**Florian Eckkrammer:** As a purely technical university, we have a clear profile and have been encouraging people to pursue technical studies for almost 30 years. In fact, our programs are in high demand—which allows us to debunk the myth that young people aren't interested in technology. During their Bachelor's and Master's degree programs, we train them using a practical and modern mix of didactic methods. And even during their studies, there is a direct link with companies, be it via lecturers from the field of business or work placements that students complete at companies. Our primary goal is to produce as many well-trained graduates as possible who can contribute to positively developing Austria as a location for business and industry. We also provide a “matching” service for companies, which sees us manage the links with our approx. 4,500 students and

almost 17,000 graduates. We have set up specific partnerships with companies for this purpose. Our role in this is as a problem solver for business and industry.

**What characterizes these partnerships with companies?**

In both spring and fall, we hold career fairs at UAS Technikum Wien to allow the companies to present themselves to our students and graduates. We're very proud of the fact that our recruitment fair in October in particular is the largest technical career fair in Austria with over 100 exhibitors. What's more, we also operate a digital job platform on which around 2,500 job listings are posted every year. Through this, we provide businesses with exclusive access to potential new employees right at the source.

In addition, we hold our own fair for the integrated work-study Computer Science program under the motto “We bring students and businesses together” so students who have completed three or more semesters can alternate between working







Florian Eckkrammer,  
Managing Director of  
UAS Technikum Wien

and studying at businesses and UAS Technikum Wien. Because we've recently been allocated a number of new study places for this program, we're looking for companies to take on students. The same applies for the Junior Developer university course, which is also operated jointly and is offered by our continuing education facility Technikum Wien Academy in partnership with waff (Vienna Employment Promotion Fund).

**About the new study places.  
UAS Technikum Wien really lucked out in the last round of allocating new study places.**

We're incredibly proud to have received 180 study places, which is half of the total allocation. This is impressive considering we are only one of 21 universities in Austria. Another crucial factor in this was certainly the fact that, thanks to high demand from applicants, we were actually able to fill these spaces so in the future we'll be able to prepare more graduates for the world of business. But we still need to turn away over 1,000 qualified applicants every year because of the lack of study places, which naturally is unfortunate and a terrible waste of talent. For that reason, we want to expand the STEM area of the university sector in particular moving forward. >

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**180 new study places: that's something we're proud of!**

**FLORIAN ECKKRAMMER**  
MANAGING DIRECTOR



Continuing education opportunities are available to alumni after they graduate.

”  
We still have to turn away over 1,000 qualified applicants.

FLORIAN ECKKRAMMER  
MANAGING DIRECTOR

› **Growth should also be on the agenda of UAS Technikum Wien. There are plans to add four new programs. Which new options can students expect? When do they start?**

We're scrutinizing new technological developments and continually assessing what these developments mean for business and the relevant fields. With our four new programs covering current issues—hydrogen, biotechnology, climate-conscious building technology, and quantum engineering—we're demonstrating our ongoing quest to keep pace with the times in the field of technology, where transition, change, and innovation happen at lightning speed, and to provide students and business with exactly the training they need at the time and to meet future demands. The hydrogen technology Bachelor's degree program and climate-conscious building technology Master's degree program are planned as joint programs, meaning we welcome

businesses who want to take on students. If all goes well, we want to launch our new programs in the 2024/25 academic year. Joint programs mean that the first two semesters involve completing studies at UASTW. From the third semester onward, the programs alternate between work experience in businesses and attendance at UASTW.

**What options does UAS Technikum Wien offer for businesses in the area of continuing education?**

Technikum Wien Academy is the continuing education and digitalization academy of UAS Technikum Wien. It's a brand of Technikum Wien GmbH, which is a wholly owned subsidiary of UAS Technikum Wien.



Technikum Wien Academy offers seminars, certifications, academic courses, post-graduate Master's courses, pre-college programs for international students, and bespoke in-house training sessions for businesses. Technikum Wien Academy also has experience of delivering retraining and qualification options for the Austrian labor market that extends back to 2005. These options aren't just used by businesses—we've already supported students from our university and a great many of our almost 17,000 graduates on their path of lifelong learning.

**Which other links to UAS Technikum Wien are available to companies?**

A key area of our work at the university is research. UAS Technikum Wien provides research expertise to a range of partner companies, organizations, and institutions.

These activities cover innovation checks for small- and medium-sized enterprises to transnational EU projects, from externally funded and commissioned research projects to student projects and Master's theses in partnership with businesses.

In addition, we support tech-related start-ups with infrastructure, know-how, and our network through our Entrepreneurship in Technology initiative. We're proud that several start-ups that have emerged from our university have already achieved success on the market. Among them are IoT business ToolSense and myBioma, which specializes in analyzing the gut microbiome. ■

”

**Tech-related start-ups are supported with infrastructure, know-how, and our network.**

Recruitment events at UAS Technikum Wien attract businesses and students.



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# Women in Technology: “Showing What We Can Do”

**APPLICATION.** UAS Technikum Wien has in place numerous measures to bring more and more women into the technical field. Our Rector Sylvia Geyer is at the forefront of this. We follow her through an academic year with a clear mission.

## **NOVEMBER 2022: HOST ON W24**

When studying at UAS Technikum Wien, women in employment also receive financial support via an initiative run by waff (Vienna Employment Promotion Fund). Rector Sylvia Geyer hosted W24's Wirtschaftsreport Wien spezial, a special business report with a focus on Vienna. She engaged in conversation with Executive City Councillor Peter Hanke, Monika Nigl from waff, and Frauke Bastians from the Mondi Group at UASTW. waff provides advice and a scholarship for women in Vienna who want to complete a program in the fields of digitalization, sustainability, and technology alongside their job.



## **DECEMBER 2022: DIVERSITAS AWARD 2022**

UAS Technikum Wien was the only university to receive the prestigious diversity management award from the Federal Ministry of Education, Science, and Research. The accolade for universities and research institutions was handed out for the fourth time and went to UASTW for the third time—for its work in the area of gender equality on this occasion. “Technology is still considered an atypical career for women in Austria,” said Sylvia Geyer at the awards ceremony. “Yet in our technologically driven times, technology provides opportunities to help shape the future, offers top starting salaries, and sometimes looks very different from the common perception. That’s why we’re actively working to make girls and women aware of this.”



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### AUGUST 2023: SUMMER CAMP FOR GIRLS

“DIY Science—All Girls Can Make Tech”—that was the title of the summer camp for girls held at the end of August at UASTW. At the end of the camp, Federal Minister for Women Susanne Raab and UASTW Rector Sylvia Geyer handed out the certificates of participation. “Technology has nothing to do with gender,” said Geyer. “Girls can understand technology just as well as boys. But there are still hurdles in our society that suggest the opposite and cause girls to doubt their capabilities. That is why the ALMAH project is close to my heart. The girls and young women were able to get a taste of technology at the summer camp, female students from the university of applied sciences regularly give math learning help at \*peppa, and our experts talk about their jobs at places where the girls spend their free time. They are role models in the truest sense of the word.”



### JUNE 2023: SHETECH ONLINE DAYS: HOW TO ATTRACT WOMEN TO TECHNICAL CAREERS

At the Haus des Meeres aquarium in Vienna, a roundtable event took place as part of the SHETech Online Days under the title “How Women Shape the Future”. During the event, inspirational women who work in the technical field took to the stage. “We have to start much earlier on creating an awareness of what technology can be, what studying can be, what STEM professions can be, and what error culture can be,” said Sylvia Geyer. She was joined on the discussion panel by Robert Kaup (Tietoevry), Linda Mohamed (EBCONT), and Alexander Hochmeier (FACC).



© UASTW\_NUSSBAUM

### FEBRUARY 2023: WECANTECH AWARD 2023

UAS Technikum Wien presented the WeCanTech Award for the second time. The award was introduced to put the spotlight on exceptional students as role models. “It’s about raising awareness, showing what we can all do, and being a role model to others,” said the Rector. “Many of you will have been asked questions like: Why are you doing it to yourself—technology? Math? Physics? All the better when I look around the room here today and see that you haven’t been put off and you’re doing your bit to show others new paths and careers.”



© WAFF

### FEBRUARY 2023: NETWORKING EVENT FOR WOMEN

waff doesn’t only provide financial support (see November), it also took the opportunity to hold the first networking event for female students at universities of applied sciences in Vienna who are in employment. The Praterstrasse club in the 2nd district was suitably full and most attendees were women. As well as hearing from Deputy Mayor Kathrin Gaál, Gudrun Senk from Wiener Linien, and Monika Nigl from waff, attendees were welcomed by Sylvia Geyer: “I see the future in front of me here. You are the people who will solve the problems of the future.”

### TECHNIKUM PODCAST



#84 WeCanTech  
Mentoring

# News Flash

## TECHNIKUM PODCAST



#71 Open Day

## YOUTUBE PLAYLIST



Alumni profile

## NEW PRESIDIUM AND NEW INTERIM MANAGEMENT TEAM

At the Annual General Assembly of the University of Applied Sciences Technikum Wien on March 17, the wheels were put in motion for a new era of the university. Numerous representatives from business, science, and interest groups were attracted to participate in the Annual General Assembly, which now has 21 members. The Annual General Assembly also elected a new presidium, which is headed by Dr. Kari Kapsch. Johannes Höhrhan, Managing Director of the Federation of Austrian Industry in Vienna, was elected as Vice President. Gabriele Költringer left UASTW in 2023 at the end of her term of office as Managing Director. She was succeeded temporarily as Commercial Managing Director by Johannes Höhrhan, who remains on a leave of absence from his role as newly elected Vice President of UAS Technikum Wien.



Kari Kapsch is the new President of UAS Technikum Wien, while Johannes Höhrhan is running the business in the interim alongside Florian Eckkrammer.

© ADOBE STOCK



Alumni in the workplace—at  
Siemens Mobility Austria

## VIDEOS: ALUMNI PROFILE

Technical degree programs with complex names often cause prospective students to wonder what careers they can actually pursue with that qualification. New episodes of the Alumni Profile video series were released in 2022/23 that provide some answers. On the UAS Technikum Wien YouTube channel, there are on-site insights into the everyday working life of UASTW graduates—this time including those working at Infineon Technologies, TTTech, and Siemens Mobility Austria. From PhD candidates to managing directors and from the meeting room to the factory floor, there was once again a broad spectrum of fields of activity.



## NEW RECORD AT THE OPEN DAY

Trying it out, getting information, looking for ideas—around 1,200 visitors, more than ever before, had the chance to discover UAS Technikum Wien at the Open Day on March 17. In addition to study advice, there were also tours so attendees could experience everyday student life and the labs for themselves. One of the tours was led by Barbara Gepp (Head of Competence Center for Chemical Engineering & Ecotoxicology), who showed participants research using zebrafish embryos, among other things. In the large area for student consultations, it was also possible to meet with Program Director Peter Rössler, who is director of the new electronics degree program. On the Technikum podcast, Gepp and Rössler gave insights into their departments during an interview.



Open Day at UAS Technikum Wien

## COLLABORATING ON THE EUROPEAN HEALTH DATA SPACE

April saw the official launch of IDERHA (Integration of Heterogeneous Data and Evidence towards Regulatory and HTA Acceptance), a new Europe-wide consortium of 33 public and private institutions, which includes UAS Technikum Wien. The goal is to make the wealth of data in the healthcare sector accessible in a meaningful way and use it to give lung cancer patients in particular new opportunities for personalized treatment and cures in future. One example of an initiative to emerge during the course of the project is the first pan-European Health Data Space. In addition, recommendations to politicians and authorities are being developed on how heterogeneous data and results of research can be used in the healthcare sector for the benefit of patients. On the recommendation of the European Commission, secure health data spaces should be set up for Europe (European Health Data Spaces).

Secure health data  
spaces for Europe





The Internet of Things is one of the future-oriented fields that is reflected in the new branches of study.

# The New Electronics Program

## STUDYING.

Technikum has refined the profile of its foundation study program and offers four new branches of study – from Internet of Things to Entrepreneurship.

For over 25 years, electronics experts have been trained to an academic level at UAS Technikum Wien. In the 2023/24 academic year, the study program received its biggest update so far: four branches of study and attendance times that allow for full-time study or study alongside employment.

“We have tailored the program to the needs of a range of target groups and the branches of study cover a broad spectrum of topic areas,” says Program Director Peter Rössler. “Our graduates bring solid electronics expertise plus additional skills in fields such as computer science, business, and personal development. They are among the most sought-after technical experts.”

We at Technikum have placed our primary focus on electronics since being founded. Anyone looking at the world as it is today will quickly notice that our oldest program looks anything but old. No other area corresponds with our slogan “Change our tomorrow” as much as this one.

## OVERVIEW OF THE BRANCHES OF STUDY

All students learn the basics of developing electrical systems, supplemented by knowledge of hardware-related computer science, natural sciences, business, and personal development. Four branches of study focus on highly sought-after, future-oriented areas of electronics and are coordinated with the ongoing Master's degree programs at UASTW:



## HANDS ON IN THE NEW IOT LAB

When it comes to the Internet of Things, it's often only the direct applications that are visible. A new lab is helping with demonstrators and visualizations.

To enable the delivery of up-to-date training in the area of IoT radio technologies, the IoT lab in the Faculty of Electronic Engineering & Entrepreneurship is developing hands-on demonstrators for classes. The team under Head of Competence Center Stefan Paschek and Program Director Thomas Polzer has completed the first demonstrator, which uses the LoRa IoT radio standard.

## TECHNIKUM PODCAST



#68 Internet  
of Things

- **Embedded & Cyber-Physical**

**Systems:** In the daily use of TVs, cars, washing machines, and credit cards, people are rarely aware that there are computer systems embedded in all of these items. In addition, these systems are widely used in industry, for example in automation technology, medical technology, and robotics.

- **Internet of Things & Smart Infrastructure:**

The Internet of Things is applied in buildings, industrial facilities, and entire cities. This means smart infrastructure becomes a link between the real and the digital world. Students learn the basics of implementing IoT systems and smart solutions in a range of applications, such as specialist knowledge in the field of communications technology, computer science, and automation technology.

- **Power Electronics & Sustainable**

**Energy Technology:** Energy is the core focus of this branch of study, with topics including energy systems and energy conversion, the electricity industry, electric mobility, and power electronics. The need for well-trained experts in these traditional yet promising fields of electrical engineering and electronics has been high for several years, meaning graduates from this branch of study can expect excellent career prospects.

- **Business & Entrepreneurship:**

The electronics industry is composed of a huge range of businesses. Management skills and technical expertise are an unbeatable combination here. Students are prepared for the management responsibilities and challenges of business. The branch of study is suitable both for people who are interested in combined business and technical training and for those who already have the relevant knowledge in one of the two disciplines—business or technology—and want to expand their knowledge in line with a professional higher qualification. ■

The graphical visualization of radio communication at the Open Day in March 2023 impressed attendees: "It's difficult for many students to envisage radio transmission. Our new demonstrator is a good representation of what happens at the air interface, and you can see the details of the transmission for many different parameters and messages," said Stefan Paschek.

### MORE ABOUT THE LAB

The new IoT lab at UAS Technikum Wien has a special focus, with the reality being that the entire campus serves as a laboratory environment. Results are displayed in the showroom of the IoT lab on screens and posters. The lecturer and researcher in charge, Harald Winkelhofer, explains what is involved on the Technikum podcast.

Visitors to the new IoT lab at the Open Day 2023.



## EXAMINING SIX DISTRICTS

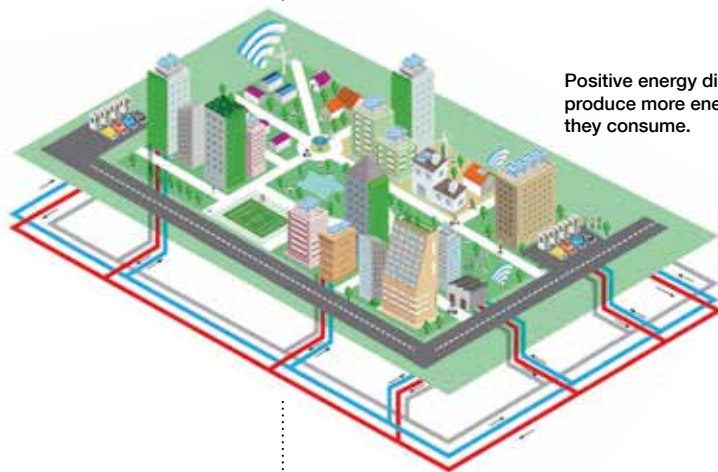
In order to make buildings and entire districts climate fit, major investment is required. This begs the question as to how the less affluent strata of society, who are reliant on affordable housing, can be included in this transition. The ProLight project, which is cofunded by the EU, is investigating how innovative renovation technologies, new sustainable business models, and the participation of local citizens can be brought together in six urban neighborhoods in Austria, Finland, Italy, Greece, Spain, and Portugal. "Our goal is to empower the citizens of our demonstration districts to become active partners in the necessary shift toward lower CO<sub>2</sub> emissions," says Momir Tabakovic from UASTW's Climate Fit Building Technologies Competence Center, coordinator of the ProLight project.

## ROBOTHON MUNICH

The team from UASTW received rapturous applause at the Robothon ceremony, which was held during the automatica trade fair in Munich. Only in their fourth semester of the Mechatronics/Robotics Bachelor's degree program, these students cast aside the considerable competition and took fourth place in the Robothon Grand Challenge. Together as a team, they worked for a month to improve the performance of the CRB 1100 robot and find innovative solutions to the issue of electrical waste.

# SUCCESSFUL TINKERING

**HIGHLIGHTS.** The Faculty of Industrial Engineering covers a wide range of topics between automation and robotics, sustainable renewable energy technologies, mechanical engineering, and material technology. Here is a selection of the projects and events.



Positive energy districts produce more energy than they consume.

## TECHNIKUM PODCAST



#54 Potential of small wind turbines

#57 Sustainable energy concepts



## POSITIVE ENERGY DISTRICTS AND SMALL WIND TURBINES

Regarding the energy crisis, the private sector is also showing increasing interest in generating its own electricity. One option aside from photovoltaic systems is small wind turbines. On the path to climate neutrality, buildings also have a crucial role to play. What are known as positive energy districts can provide a possible solution in this regard. In both areas, experts from the Industrial Engineering Department are involved in groundbreaking projects. The podcasts with Alexander Hirschl-Smol from the Renewable Energy Technologies Competence Center and Simon Schneider from the Climate Fit Building Technologies Competence Center provide insights for those who want to know more.



## STUDY TRIP TO SOUTH AFRICA

24 Master's students from Industrial Engineering and Business and Innovation and Technology Management took part in the international study trip, which was the tenth to have been organized. Between January 28 and February 9, they visited branches of Austrian companies (e.g., An-dritz, Backaldrin, Alpla, Plasser & Theurer) and both local and global organizations (e.g., Bühler, pwc, BMW) as they traveled between Johannesburg, Pretoria, and Cape Town. There were also interesting fireside chats, for example with the Deputy Mayor of Cape Town and the Austrian ambassador. Thanks to sponsorship from the International Office and businesses like Kraus & Naimer and ACAM, the cost of the trip could be considerably reduced.

Motivated  
students in  
South Africa

## LAS PALMAS MAKEATHON

In Las Palmas in Gran Canaria, 200 students of various nationalities developed innovative ideas on the topics of green energy, smart mobility, and more—and among them were UASTW students from the Robotics Engineering Master's degree program under the leadership of Horst Orsolits (from the Virtual Technologies & Sensor Systems Competence Center). The SunPirates team also included a female student from the Universidad de Las Palmas de Gran Canaria. Their smart sun tracker followed the position of the sun in order to store energy efficiently in the Li-ion battery and display data such as the temperature or wind speed on an IoT platform dashboard. During the Makeathon, the teams shared their data on various platforms and integrated the smart IoT sun tracker into other projects.



Video: What  
happened  
at Robotics  
Day 2023



Man and machine on Robotics Day

## ROBOTICS DAY SETS THE STANDARD

With more programming—plus industry talks in the afternoon for the first time—and more people than ever before with around 500 attendees, Robotics Day 2023 can be chalked up as a roaring success. Once again, January saw UASTW host a robot performance with the aim of informing people, both young and old, of the potential of this technology.

Working  
away  
beneath  
the palms





ChatGPT and the like—  
friend or foe?

Artificial intelligence was in the spotlight at an at-capacity “Start me up Monday” in February organized by the Faculty of Computer Science. Topics included the impact of ChatGPT and large language models on teaching. “ChatGPT and the like—friend or foe?” was the question at the center of the discussion.

Alongside Bernhard Knapp (Director of the Artificial Intelligence Engineering Master’s program) and Alexander Mense (Head of the Faculty of Computer Science and Applied Mathematics), experts from Microsoft, danube.ai, AIT, and AWS were also present.

Knapp gave an overview of the current status of ChatGPT and reported on the significance of such tools in running a university. He illustrated that conventional plagiarism checks carried out on theses and self-proclaimed AI review tools don’t provide any clear indication as to whether a text has actually been written by a person.

“The essence of a piece of academic work is the author’s own contribution,” said Knapp. In the context of a thesis, this might refer to a piece of software the student has developed themselves—unlike a purely theoretical piece of writing. In these times of artificial intelligence, Knapp supported this author contribution playing a bigger role in terms of student performance and its assessment.

One way of addressing ChatGPT is therefore making the defense of theses longer and more comprehensive in order to ensure that the author has an in-depth understanding of the topic and hasn’t just used a digital tool.

Knapp also presented this approach to employees of the International Atomic Energy Agency in April as part of the Innovators’ Voices webinar series.

# Spotlight on Artificial Intelligence

## START ME UP MONDAY.

ChatGPT took over the world at the end of 2022.  
The faculty’s expertise is in increasing demand.

© PEXELS/TARA WINSTEAD, THE NOUN PROJECT/C\_ART\_0, UASTW/GERD KRIZEK





## QUANTUM TECHNOLOGY MAKES GIANT LEAPS

The Faculty of Computer Science and Applied Mathematics is carrying out further expansions in the area of quantum technology. In 2022/23, a separate career path for the Computer Science Bachelor's degree program was established, the Summer School on the topic was a success for the second time, and the development of a Master's program is on the agenda for the coming academic year.

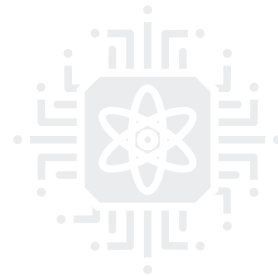
Starting in 2023/24, computer science students will be able to look into qubits, quantum cryptography, and other related topics. In tandem with the quantum information career path, the program establishes an option to dive deeper that cannot be found elsewhere. "This gives students the opportunity to delve into the fascinating world of quantum technology. We are proud that we can offer the first program of this kind in Austria," says Program Director Harald Wahl.

## UAS TECHNIKUM WIEN BECOMES AN OFFICIAL MEMBER OF BLOXBERG

UAS Technikum Wien became an informal member of bloxberg back in summer 2020 and was the first university in Austria to do so. It is now an official member. On the initiative of Alexander Mense (Head of the Faculty of Computer Science), the university of applied sciences uses blockchain for scientific development.

"Free access to a modern blockchain is essential for state-of-the-art teaching and project development. We are proud to be part of a worldwide network of renowned universities and organizations that can provide such infrastructure, and services based on it, in an energy-efficient way," enthuses Mense.

Quantum cryptography was the focus of the Quantum Technologies Summer School in summer 2023, which UASTW held in collaboration with the Slovak Academy of Sciences. At the end of August, 100 participants from various countries spent a week learning about entangled photons, qubits, quantum key distribution, and quantum algorithms. The fact that there were over 200 applications from all over the world underlines the appeal of this format. A Master's program will also be launched in 2024/25. ■



A positive response to the  
Quantum Summer School



# A NEW HEAD OF FACULTY

**PLOTTING THE COURSE.** Carina Huber-Gries is leading the Faculty of Life Science Engineering into the future.



Carina Huber-Gries took over leadership of the Faculty of Life Science Engineering from Anton Sabo in February 2023.

People and technology—nowhere else at UASTW is this interplay more closely examined than in the Faculty of Life Science Engineering. In February 2023, Carina Huber-Gries took over leadership of this faculty from Anton Sabo, who has retired.

“Our main topic is technologies that help to improve people’s health and well-being,” says Huber-Gries. The topics covered range from the impact of substances on the ecosystem to all biomedical and biomechanical technologies and miniaturized models of diseases in the field of tissue engineering.

After completing her biotechnology studies at the University of Natural Resources and Life Sciences in Vienna, Carina Huber-Gries got her PhD from the university’s Department of Nanobiotechnology and contributed academically, before starting as a lecturer at UAS Technikum Wien, where she has been working on a full-time basis since 2009.

“I’m delighted to be working with staff on developing our faculty in the areas of teaching and research, and in relation to other internal challenges,” says Huber-Gries. She names the following as examples of topics for the future: advances in medicine and

healthcare research, such as 3D bioprinting, and new opportunities in the healthcare sector, such as telemedicine and eHealth. Her areas also include sustainability, meaning things like life cycle thinking and the risk assessment of environmentally relevant substances, plus healthy aging and working.

The Faculty of Life Science Engineering comprises seven Bachelor’s and Master’s degree programs and the Life Science Engineering Department, which Huber-Gries has been in charge of since 2018. Anton Sabo has shaped UAS Technikum Wien since he first started in 1994 and he is a central figure in the area of sports equipment technology. Find out more about his farewell in the podcast. ■

## TECHNIKUM PODCAST



#67 Technology  
in sport?

Anton Sabo has  
taken well-deserved  
retirement.







Taking measurements and meters

## HIGH-TECH SENSORS TO ANALYZE TRAINING

In fall 2022, a rowing boat was equipped with high-tech sensors by the Sports Engineering, Biomechanics & Ergonomics Competence Center and handed over to the Austrian Rowing Federation. The integrated measurement system analyzes the pressure exerted by the athletes' feet during training and helps to optimize their performance.



Inside the virtual hospital

## MEDTECH IN MIXED REALITY

The FFG-funded research project MedTech-mR develops scenarios for students and professionals in the healthcare sector, in which digital images are used to practice on medical instruments. For example, students can configure and test a patient monitor using virtual reality (VR). Another key activity is specialist medical planning. The Medical Reality™ app makes it possible to virtually test and experience operating room planning in advance.

## TWO NEW DOCTORATES

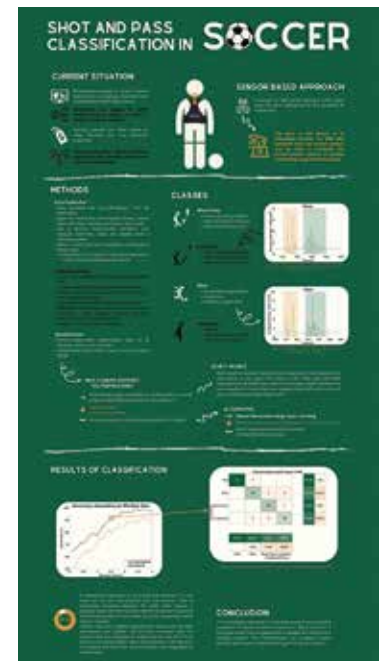
Janine Tomasch and Richard Paštěka have enlarged the circle of employees with a doctorate in the Faculty. Tomasch's dissertation provides insights into the suitable design of the environment to improve the functionality of skeletal muscle tissue. Paštěka's doctoral thesis deals with the increasing transmission of respiratory diseases and the need for advanced breathing models to develop effective treatment approaches.

Both presented their work at international conferences and published it in influential journals.

## LIFE SCIENCE ENGINEERING

### TRIP TO JENA

In July, students on the Biomedical Engineering Bachelor's degree program took a week-long trip to Jena. Visits to Carl Zeiss Meditec, Microfluidic ChipShop, the Fraunhofer Institute for Applied Optics and Precision Engineering, the Institute of Photonic Technology, the Institute of Applied Physics (Friedrich Schiller University Jena), and SciTec (University of Applied Sciences Jena) provided valuable insights and opportunities for networking.



Extract from the winning poster

## COMPETITION HAT TRICK

During the International Sports Engineering Association project competition, a Master's student from Sports Technology claimed victory. Johannes Urbauer took the win with a concept for classifying shots and passes in soccer. Second place went to Andreas Petter, who investigated how different salsa moves can be recognized using smartphone sensors. Tobias Salm came in third with his track detection system for mountain biking.

# OUTSTANDING TEACHING

**AWARDS.** The best lectures of the year were characterized by modern concepts and engaging delivery. The majority of the award winners were nominated by students.

In fall 2022, the best lectures from the previous academic year received awards for the first time. Nominations for the teaching awards could be submitted by the lecturers themselves, or by students. A panel comprising both internal and external lecturers from various departments and disciplines selected the winners.

Among the criteria were variety in the choice of teaching methods, competence orientation—meaning focus on the learning objectives—sustainability, transfer, and active involvement of the students.

“I’m especially pleased to shine a light on the performance of our teaching staff,” said

Managing Director and panel member Florian Eckkrammer. “A total of 120,000 teaching units are delivered at our university every year. With such a huge number, it’s easy to take this core activity for granted and focus on everything else that needs to be done. But teaching is our most important activity.”



The winners of the 2022 teaching awards with some of the panel members





Teaching award trophy

### GOOD TEACHING ISN'T A ONE-OFF

“Good teaching isn’t a one-off event, but rather something that is important throughout the year,” said Rector Sylvia Geyer, who was also on the panel. “Good teaching means using expert knowledge, drawing on years of experience, linking with practice, and of course applying teaching expertise. The remit of staff includes ensuring the quality of teaching. Today, we’re presenting a few carefully chosen examples of outstanding teaching from a huge choice of amazing lectures held at our university.”

For several award winners, students spontaneously took to the stage to emphasize what they liked most about the lectures, which also went down well with the panel. The event came to a celebratory conclusion because, as Head of the TLC Sylvia Lingo said in her welcoming statement: “The celebrations in teaching are usually much too short.” ■



**The celebrations in teaching are usually much too short.**

**SYLVIA LINGO**  
HEAD OF THE TEACHING AND  
LEARNING CENTER (TLC)

© THE NOUN PROJECT/BECRIS

## OVERVIEW OF THE AWARD WINNERS

### GOOD TEACHING IN BACHELOR'S DEGREE PROGRAMS, RELATED TO CONCEPT:

“Leadership” by Michael Wekerle-Dreier on the Electronics and Business program, with highlights including the combination of methods consisting of individual and group tasks and the opportunity to include the students’ own experiences.

“Cell Culture Techniques” by Carina Huber-Gries and Veronika Jesenberger on the Biomedical Engineering program was particularly proficient at applying different types of learning and combined independent work with group tasks.

### GOOD TEACHING IN BACHELOR'S DEGREE PROGRAMS, RELATED TO DELIVERY:

“Physics for Engineering” by Lukas Mairhofer on the Biomedical Engineering program grabbed the attention of students with varying levels of prior knowledge and used the “old-fashioned” medium of the blackboard to provide clear and empathetic explanations.

“Mathematics for Engineering Science” by Gudrun Weisz on the Mechatronics/Robotics program included group work in its diverse combination of methods, something that’s not common in math but was well received by students.

### GOOD TEACHING IN MASTER'S DEGREE PROGRAMS:

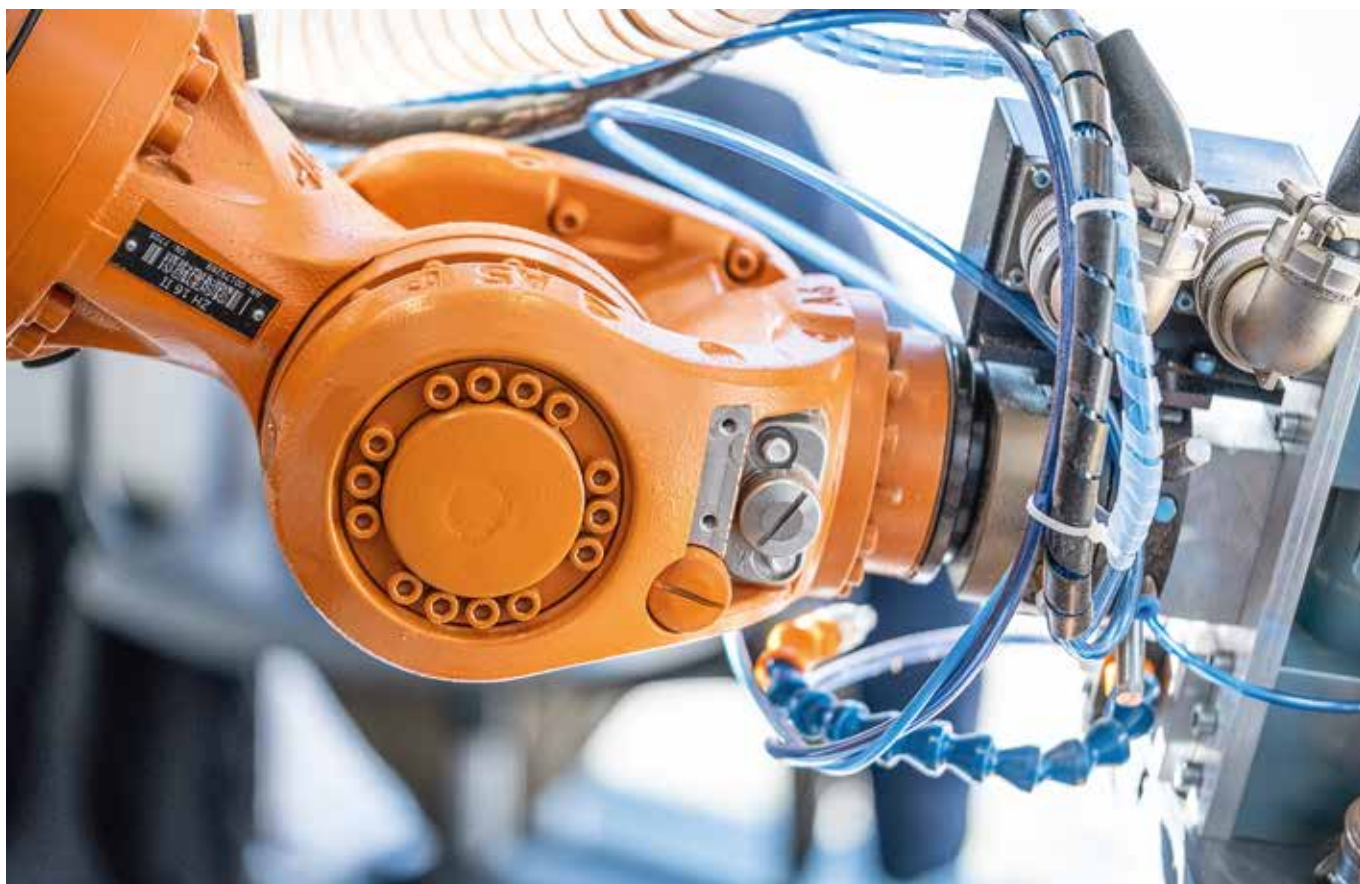
“Data Driven Business Models” by Lukas Schober on the Business Analytics Master’s course won over the panel with practical relevance and consolidation.

“Ecology and Society” by Susanne Schidler on the Renewable Energies program stood out for its interactive teaching and out-of-the-box thinking.

### DIVERSITY IN TEACHING:

The Students Support Students Network, a course-independent networking tool on an online platform, by Mark Adams and David Warren was nominated several times as an alternative to a typical lecture, and 1,200 students now use it. Initiatives like Queer Engineer have come out of this community at UAS Technikum Wien.





The aim of SAMY is to simplify working with demanding robot systems.

# PLUG & PLAY IN THE FACTORY

**AUTOMATION & ROBOTICS.** The SAMY project is simplifying the programming of industrial robot-based production facilities.

Robot-operated production is a critical topic for the future for both production in industry and research. More recent research areas such as artificial intelligence and collaborative robots intersect here in order to relieve humans of boring or dangerous tasks. Taking into account the socially beneficial and resource-efficient use of these technologies, intelligent robot-operated production facilities need to be safely, quickly, and reliably programmed for all situations.

Yet both technical research institutions (UAS Technikum Wien, Fraunhofer Austria, and Joanneum Research) and domestic industrial businesses (Eberle Automatische Systeme GmbH & Co KG, Henkel Central

Eastern Europe Operations GmbH, TDK Electronics GmbH & Co OG, Franz Josef Mayer GmbH) discovered that many users didn't have sufficient expertise in programming for robot applications and that training on this complex topic would be incredibly costly.

## SIMPLE APPLICATION WITHOUT PROGRAMMING KNOWLEDGE

The FFG-funded SAMY (semi-automatic modification of control programs of industrially used collaborative robot systems) project run by Fraunhofer Austria and concluded on 12/31/2022 aimed to simplify the application of complex robot systems for users. Through SAMY, the research

consortium was able to considerably simplify complex programming: "Thanks to specially developed frameworks, an idea can be translated into robot code without much technical knowledge," explains Wilfried Wöber, Head of the Digital Manufacturing, Automation & Robotics Competence Center. By automating the programming of robot-operated production facilities, they will be able to automatically handle a process plan based on the respective client wishes in future. The smart production facility should even recognize new machines and be able to automatically adapt production to accommodate them. So if a machine malfunctions, another robot can take over the task regardless of the manufacturer. ■



# RESEARCH THAT TOUCHES A NERVE

**PERSPECTIVE.** Artificial grafts expand the treatment of peripheral nerve injuries and offer a possible alternative to animal testing.

A team of researchers at UAS Technikum Wien is working on promising artificial nerve grafts to treat peripheral nerve injuries. In addition, the developments at the university can help to reduce animal testing.

Peripheral nerve injuries are nerve injuries outside the brain, for example in the nerves of the hand. Such damage, which is often caused by accidents, significantly affects the quality of life of patients and can lead to the loss of motor and sensory functions. Current treatment is based on nerve grafts from the patient's own body, but this involves loss of function of the donor nerve—sacrificing a healthy nerve to restore the function of the injured nerve.

“There is an urgent need for alternative treatments, such as the production of artificial nerve grafts, which my team has set itself the goal of researching and developing,” says Andreas Teuschl-Woller, Head of the Tissue Engineering & Molecular Life Science Technologies Research Focus at UAS Technikum Wien.

## INNOVATIVE APPROACH WITH PATENT APPLICATION

Researcher Carina Hromada is pursuing an approach that takes the natural regeneration processes in the body after nerve injuries as a model. After nerve injuries, glial cells (also called “Schwann cells”) can form longitudinal cell tracks (bands of Büngner) between the severed nerve endings, which

serve as guide structures for regenerating, regrowing axons.

## NEW REGENERATION MODEL

In order to be able to predict the regenerative capacity of artificial nerve grafts in the body, Hromada is also working on establishing a cell-based regeneration model for peripheral nerves, which is intended to mimic the regenerative processes after injuries.

## FURTHER POTENTIAL ADVANTAGES OF THE MODEL

The above-mentioned nerve-like cell constructs offer a variety of further possibilities that are currently being tested. At the moment, the combination with macrophage models is being worked on within the framework of the City of Vienna project ImmunTissue (MA23 30-06), which will serve to further evaluate the constructs. Using the combination with macrophages (specialist cells in the immune system) in the lab, the project intends to predict compatibility of the Schwann cell constructs with the body, as macrophages play a crucial role in the rejection of grafts. These models also have further relevance for research and clinical application as a possible drug screening platform to detect potentially neurotoxic effects of new and established drugs (which are used as specific chemotherapeutic agents, for example). This can not only significantly reduce animal testing and associated costs, but also better predict the success of clinical trials. ■



MagneTissue bioreactor with cultivated Schwann cells

# International Activities across the Academic Year

## EXCHANGE.

Networking across borders is a fixed element of teaching and research, and the International Office plays a central role in this.



Students from Finland, the Netherlands, and Austria collaborated on technical and social challenges as part of the Blended International Program.

The international nature of the university doesn't manifest itself in individual, one-off events. Instead, it is part of everyday operations. Let's take a look back through the academic year... The start of the year is always the time for welcome lectures for all new students. The International Office greets incoming students for Orientation Week, while updating enrolled students during Welcome Days organized by the TLC and holding information events on the courses. This induction is closely followed by the annual Erasmus+ Days, during which staff and student mobility takes center stage. During the International Fair, students also have the chance to find out about the options for a stay overseas and connect with incoming students. The week concludes with the "From Global to Guglhupf" event at the wine tavern, where former outgoing students meet current incoming students.



## Change our tomorrow: Pathways to a sustainable future

MOTTO OF INTERNATIONAL  
WEEK 2023

Last fall, an edition of "Start me up Mondays" was also devoted to the aspects of internationalization of entrepreneurship. This involved Silicon Valley experts and the participants in the previous year's Silicon Valley Summer School reporting on their experiences in California's tech paradise. Because the focus of the last academic year was on strengthening partnerships in North America, a delegation of seven took a ten-day trip to visit Harvard Medical School, MIT, Tufts, Kettering University, and Iowa State University in October.

## FROM THE PACIFIC SUN TO THE NORTHERN LIGHTS

Lapland UAS in northern Finland has been one of UAS Technikum Wien's most important international partners for many years. This relationship has resulted in two annual projects. For the fifth time, students from both universities (on the Renewable Energies program specifically at UASTW) graduated as part of the Cooperative International Student Project (CIP). This year, the groups worked together on an energy concept for a biomass district heating plant in Kemi, one of the locations of Lapland UAS. A highlight was the joint project week in Vienna. This was followed in the summer semester by the Erasmus+ Blended





© FABIAN ORNER

## DIGITALIZATION IN THE INTERNATIONAL OFFICE

Most mobility programs these days are developed using the Mobility-Online software by SOP. The aim is to manage all mobility flows on both the outgoing and incoming side going forward so that they also correspond with the Action Plan for Digital Education released by the European Commission. The software helps to automate existing processes and to save time thanks to the data processing by the applicants themselves. The workflows support the applicants during the entire application process and the subsequent stay abroad. Other key features of the software are the partner and financial management.

The Erasmus+ Blended Intensive Program (BIP) took place in the summer semester.

Intensive Program (BIP) entitled “Technological innovation to support coaching in sports and health”, which has brought another partner on board to join Lapland UAS: Brno University of Technology. While the teaching tackled numerous issues, 19 employees from UASTW and Lapland UAS agreed on key areas for enhanced collaboration in future during a meeting in Vienna. The next meeting of this steering committee is scheduled for January 2024 in Finland.

One of the most important events of the academic year is the International Week in May. This year, 55 international guests joined employees of the university under

the motto “Change our tomorrow: Pathways to a sustainable future” to address the topics of sustainability and the UN Sustainable Development Goals. Projects from UAS Technikum Wien, the City of Vienna, and international visitors provided diverse perspectives, which this year led to the energy research park in Lichtenegg, Lower Austria.

### LANGUAGE AND INNOVATION TRIPS

As always, the end of the year was marked by the English language course in Dublin. In order to prepare staff for the increasing number of international students and an international feel on campus, there is an annual invitation to attend a 30-hour English

course at the Centre of English Studies. Twelve employees from course support and departments attended this July.

Students were also on the move during the summer months. For the second time, UAS Technikum Wien sent four students to the home of Google, Apple, and the like. Participants at the Silicon Valley Summer School had the chance to spend five weeks at the San José State University (SJSU) right at the heart of one of the world's leading regions for innovation. Travel, accommodation, and participation in the Summer School were funded by UAS Technikum Wien and Wüstenrot Technology. And at the end of August, the cycle begins again. ■



# HIGHLIGHTS: SUSTAINABILITY ACROSS THE ACADEMIC YEAR

**INSECT HOTELS.** By installing insect hotels on the UASTW campus, building services contributed to promoting and maintaining insect biodiversity.

## CHALLENGE.

“Step by step toward the win”: In fall, an internal competition encouraged employees and students to climb the stairs in order to save electricity and benefit their health. Every day, participation cards were handed out to people who used the stairs, who could use them to enter a prize draw to win vouchers for a sustainable online shop and UASTW merchandise.

## ACTION TO REDUCE ENERGY CONSUMPTION.

In winter, reducing the room temperature to 20°C (approx. 70°F), switching off PCs, screens, and other devices on standby, and switching to LED lighting helped to save energy.



A competition that encouraged people to use the stairs.

## CLIMATE TICKET.

In the 2022/23 academic year, the university covered the cost of a climate ticket that's valid on public transport across Austria or an annual Wiener Linien ticket for all employees.

## LIFE CYCLE ASSESSMENT.

In March 2023, the “Systemic Assessment Methods for Technology and Environmental Management” project sponsored by the City of Vienna (MA 23) was launched to ensure the quality of teaching over the long term through the enhanced integration of systemic environmental assessment methods, life cycle assessments, and whole system thinking.



**ACCOLADE.**

As one of three institutions in the “Education & Research” category, UAS Technikum Wien was recognized as a sustainable business by the “Kurier” daily newspaper and the IMWF Institute for Management and Economic Research.

**WORLD ENVIRONMENT DAY.**

On the occasion of World Environment Day on June 5, the Ecotoxicology and Environmental Management Master's degree program issued an invitation to a microplastics event. Elisabeth Simböck, Head of



An event on the topic of microplastics took place on June 5.

the City of Vienna Competence Team for Microplastics and Nanoparticles as Environmental Risks (teacher), delivered insights into her research. Afterward, the into.wild duo presented their films “One Way Boat” and “Two Way Street”. Both documentaries address microplastics pollution in the Danube. ■

(Left to right) Christian Fleis (Ecotoxicology and Environmental Management Master's student), Martina Ortbauer (Program Director of the Ecotoxicology and Environmental Management Master's), Maria Marienschek (Sustainability Officer, project manager for the Austrian Ecolabel), and Thomas Faast (Head of Marketing & Communication) at the update on changes to sustainability reporting with UASTW Managing Director Florian Eckkrammer

**TECHNIKUM  
PODCAST**

#52 Sustainability  
at the university

**JOURNEY TO  
THE ESG REPORT**

**PERSPECTIVES.** It is expected that in the 2025/26 academic year, UAS Technikum Wien will also be obliged to ensure its non-financial reporting complies with the Corporate Sustainability Reporting Directive (CSRD).

As valuable preparation for this, several projects have already been implemented in the last couple of years and Master's theses have been completed (including on the Ecotoxicology and Environmental Management Master's degree program) on the topic of sustainability reporting. Most recently, a comprehensive stakeholder survey was conducted among students, lecturers, alumni, and so on in order to identify crucial issues that UAS Technikum Wien should be acting on. At the same time, considerable preparatory work was put into the central and structured collection of data. Using the evaluation of heat, electricity, and water consumption and waste generation, it was possible to draw initial conclusions about further future optimizations.



# KNOWLEDGE SHAPES THE FUTURE

**PORTFOLIO.** Technikum Wien Academy is the continuing education and digitalization academy of UAS Technikum Wien. It offers seminars, certificates, university courses, pre-college programs for international students, and bespoke in-house training for businesses.



## DEMAND FOR BESPOKE IN-HOUSE TRAINING UP BY 70%

Technikum Wien Academy enables businesses to offer its employees continuing education through bespoke seminars, certificates, and university courses. In comparison with the 2021/22 academic year, the number of participants in this type of in-house training has gone up by 70%. This result shows that an increasing number of businesses are recognizing the need for their employees to undertake ongoing training.



Proud pioneers on the new MBA program

## NEW HEALTH TECH MANAGEMENT MBA OFF TO A GREAT START

Technikum Wien Academy and consultancy firm en.co.tec are collaborating on an innovative continuing education option for the medical technology sector. The new Master's program got off to a great start in fall 2022 with 13 participants. "I decided to do an MBA because I work for a company that wants to bring an in vitro diagnostic device to the market.

It's as if this MBA was made to meet our needs. In a short time, it has vastly increased my level of knowledge," said Carolina Gnaiger from Oroboros Instruments.



The number of participants in in-house training sessions is up by 70%.



## RECORD ENROLMENT NUMBERS ON MASTER'S COURSES

In times rocked by crises, it is especially pleasing that the number of students on Master's courses at Technikum Wien Academy continues to rise. The courses started with 112 first-year students in the winter semester of 2022, which is a new record. It's not a given that investments will be made in private continuing education in the face of dramatically increased inflation.

In times of crisis, the right continuing education can be the best investment in stability. The pandemic expedited the transition to digitalization and technology. The high enrolment numbers for the courses at Technikum Wien Academy are testament to the fact that despite financial uncertainty, investment in technical continuing education is of great importance.



Master's courses at Technikum Wien Academy started with 112 first-year students.



Managing Director Florian Eckkrammer and Rector Sylvia Geyer

## ATOS & TECHNIKUM WIEN ACADEMY TRAIN ERP CONSULTANTS

In April 2023, Technikum Wien Academy and the Atos Austria Group launched the academic university course to become an ERP consultant with 16 participants. The course is aimed at both existing and new employees, who are given the title of Academic ERP Consultant upon its completion.

### TECHNIKUM PODCAST



#72 From  
technology to  
medical product

Participants in the Academic ERP Consultant university course.



GASQ



## NOT A JUMBLE OF LETTERS BUT NEW TOP CERTIFICATIONS IN THE SOFTWARE SECTOR

Since March 2023, Technikum Wien Academy has been offering two new internationally recognized certifications. ISAQB communicates about current technologies and methods in the area of software architecture. ISTQB certifies the qualification to become a professional software tester. The practice-oriented expertise in software architecture and software quality management is regarded as a sign of quality in the industry around the world.

# BY BUSINESS FOR BUSINESS

**INTERFACES.** UASTW proves itself to be a university with entrepreneurial spirit and thrives on exchange with businesses.

Entrepreneurship is firmly rooted in the UASTW community. The ultimate proof of this was the list of the 100 best start-ups in the “trend” business magazine in 2022. 7 out of the 100 businesses mentioned were founded by UASTW alumni, and graduates from UAS Technikum Wien are employed at just under half of the 100 start-ups according to LinkedIn—hardly surprising, considering the popularity of the regular “Start me up Mondays”. Two of the start-ups on the “trend” list

## START-UP EVENTS DURING THE ACADEMIC YEAR

September: Renewables  
October: Security  
November: User experience  
December: International  
February: ChatGPT  
March: Life Sciences  
April: The future of hydrogen

originate from the foundation program at UAS Technikum Wien in the form of “myBioma” and “ToolSense”. The program currently comprises three businesses: zone14 deals with the use of artificial intelligence for the video analysis of soccer training and is already well established in both the professional and amateur sectors. Instruclick innovates material supply in operating rooms thanks to a learning neural network. THT Biomaterials isolates proteins from the human placenta for the purpose of cell culture research.

Nothing promotes exchange as much as connecting in real life. That's why the company fair finally took place in person once again in October and assembled 106 employers, one third of which focused on international career opportunities. Another 80 companies presented themselves at the Careers Lounge at the start of the year. And at the first Alumni Homecoming at UASTW, the team welcomed 120 alumni plus star guests such as keynote speaker Thomas Arnoldner, CEO of the A1 Telekom Austria Group.

The team consisting of Rafael Rasinger and occupational researcher Günter Essl is responsible for corporate partnerships and innovation management at the university. What's especially pleasing is that three of the four new programs due to start in fall 2024 were developed as part of the internal innovation and portfolio process. ■



zone14 from the UASTW foundation program provides fully automated video analysis of soccer.



Students and employees at the rainbow parade and giving out rainbow roulades



# SPEAKING ABOUT IT OPENLY

## DIVERSITY.

The Queer Engineer network displays flags—for Pride Month and beyond.

The Queer Engineer network was launched in 2022. Since then, they've done more than just hang the rainbow flag in Höchstädtplatz. The network's activities include digital and analog networking opportunities for students and employees.

"The goal is to make LGBTQ+ matters more visible," says Mark Adams, Head of the Languages Competence Center and coinitiator of the community. He tells the story of two students who provided the momentum: "They came to me at the time and asked why we make so little publicly known when they feel so strongly about it internally. One of them even came out during a lecture."

Now, connection takes place digitally via the Discord platform and face to face at regular drinks and queer city walking tours. The network is also open to allies who support queer employees and students.

June 2023 was again an important month for this issue. Rector Sylvia Geyer sent a message via social media and helped to hand out flyers on campus. Some attendees at the regular drinks in June gave interviews for the UASTW Instagram account, and on June 17 the university once again took part in the rainbow parade with the Queer@Hochschulen network.

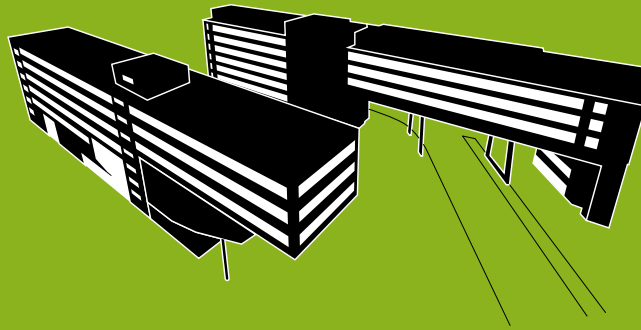
"We care deeply about everyone finding a learning and working environment in which they can be open about their sexual orientation and gender identity, and talk openly about it," says Mariella Müller, Head of Equality Management. "Some people might ask why you even need to talk about it when it's a personal matter and has no bearing on everything else. But you can't show your full personality in the workplace then. Shouldn't you be able to tell colleagues on a Monday morning who you spent the weekend with? We need to start talking about it before we can stop again." ■

## TECHNIKUM PODCAST



#80 Queer Engineer

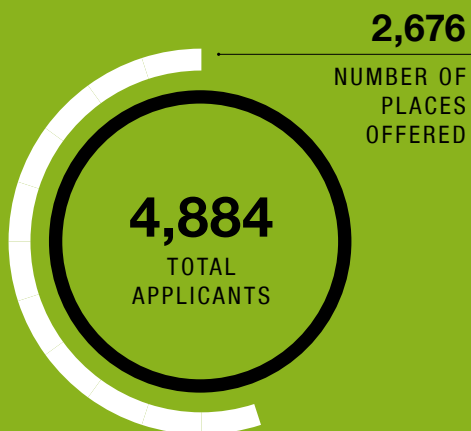




# The 2022/23 Academic Year in Figures

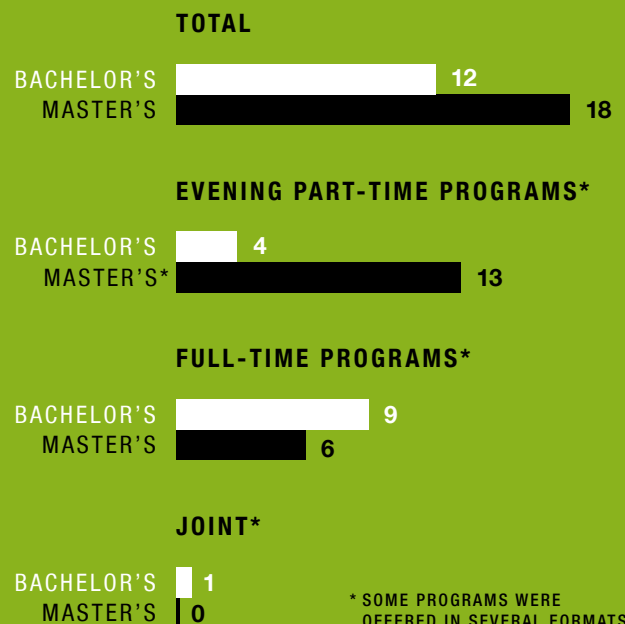
**STATISTICS.** How many people studied and worked at UAS Technikum Wien during the last year? Where did they come from? How many of them were women? On the following pages, we have presented facts and figures from various units to provide a quantitative overview of how the university is evolving.

NUMBER OF APPLICANTS



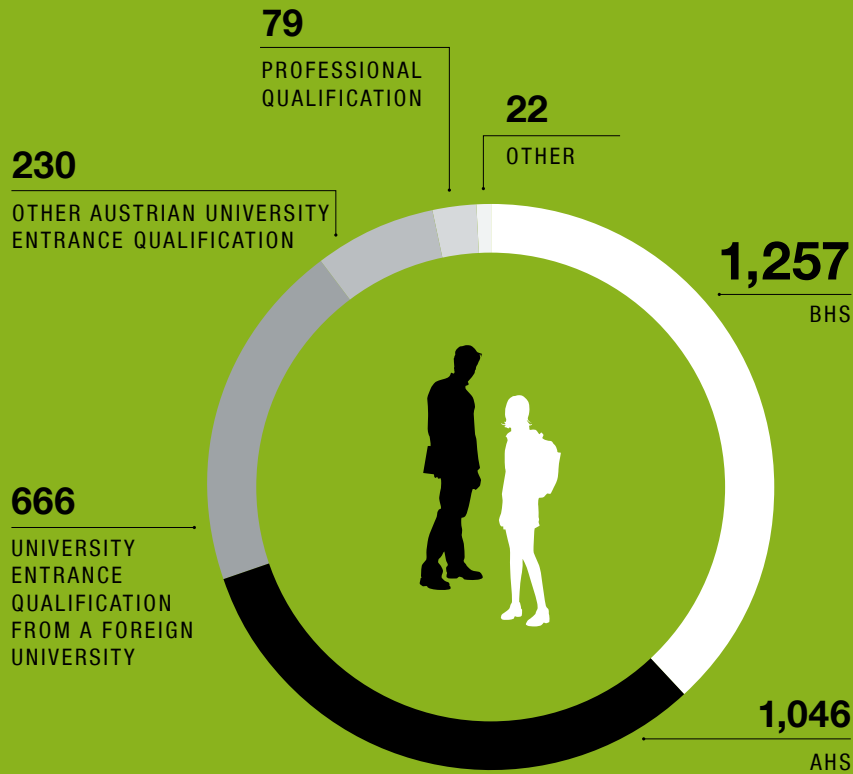
55%  
APPLICANTS ACCEPTED

NUMBER OF PROGRAMS





## BACHELOR STUDENTS BY SCHOOL TYPE



## NUMBER OF STUDENTS

**21.22%**  
PROPORTION OF WOMEN

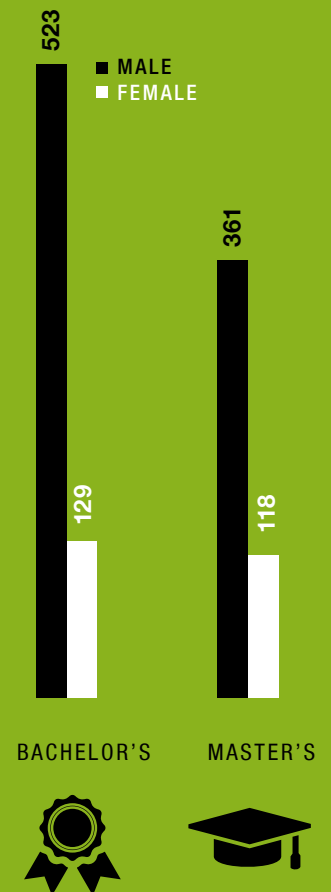
**3,708**  
MALE



**999**  
FEMALE

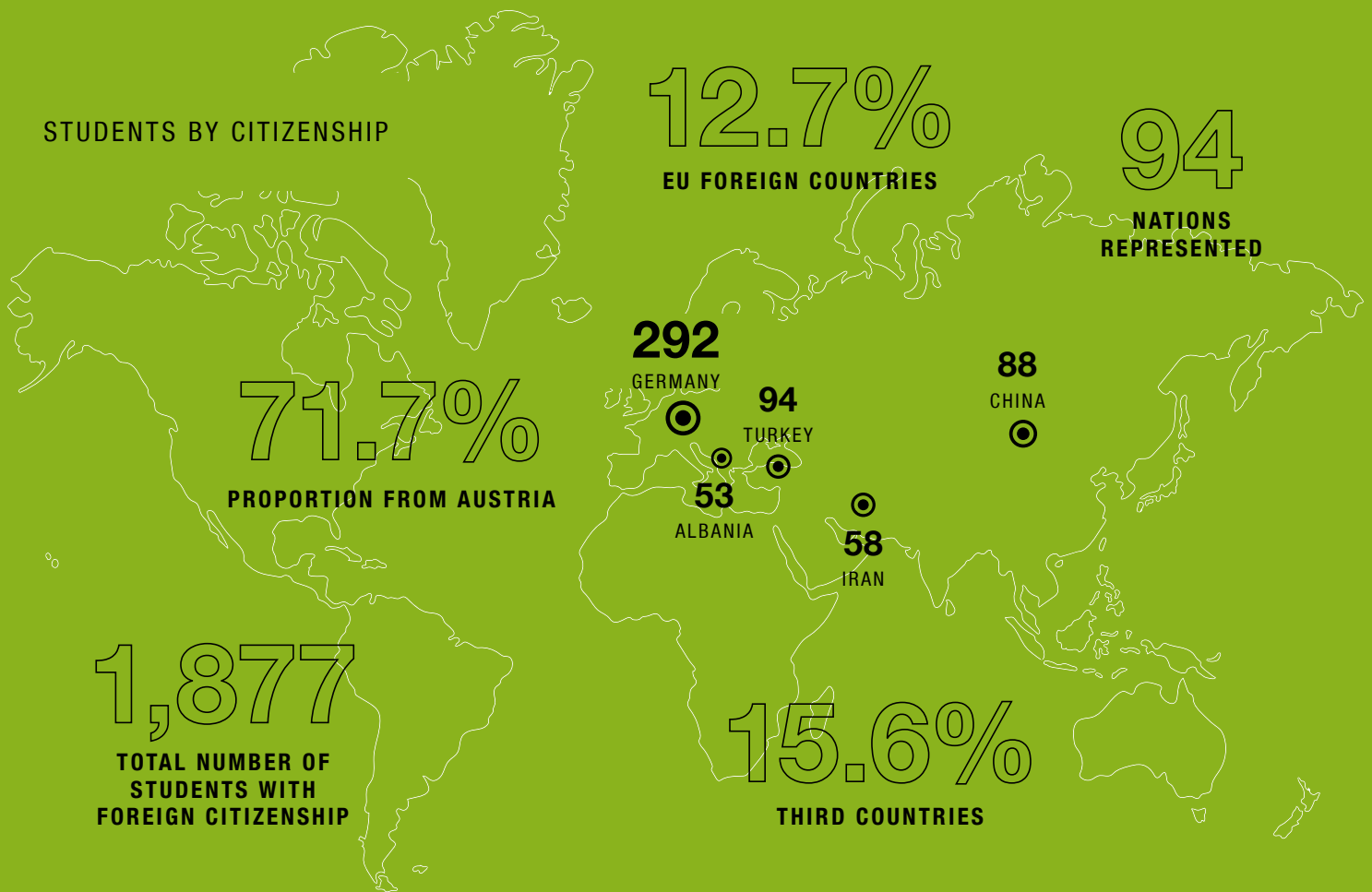
**4,708**  
TOTAL NUMBER OF STUDENTS

## NUMBER OF GRADUATES



## DEVELOPMENT IN TOTAL





82

PARTNER UNIVERSITIES



84,749

COURSE HOURS OFFERED



STUDENT MOBILITY



STAFF MEMBER MOBILITY



## PERSONNEL

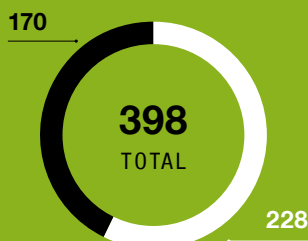


**1,181**

TOTAL  
EMPLOYEES

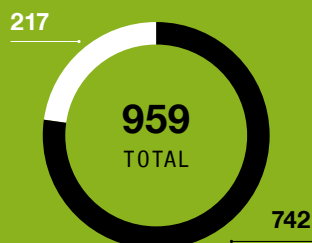
**821**  
MALE

**360**  
FEMALE

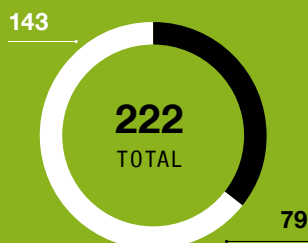


FULL-TIME EQUIVALENT  
RELATED TO PERMANENT EMPLOYEES

■ MEN ■ WOMEN



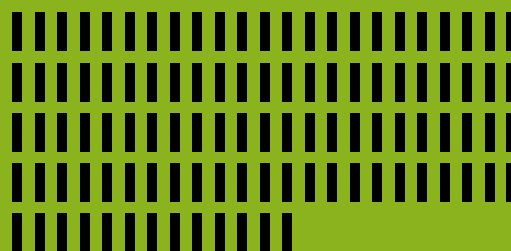
TEACHING  
AND RESEARCH\*



ADMINISTRATION  
AND MANAGEMENT

\* INCLUDING 647 EXTERNAL LECTURERS

## RESEARCH & DEVELOPMENT



**105**

ONGOING OR COMPLETED  
R&D PROJECTS



**€5,820,956.56**

FUNDED PROJECTS VOLUME  
UAS TECHNIKUM WIEN SHARE



**33**

RESEARCH PROJECTS 22/23



**€632,357**

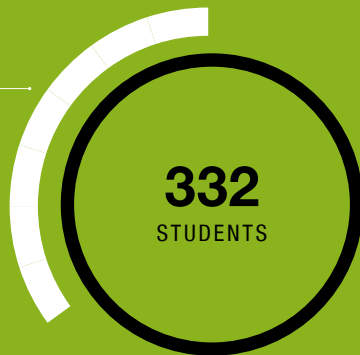
PROJECT VOLUME

## CONTINUING EDUCATION— TECHNIKUM WIEN ACADEMY

8 MASTER'S COURSES,  
3 SHORT COURSES

SEMINARS AND  
CERTIFICATIONS

119  
FEMALE



35.84%

PROPORTION OF WOMEN

149  
FEMALE



33.26%

PROPORTION OF WOMEN

### COMPANY FAIR

111  
PARTICIPATING  
COMPANIES

1,000  
DISCUSSIONS  
OVER 2 DAYS

### CORPORATE PARTNERS

AS AT END OF AUGUST 2023



4  
START-UPS

### CAREERS LOUNGE

2022

85  
PARTICIPATING  
COMPANIES  
OVER 2 DAYS

### LIBRARY

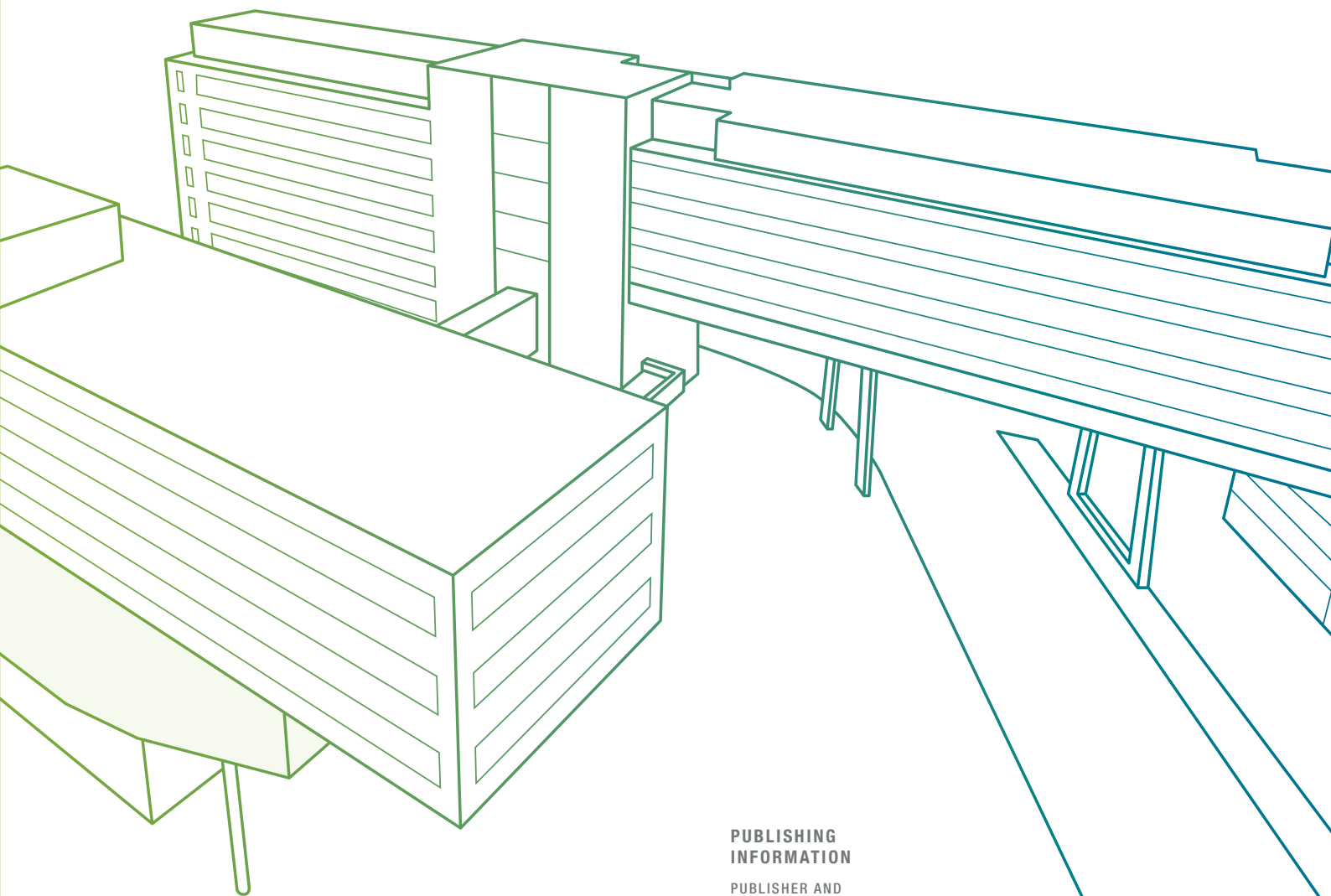
- E-BOOK/E-JOURNAL DOWNLOADS  
(INCLUDING INDIVIDUAL CHAPTERS/ARTICLES)
- NUMBER OF LOANS



23,057  
TOTAL PRINT MEDIA  
INVENTORY

~ 25,500  
NUMBER OF  
LICENSED E-BOOKS





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