

Bingen Technical University of Applied Sciences





About Bingen Technical University of Applied Sciences

Bingen UAS has been training students in engineering and life sciences since 1987. We offer qualified teaching, a strong practical orientation and close cooperation with companies in our 25 degree courses.

The degree courses cover the following main areas of study:

- › Engineering
- › Life Sciences
- › Environmental and Climate Protection
- › Information Technology and Digitalisation
- › Energy
- › Business Studies

Application-oriented research enables students to obtain academic degrees including doctorates. Students can supplement their skills with international experience by participating in exchange programs or even earning a double degree. In cooperation with numerous companies, we offer dual degree courses, continuing education and in-depth practical periods at companies.

UAS Bingen is geared towards the actual needs of the working world and life. The university works closely with regional and national companies to ensure this.

Studying at UAS Bingen means personal attention, short distances and open doors at a modern university with a long tradition and its own campus.

The UAS in figures



91%
would recommend
(studycheck.de)



25
degree courses



100%
STEM



2,600 students



> 50
partner universities



71
professors



13
dual degree
programmes

„We consider ourselves the STEM university of our region. We have been providing practical training for and educating skilled professionals in the engineering and natural sciences since 1897.“

Prof. Dr. Klaus Becker | President of Bingen UAS

Milestones in the history of Bingen Technical University of Applied Sciences

- 1897** Hermann Hoepke founded the Rheinische Technikum with mechanical and electrical engineering departments
- 1937** Bingen am Rhein Engineering School
- 1964** Rhine State School of Engineering
- 1971** Integration into the new Rhineland-Palatinate University of Applied Sciences with the departments of mechanical engineering, electrical engineering, process engineering and agriculture
- 1987** Inauguration of the new university campus
- 1990** New environmental protection department
- 1996** Administrative independence of Bingen University of Applied Sciences
- 2006** Restructuring of the entire programme of courses as Bachelor's and Master's degrees in line with the Bologna reforms
- 2016** Renamed Technische Hochschule Bingen (Bingen Technical University of Applied Sciences)

A tradition of inventiveness

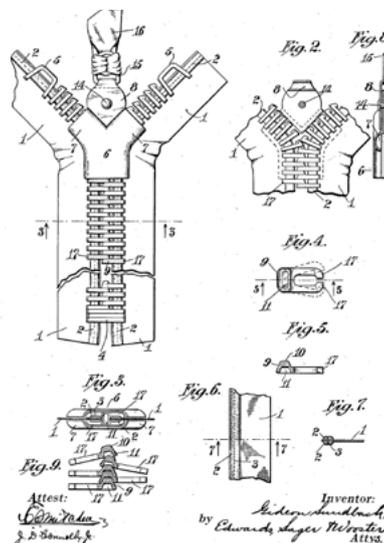
Success stories

A visionary, made in Bingen

Hugo Gernsback was a true visionary. Born in Luxembourg in 1884, he had a penchant for technical progress from an early age, so his decision to study electrical engineering and mathematics in 1900 was not surprising. And he did so at the Rheinische Technikum für Maschinenbau und Elektrotechnik in Bingen, now Bingen UAS. He successfully graduated in 1903 and emigrated to United States of America. In 1926, Gernsback published the first issue of *Amazing Stories*, the first magazine dedicated exclusively to fictional visions of the future. As a result, Gernsback is now considered the father of science fiction. The Hugo Award, an annual science fiction achievement award, was named in his honour. The Bingen UAS alumnus died in New York in 1967.

A small invention with a huge effect

It is part of our everyday life, and without it we would still be buttoning or knotting our clothes to keep them on. We are talking about the zipper! This little miracle was invented by a graduate of Bingen UAS: Otto Fredrik Gideon Sundbäck. The inventor was born in Sweden on April 24, 1880. Sundbäck was drawn to the Rheinische Technikum, now Bingen UAS, to study mechanical engineering. He successfully passed his engineering exams in 1903 and emigrated to the USA two years later. In 1917, the mechanical engineer from Bingen received a US patent for the Separable Fastener. Since then, the zipper of this Bingen alumnus has been unstoppable and in use all over the world as a closure for trousers, dresses and everyday articles.



Our degree courses

Department 1

Life Sciences and Engineering: The teaching and research focus of Department 1 is biological along with natural sciences and engineering. In some subjects, bachelor's and master's degrees can also be taken as a dual degree course or integrated in your job. We focus on maximum practical relevance, also ensured by the research and development facilities of the department, including St. Wendelinshof, the greenhouse and our research laboratories.

Bachelor's degree courses

Agronomy

Biotechnology

Energy and Process Engineering

Climate Protection and Adaptation

Medical Biotechnology

Process Engineering

Renewable Energy Management and Building Service Engineering

Environmental Protection

Viticulture and Oenology

Master's degree courses

Energy Operations Management

Energy, Facilities and Environment Management

Agriculture and Environment

Process Engineering

Department 2

Engineering, computer science and business: Department 2 includes the traditional engineering disciplines and information technology courses. In many subjects, a bachelor's degree is also available with job integration or as a dual course. The two competency centres, Innovative Information Systems apart from Mechatronics and Automotive Systems (KompMAS), ensure maximum practical relevance.

Bachelor's degree courses

Applied Bioinformatics

Electrical Engineering

Computer Science

Mechanical Engineering

Mechanical Engineering – Industrial Engineering

Smart Systems Engineering

Industrial Engineering

Master's degree courses

Electrical Engineering

Computer Science

Mechanical Engineering

Industrial Engineering

Why choose UAS Bingen?

Permanent employment:

88%

of UAS Bingen master graduates start their employment with a permanent contract.

Permanent employment:

78.8%

of UAS Bingen bachelor graduates start their employment with a permanent contract.

They would do it again:

83%

of UAS Bingen master graduates would study at UAS Bingen again.

Salary:

€4250

UAS Bingen master graduates receive an average (gross) starting salary of €4250.

Job search:

< 8 weeks

Bachelor graduates of UAS Bingen search for a job on average for <8 weeks.
70% of Computer Science graduates even search for less than 4 weeks.

Satisfied:

87%

of UAS Bingen bachelor graduates were very satisfied with their studies at UAS Bingen.

Students

573

First-semester
students

239

Graduates

1400

Students in
Department 1

2600

Students in total

1200

Students in
Department 2

207

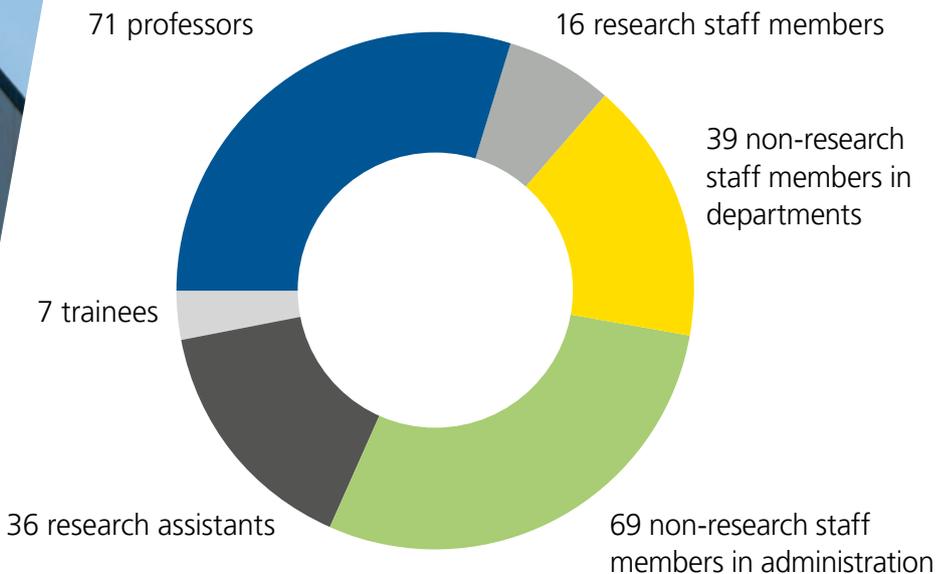
Foreign students
(from over 40 countries)

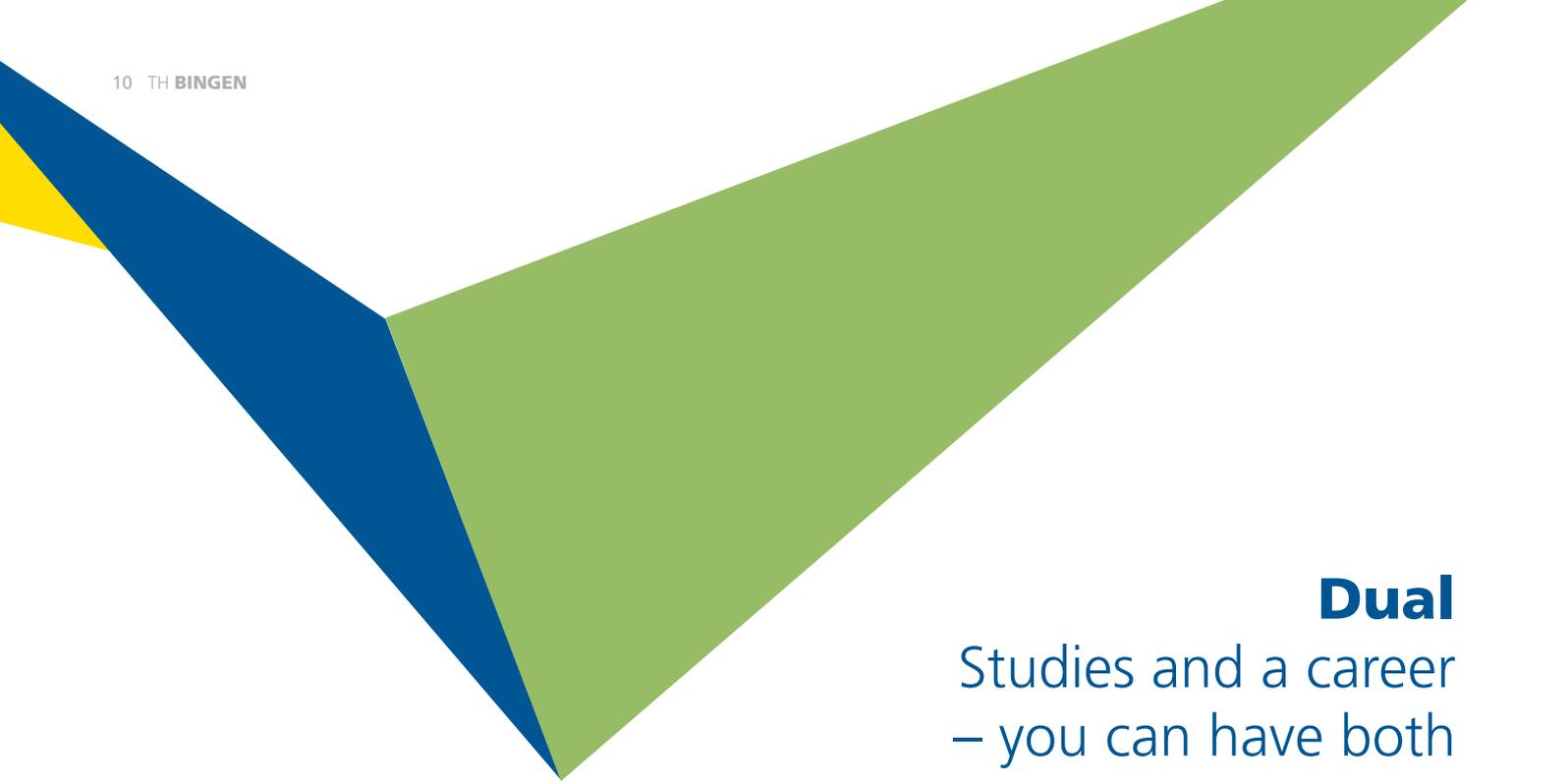
613

Female students



University staff





Dual Studies and a career – you can have both

Jana Zander first trained as a technical draftswoman and then decided to study Mechanical Engineering – Industrial Engineering, with her studies integrated in her job.

Did you always plan to study at some point?

When I was in secondary school, I could have switched to a school qualifying me for university studies. At that time, I said, “I don’t need that school diploma. I want to do my apprenticeship and start working.” But then I wanted to learn more and understand everything. I attended evening classes to earn my school diploma, so that I could start studying mechanical engineering. At that point it wasn’t clear that my studies would be integrated in my job.

How did you happen to decide to study parallel to your job?

After I had put together and looked at all the information, I knew I wanted to start my studies in Bingen. Because, what I

learn during my studies, I can put it directly into practice. That is a brilliant concept. We often discuss problem solutions in the lectures. Afterwards, I can go back to work and say, “Let’s try it out.” That’s great.

First you earned your high school diploma while holding a job, and now you’re studying while working. How do you handle this double burden?

It requires a lot of discipline and work, but anything is possible. What’s important is to have people backing you. Family and friends have to bring me back to reality from time to time when I don’t know where my head is at. Support from the company is also important. You need someone who says, “I support you,



and I'll be there no matter what." o And it's important to be able to disconnect, because otherwise you are under constant strain.

You have now been with the company Maschinen- und Stahlbau Technik Markus Graffe in Langenlonsheim for eight years. What do you like best there?

The variety. I never get bored. I always have different projects and a lot of tasks. I now also supervise our trainees.

You work in the office a lot, but you're also involved in production in the workshops. Do you also encounter any prejudice?

Those situations are rare, because we are a rather small company of about 30 employees. Many of them have already been with me during my apprenticeship and my studies, so they know me and they work with me every day. I only encounter prejudice when new colleagues join us. Then I show them that I know

"I think it's important that women have the courage to enter the world of technical professions."

what I'm talking about. When men are tossing technical terms around, I'll make a suggestion. That way they know I understand what they're talking about. Most of the time, it makes their eyes open wide.

What advice would you give to other women who are thinking of following a path similar to yours?

Just take a look around. I think it's important that women have the courage to enter the world of technical professions. Many of them will find that it's really fun.

University administration



Prof. Dr.-Ing. Klaus Becker
President



Dr. Ulrich Müller
Chancellor



Prof. Dr. Michael Rademacher
**Vice-President, Research
and Technology Transfer**



Prof. Dr.-Ing. Peter Leiß
**Vice-President,
Academics**

We ensure quality

Involving the students

We involve students in the quality management process with regular surveys. The results are evaluated anonymously and serve as impetus for change.

Making processes visible

Organizations generally function well when it is clear to everyone involved who is responsible for what. Both staff and students have a clear picture of all work processes at Bingen UAS. Transparency contributes to quality here.

Advancing university teaching methods

Good teaching is at the heart of a high-quality course of study, and each individual lecturer contributes their expertise to this. UAS Bingen offers its lecturers continuous opportunities for professional development, which helps advance university teaching practices.

Our goals and values

We aim to offer our students a high quality, practical and personally supervised course of study. In addition to a well-founded education in each subject, the teaching of social skills is also key to us.

In teaching and research, we are particularly committed to improving living and working conditions, conserving natural resources and ensuring the sustainability of technical developments.

We work for and at a place of applied research. Our university offers excellent conditions for interdisciplinary collaboration, transfer and personal exchange in teaching and research.

We feel deeply connected to our region and maintain intensive cooperative relationships with companies, institutions and associations. This enables us to promote the continuous expansion of knowledge and technology transfer.

We promote lifelong learning at our university. In order to fulfill this promise, we provide attractive offers that facilitate a smooth transition between school, studies, career and practical work, and we make dual models possible.

We see ourselves as a cosmopolitan university, and we actively support our foreign students. We promote intercultural exchange and encourage our students to gain international experience.

We welcome the many different ways of life and offer solutions for reconciling family, career and studies. We are committed to the social needs of our employees.

We support the sustainable use of resources, the protection of biodiversity and climate. One of our main priorities is to increase the shares of women in all areas of the university.

Networking

Many inventions have their origins in Bingen, and this will continue to be the case in the future. Yet the best ideas only have a chance if they can be implemented in the right places. Bingen UAS is active in a large number of regional and national networks, initiatives and clusters, making it possible for the potential of our applied teaching and research to be optimally harnessed. This close cooperation with companies, universities and public authorities not only strengthens our competitiveness, it also benefits Bingen as a science hub and a centre of excellence for applied teaching and research. Together, we keep creating a university with a clear focus: The future.



Successful collaboration

We work successfully with a large number of companies, be it in teaching or in research. Examples of our collaboration include our transfer events, dual courses of study, research projects and the numerous practical experiences of our students.

In the context of our THinktank, we regularly visit companies in the region and establish cooperation agreements with them.





Research transfer: We research and you benefit

In addition to teaching, the most important tasks of a university include research and the transfer of knowledge and technology. Our Research and Technology Transfer team is the central point of contact for companies that wish to access the know-how of Bingen Technical University of Applied Sciences.

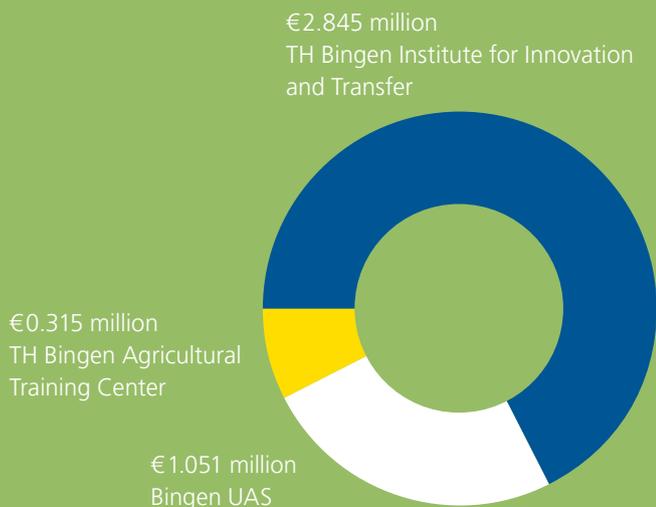
We support companies in taking up new ideas and working to improve their own products and processes. In particular, we aim to facilitate access to the university's research and development capacities for the region's economy and small and medium-sized companies. With our help, you can maintain and increase your competitiveness.

In keeping with the importance of knowledge and technology transfer, we document our goals and the measures for their implementation in our transfer strategy. This allows us to fulfill our task of translating scientific findings into innovative products, processes and services for the benefit of society and nature, making our potential transparent and usable to the outside world and demonstrating our responsibility for the region.

Research for the practice

The Hermann-Hoepke-Institut (HHI) connects the research activities of our university. We research, advise and develop projects in the fields of energy, information technology, engineering, agriculture and the environment, making our contribution to technology transfer in business, science and politics. Our namesake, Hermann Hoepke (1865-1928), founded the Rheinische Technikum, which later became Bingen UAS.

Third-party funding in figures



Ongoing projects

- › Soil Science and Soil Protection
- › Animal Nutrition and Animal Husbandry
- › Landscape Ecology and Biodiversity
- › Automation and Information Technology
- › Climate Protection and Climate Adaptation
- › Plant Cultivation and Plant Protection
- › Environmental Management and International Development Cooperation
- › Energy Management and Renewable Energy Management
- › Biogenic Materials
- › Energy and Building Service Engineering
- › Engineering Mechanics and Finite Element Method Analysis
- › Computer Science
- › Biochemical Engineering



Mainz-Bingen as a **STEM** region

The Mainz-Bingen region has been a STEM region of the state of Rhineland-Palatinate since 2018. The idea germinated from the MINTplus initiative of Bingen UAS at schools in the region. The project created a close network, in which the university, schools, communities and industry all work together with the same aims in mind. These partners have the objective of increasingly interlinked cooperation. STEM topics in the education chain are intended to start in day-care centres and continue throughout a child's school career.

MINTplus

MINTplus is an initiative of Department 2 of Bingen UAS and its regional cooperation partners. The aim is to inspire the lasting interest of fifth to tenth grade school pupils in the STEM subjects of mathematics, information technology, science and technology. The lack of trained professionals in these subjects is immense, and this is where MINTplus comes in. The initiative aims to counteract prejudices and increase the interest in technical and scientific subjects among boys and girls alike.

Join in and get to know us

Would you like to get to know the university a little better, or get yourself and your students excited about STEM topics? Then come visit us, or let us bring a bit of the university to your school. Bingen UAS has numerous offers for pupils, prospective university students and teachers.

University Information Day

We open our doors – with sample lectures, open labs and consulting opportunities.

Girls' Day

Girls participate in exciting workshops in technology and the natural sciences.

Coding Camp

Android programming – develop apps during a weekend camp.

Children's University

Experiment in the natural sciences or work as an engineer in technology.

Sample lectures

Come listen! Around the time of Easter and fall school breaks.

Research for Youth

Getting young people excited about STEM subjects, finding and fostering talent.

Bingen UAS in schools

Professors hold workshops, teach classes, hold lectures and more ...

Das STEM lab

The new STEM lab on the Bingen-Büdesheim campus offers school classes modern rooms for experimenting. Teachers can use it as an extracurricular, free of charge learning space. Fifteen different energy-related experiments are available there for grades ten and above. Staff of Bingen UAS supervise the experiments and provide teaching materials. The STEM laboratory is also used for other projects as part of the STEM region and for the children's university.

Career and academic guidance

Bingen UAS supports teachers as part of their vocational and study orientation (BSO). It offers events and various, individually available offers for pupils from primary level to secondary level II: From attending lectures, experimenting in laboratories, working together in workshops to a professor's visit to the school, Bingen UAS provides numerous offers.



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