TECHNISCHE HOCHSCHULE
OSTWESTFALEN-LIPPE
UNIVERSITY OF
APPLIED SCIENCES
AND ARTS

# Annual report 2022/2023

of the (TH) OWL University of Applied Sciences and Arts and Arts

**AT THE VERY TOP IN**
**NORTH RHINE-WESTPHALIA**

# EAST WESTPHALIA-LIPPE


# Contents


**The President of TH OWL:** Professor Dr. Jürgen Krahl

# EDITORIAL

Dear readers,

the current academic year has picked up speed. The campus railroad in Lemgo is on the horizon, the planned Center for Sustainable Digital Building in Detmold meets with much approval from politics, business, and associations. And the relocation of the Höxter site to the nearby Corvey Monastery would be a great opportunity for our university as a flagship project.

Let me be a little more concrete: The two new laboratory buildings on the Innovation Campus Lemgo are spatial signs of the positive development of our (TH) OWL University of Applied Sciences and Arts and Arts (TH OWL). We recently celebrated the topping-out ceremony together with BLB NRW.

Our university is creative, innovative, and sustainable. We look to the future and for research solutions for the challenges of today and tomorrow.

But let's also take a look at the past with this 2022/2023 annual report. It is both an information brochure and an accountability report, a practical reference work that provides a good overview of our university. Take a little time to browse.

I wish you a pleasant read.

Yours,
Jürgen Krahl

# REVIEW OF THE YEAR



**OWL RACING TEAM**

## Success is a joint effort

The night sky is clear, the streets are empty, the hustle and bustle of university life on the InnovationCampus give way to the gentle hum of lanterns. No movement far and wide, except for the swaying of the trees on Campusallee 19: InnovationSPIN.

The lights are on – again. Between soldering stations, 3D modeling, software development, and welding equipment, something special is being created. An electric racing car is being built here, designed by students at L. It is not the first and will not be the last. The OWL Racing Team has been building a new racing car every year since 2008 – formerly with a combustion engine, now electric. Why?

The answer is as varied as the backgrounds of the team members. First and foremost, the Formula Student competitions, in which the OWL Racing Team participates, are constructional design competitions. But building a competitive car and qualifying for races requires far more than specialist knowledge. You need a team that can cope with setbacks as well as successes. New approaches to problem solving are required as well as the will to grow beyond oneself.

Where the lights remain turned on, students burn even brighter for their cause: the unique combination of study programs from all faculties creates unexpected synergies. What is learned in lectures is applied in a practical environment.

But the students' passion alone is not enough to realize this ambitious project. It is only with the support of the university and the largely regional sponsors that the idea becomes reality. Students and sponsors alike benefit from the project, which, in addition to specialist knowledge, also promotes critical faculties, self-motivation, empathy, and communication skills and, thus, the perfect employees of tomorrow.

The experience, time, and work invested in a racing team is more valuable than many a module grade. For every member, the time here is particularly instructive and intensive, which is also reflected in the friendships that have developed. So the light continues to burn, even if a new team will build a new car at some point: the passion remains.


Professor Dr. Andreas Paa (left), an expert in drive technology from the Department of Mechanical Engineering and Mechatronics at (TH) OWL University of Applied Sciences and Arts, supervises the OWL Racing Team. The students pictured here are part of the project group and are already developing the new e-racing car for the coming season.


ANNUAL RECEPTION

# "The future lies in the now"

On October 19, 2022, TH OWL held its 19th annual reception, at which prizes were once again awarded for research, teaching, and engagement. Under the motto "The future lies in the now", the focus was on building and campus development at all of the university's locations. Projects in the areas of innovation, food production, and sustainability were also presented in lectures and the Lemgo, Detmold, and Höxter locations were introduced in small moderation groups. The award winners of the evening were Professor Dr. Burkhard Wrenger (research award), Professor Dr. Martin Oldenburg (teaching award), Lisa Kemper, Robin Zittrich, and Valentin Ntem (university society award), Martina Wallbaum (student body award), and Mohammad Abo Kaf (DAAD award).

**Click here for the award winners' videos**

Research award | Teaching award | University society award | Student body award | DAAD award




APPLICATION-ORIENTED RESEARCH STRENGTHENED

# Doctoral studies now possible at TH OWL

In November 2022, the Ministry of Culture and Science of the State of North Rhine-Westphalia (MKW NRW) granted the doctoral college of the Universities of Applied Sciences in NRW the right to award doctorates for an unlimited period. This enables professorships at TH OWL, which are members of the NRW doctoral college, and professorships at 20 other universities of applied sciences in NRW to carry out independent doctoral procedures. This strengthens application-oriented research at TH OWL and makes the university more attractive for both students and researchers. The opportunity to complete a doctorate will expand research at the university and strengthen TH OWL' role in the innovation process. The doctoral college NRW consists of 21 universities, qualifying graduates in structured doctoral programs at university level.

TEACHING AND RESEARCH PROJECT DIVERSITYLAB

# Further improving the quality of teaching

A cross-departmental student workshop on the Lemgo campus addressed the question of how analog, digital, and hybrid teaching formats can be improved against the background of diversity. The first of three interdisciplinary workshops took place in November 2022 as part of the DiversityLab TH OWL teaching and research project. The students from various degree programs worked in teams to develop the needs of their respective departments and examined how learning processes and diversity take place at TH OWL. A keynote speech on the ILIAS learning platform expanded the understanding of the possibilities and limitations. The results were and are used to develop new approaches to improve the quality of teaching at TH OWL. The project ran for twelve months.

ACTION DAY

# More STEM for girls

On Girls' Day on April 27, 2023, around 50 girls enjoyed what TH OWL had to offer, gaining exciting insights into various fields of study. They built water rockets, made their own muesli, examined food, and more. The professors and staff were delighted with the great response and will put together an interesting program for girls and boys for next year's Future Day.

OPEN DAY

# A "flirt with science" and 140 program items

On May 13, 2023, our open day took place at the Kreativ Campus in Detmold and the Innovation Campus in Lemgo. Under the motto "Flirt with science", TH OWL offered exciting lectures, informative guided tours, and entertaining hands-on activities with around 140 program items. In sunny weather, visitors were given an insight into research and campus life. Prospective students were able to meet students from various disciplines at speed dating and blind dating sessions and find out all about their desired degree program. The event attracted many interested people of all ages and was a complete success.

This was the open day 2023




UNIVERSITY INFORMATION DAYS

# More than 1,100 guests get a taste of campus life

TH OWL's University Information Days at the Innovation Campus Lemgo took place on January 18 and 19, 2023 – finally on location again. Students in grades Q1 and Q2 and other prospective students received comprehensive information and guidance. In addition to presentations and taster lectures by the departments, they were also able to obtain information from the advisory services offered by the central institutions. A "market of opportunities" offered the opportunity to ask questions about studying, campus life, and training. Over 1,100 pupils took advantage of this free advisory service together with their teachers.

STUDYCHECK AND CHE RANKING

# TH OWL top-rated once again

In 2022 and 2023, TH OWL impressed with its study conditions and professional practice once again. The Master's degree programs in the Department of Electrical Engineering and Computer Science took a top position nationwide in the CHE Ranking 2022 in the category "Contact with professional practice". Here, the students awarded eight out of twelve points. In terms of research funding per professor, the department is also one of the best in Germany with 226,200 euros. In 2023, the study conditions for the Business Administration and Economics and Industrial Engineering degree programs were particularly impressive.

In addition to the supervision, teaching, and practical courses on offer and the equipment, students praised particularly the general study conditions and the use of digital teaching elements. TH OWL also performed well in the StudyCHECK ranking 2023. It was ranked 2nd among the most popular higher education institutions in North Rhine-Westphalia.


It also achieved the same ranking in the "Digital Readiness" category. TH OWL even stood up to comparison with the universities in North Rhine-Westphalia and took second place overall. In a nationwide comparison of the ranking of all higher education institutions, TH OWL is ranked 14th out of 39, in the overall ranking of all colleges and universities TH OWL is ranked 18th.

PROJECT DIGIKOS

# Optimizing studies for students and teachers

The DigikoS project at TH OWL aims to support students and teachers with the increasing demands of their studies. Concepts and materials are being developed and tested to support hybrid courses and promote motivated and self-directed learning among students. The project includes the development of self-reflection tools for students, a toolbox for teachers to plan digital teaching-learning settings, and training of digital learning scouts. The scouts act as mediators between teachers and students and provide support in using the toolbox and optimizing digital course rooms. The project ends in July 2024 and the toolbox will then be accessible to everyone. DigikoS is a joint project of the Baden-Württemberg Cooperative State University, Bielefeld University of Applied Sciences and Arts, TH OWL, and ILIAS open source e-Learning e.V.



DIGITAL DAY

# State-of-the-art technology on historic market square

On nationwide Digital Day 2023, TH OWL presented several digital projects in Lemgo. Visitors were able to compete with artificial intelligence in the "Humans versus AI" picture puzzle. A field robot from the Precision Farming course and the Mobile SmartFarmOWL drove across the marketplace and delighted young and old alike.
The Institute for Industrial Information Technology (inIT) presented the Parkinson's app "PDAssist", developed in cooperation with Klinikum Lippe, which connects doctors and clinics and monitors mobility in everyday life. The Institute for Scientific Dialog (IWD) provided insights into programming and teacher training. In addition, the Central Student Advisory Service provided information about the wide range of courses on offer at the university.

UNIVERSITY ADVANCEMENT

# What do we do?

The motto of the University Advancement of TH OWL is "promotes, improves, supports".
We have made it our mission to promote the development of TH OWL, to improve the training of students to become efficient junior staff, and to support the university members, and in particular the students, both ideally and materially.
In 2022 and 2023, we provided 15 students with financial support for a semester abroad as part of our "Go Overseas" scholarship program.
In addition, since 2022, we have been able to support a further 80 students as part of the aid fund and in many cases have helped students to continue their studies.
We have provided financial support for numerous excursions, trade fair appearances, student projects, and various other requests.
We are pleased that we are also able to make a monetary contribution every year to ensure that a comprehensive program can be put together for the TH OWL company outing.

# Who are we?

The bodies of the University Society are the executive board, the presidium, and the general assembly. The University Society has 14 board members and 17 members make up the presidium. According to the articles of association, the committees are very diverse, for example with people from business, the municipalities, the districts of Lippe and Höxter, the Chamber of Industry and Commerce (IHK) and TH OWL.
Since May 2023, Anja Strüßmann as Chairwoman of the executive board and Professor Sven Hinrichsen as deputy chairman of the executive board have been responsible for the operational tasks of the association.
The president of the University Society is Volker Steinbach from Steinbach AG. His deputy is Jörg Düning-Gast, chairman of the Lippe Regional Association.

Fördert • Verbessert • Unterstützt
Hochschulgesellschaft
Ostwestfalen-Lippe e.V.

If you have any suggestions, requests or support requirements, please do not hesitate to contact us.
foerderverein@th-owl.de
New members and donations are also always welcome!

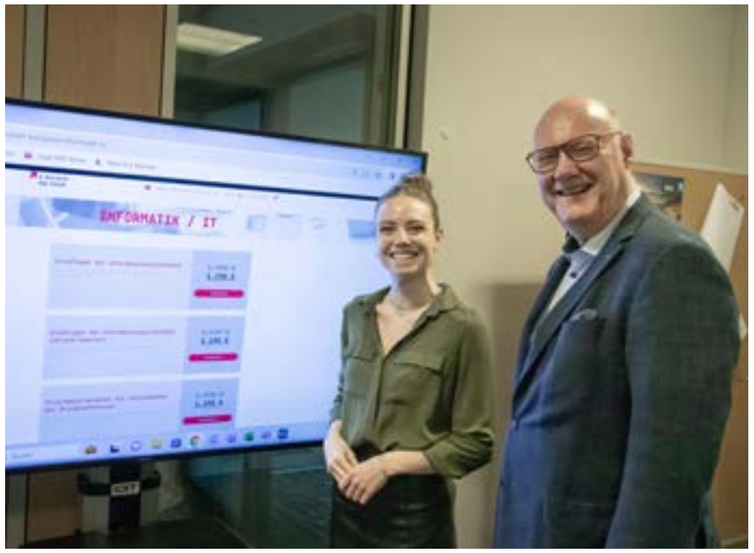
Our donation account:
IBAN: DE80 4825 0110 0000 0755 56
SPARKASSE LEMGO




E-DUCATIO OWL GMBH

# Subsidiary successfully launched

After intensive preparations, the e-ducatio OWL GmbH website was launched in the last week of October with almost 70 certificate courses and participation courses with certificates. The project for academic continuing vocational training is filled with life primarily by professors from the (TH) OWL University of Applied Sciences and Arts. They have, in particular, prepared the content of Master's degree courses for continuing vocational training. However, other TH OWL as well as external lecturers also add to a high-quality and modern training program with their seminars. Today, professional development is existential for SMEs and their employees. Modern team solutions in production can only be realized if all team members have the same level of knowledge and everyone knows how to act. For this reason, e-ducatio OWL has set itself the task of making continuing vocational training at an academic level accessible to all interested parties – regardless of their educational qualifications.
Demanding continuing education in the areas of business, management, production, and IT are an important part of modern corporate transformation against the backdrop of a shortage of skilled workers and unfilled positions. Renewable energy, sustainable urban development as well as marketing and communication are also important topics for social and economic change. We can guarantee particular practical relevance, especially for those courses that were developed through our cooperation with the Fraunhofer IOSB-INA in Lemgo.
We are pleased to provide this support.
E-ducatio OWL GmbH is a subsidiary of TH OWL. We offer our certificate and participation courses as evening, weekend and one-day compact courses, preferably on the premises of TH OWL at its locations in Lemgo, Detmold, and Höxter. They take place partly in person, partly online. Some of the courses can also be offered as in-house workshops by arrangement. The course program is constantly being expanded.



CLIMATE-NEUTRAL ADMINISTRATION

# A lot has been set in motion for greater sustainability, energy efficiency, and climate protection

Over the past year, TH OWL has tackled a wide variety of issues to promote sustainability, energy efficiency, and climate protection.

In a significant step, the university has declared its participation in the "Climate-neutral state administration" project. The state government has set itself the goal of making its administration climate-neutral by 2030 (Section 7 of the NRW Climate Protection Act). It is implementing measures to increase energy and resource efficiency, save energy, and use renewable energies. For implementation, forces are pooled, synergy effects are used, and the implementation of climate neutrality are driven forward together by the state administration and the universities.
TH OWL also successfully participated in the innovative climate protection project "Energy efficiency and climate protection at HAW", which was funded by the National Climate Initiative (NKI) and managed by HIS-HE.
Regular participation in the benchmarking of universities of applied sciences (HAW) in the area of building management – which is carried out by HIS-HE, the HIS Institute for Higher Education Development – makes it possible to record and compare key consumption data, from which corresponding savings measures can be derived.
The implemention of various measures, such as reduced room temperatures, no effect lighting, no hot water in toilets, and reduced lighting, made it possible to save almost 20 percent of energy costs last winter. The measures were derived from the Ordinance on Short-Term Measures to Secure the Energy Supply (EnSikuMaV).
In cooperation with other universities of applied sciences (HAW), the electricity supply contracts for the years 2024 and 2025 were put out to tender again. Since January 2024, TH OWL has been sourcing electricity from renewable energies, whereby the generating plants must not be older than six years. Based on the data from the Federal Environment Agency (UBA), the new electricity purchase policy results in a calculated saving of 1,437 tons of $CO_2$ per delivery year, assuming the same electricity consumption.

The different structures of the three university locations and the (age) structure of the buildings require individual measures:
The university and the Building and Real Estate Management NRW (BLB NRW) are drawing up a property energy concept (LEK) for the Creative Campus Detmold. Energy optimization studies are being carried out as part of this project; they apply to both the buildings and the operation. Specific measures, such as façade/floor insulation, window refurbishment, renewal of heating/ventilation systems, replacement of outdated lighting with LED lighting, etc., are to be derived from the LEK and implemented. A corresponding property energy concept will follow for the university locations in Lemgo and Höxter.
The university has greatly expanded the use of photovoltaic systems. After the defective photovoltaic system at the Höxter site was replaced by a new, more powerful one, TH OWL and BLB NRW also planned a photovoltaic system for Laboratory Building 5 at the Detmold site and for the two new laboratory buildings at the Lemgo site, which are funded by the university consolidation program (HKoP). These will be implemented in 2024 for electricity generation for own use.
In all older existing buildings, the conventional lighting is gradually being replaced with LED lighting (in some cases including presence detectors).
The BLB NRW also commissioned the replacement of the entire exterior lighting at the Detmold site. The replacement will take place at the beginning of 2024.

During the reporting period, eight e-charging stations, co-financed by TH OWL, were put into operation in the "Campus Parken" parking garage on the Innovation Campus Lemgo. Another fast-charging station followed at the beginning of 2024. More e-charging stations are expected to be installed by Stadtwerke Lemgo in 2025 following the completion of the two new laboratory buildings and the redesign of the main parking lot.
The green roof and façade on the newly constructed technical building at the Lemgo site and a wildflower meadow round off the measures towards greater sustainability and climate protection.



SUSTAINABILITY

# Sustainability management introduced

TH OWL reached another milestone in August 2023. Since then, Christian Einsiedel and Dr. Christoph Harrach have been tasked with bundling previous activities and establishing a strategic sustainability management system. They report to Vice President Professor Dr. Yvonne-Christin Knepper-Bartel, who has been responsible for the newly introduced Sustainability department on the Executive Board since January 2023, in addition to Education.

The work of both sustainability managers is coordinated by the Strategic University Development and Digitalization Unit and supported by all ten departments.
Following initial discussions, Christian Einsiedel and Dr. Christoph Harrach presented a roadmap of their future work to the Senate on September 27.

Nine sub-projects are planned by the end of 2025 in the three fields of action of governance, participation, and communication. The aim is to systematically gear the entire university towards greater sustainability in teaching, research, transfer, university operations, and governance.

## OUTLOOK

### Participation processes from 2024 onward

Two key questions are decisive here: What can be accomplished in-house? What is societally necessary? From 2024 onward, both are to be discussed by different groups of people and translated into concrete development projects. In the sense of the so-called "Whole Institution Approach", this creates a joint path to an overall more sustainable TH OWL.

STRATEGIC UNIVERSITY DEVELOPMENT AND DIGITALIZATION

# Digital student services with the KIS portal – TH OWL's new campus management system

## Digital services for students, applicants, and employees

November 17, 2022 was the day: As a central building block for the digitalization of student services at TH OWL, the KIS-Portal – the new campus management system – was activated for all applicants, for students already enrolled, and for employees in the Student Affairs department. Since then, a central online portal has been used to submit and process all applications for TH OWL degree programs digitally and with virtually no media discontinuity, from application to admission to enrollment. The KIS portal also offers self-service functions for all students, including direct retrieval of semester certificates, submission of online applications (e.g. leave of absence or de-registration) and editing of their own contact details. In 2024, the examination offices and examiners in the departments will also be activated for the new campus management system, which will then use the KIS-Portal as the central platform for exam administration. This will be followed by the relocation of teaching and room planning to the KIS portal, which will unite the entire study administration in one system.

## Project: "Introduction of a new campus management system"

The launch of the KIS-Portal in November 2022 was preceded by intensive project work at TH OWL since the beginning of 2021, which is expected to continue until at least the end of 2024. The technical system structure for the new software was first implemented in modular sub-projects and then the requirements for the application, enrollment, and student administration processes were implemented in parallel. The sub-projects for the implementation of examination administration and course management are currently still underway, while the already productive modules of the KIS-Portal are being continuously expanded and improved.
The university-wide changeover to the KIS-Portal brings changes for students and employees, new contact points and working methods have to be established, "analog" processes are digitized and changed. In order to achieve this, the project repeatedly offered training courses for employees and held workshops for those responsible for the individual sub-projects. In addition, the core project team and the Chancellor as the project client provided regular updates on the progress of the project to the university committees and the Campus Management Steering Committee. The rollout of the system for the student user group was accompanied by a communication campaign by the Communications and Marketing department in November 2022.

## Background campus management system

The technical basis for the KIS-Portal is the HISinOne campus management software from HIS eG, which is already in use at over 150 higher education institutions throughout Germany. At TH OWL, the KIS-Portal replaces outdated HIS software applications and offers many practical innovations for different target groups. One key improvement is that applicants, students, and employees all use the same integrated system via different interfaces, which means that everyone can access the same information via this central database. The self-service functionalities enable around-the-clock service for students, independent of the opening and service times of individual institutions. In addition, access to the stored data is better protected, as the KIS portal was the first system at TH OWL to be connected to the new two-factor authentication.
With the introduction of a document management system, the next extensive digitalization project was launched in January 2023 – another important foundation for the digital transformation of TH OWL. For the campus management system, this means that all relevant documents from the entire student life cycle can be stored securely and digitally in electronic files.

RECRUITMENT AND RETENTION OF HIGH POTENTIALS

# PROFuture@TH-OWL off to a successful start

The PROFuture team

Vice President Professor Dr. Uta Pottgiesser and Focus Professor Dr. Ulrich Nether

**It's not the fact THAT we teach that makes us special, but HOW.**

With PROFuture, TH OWL launched another highly relevant project at the beginning of 2023 with the aim of positioning the university as an attractive employer for professors, qualifying academics, and retaining them at TH OWL.
PROFuture is the combination of professorship and future and has set itself the goal of making a career path as a professor at TH OWL better known and putting it more strongly in the minds of potential candidates.

Together with all other higher education institutions in Germany, TH OWL is facing a generational change. Almost half of the professorships at the TH OWL will be vacant by 2032. Our PROFuture project is dedicated to this task with a focus on young scientists and professors – to remain strong in research and teaching in the future. Our goal: to recruit and retain high potentials for the region.

Within this framework, the project team looks at various aspects of the path to vocation: What makes us stand out as an employer? What conditions do the candidates find? How can we digitize the appointment process and further develop it throughout the university to ensure quality? What approaches and values are needed to be successful in the competition for the best minds?
Solutions are being developed in sub-projects, for example to create entry opportunities for doctoral students, postdocs, and experts from the field, to professionalize appointment management, develop a specific onboarding offer, and develop TH OWL into a strong employer brand.

Thanks to the project, four focus professorships and five tandem positions have already been awarded since the start of the year, which will be dedicated to in-depth topics from research, transfer, and cooperation as well as diversity in the coming years and contribute to the university's profile.
Organizationally, PROFuture is embedded in the Human Resources and Organization department under the leadership of Chancellor Nicole Soltwedel.



TRInnovationOWL

# Leveraging regional transfer potential

The (TH) OWL University of Applied Sciences and Arts is moving towards an exciting future with "TRInnovationOWL". Together with its project partners Innovation Campus Lemgo, Creative Campus Detmold, Sustainable Campus Höxter, Centrum Industrial IT, and Fraunhofer IOSB-INA, TH OWL will receive around two million euros a year over five years to strengthen the innovation dynamic in the region. The project is funded by the federal-state initiative "Innovative University".
An intensive exchange between business, science, and society shall not only generate ideas, but also true innovations. The diversity of the university is consciously included in the dialog with companies and society to promote innovative approaches.
Particular attention is paid to the "Bringing about innovation" phase, in which research results are translated into concrete innovations. Close cooperation with companies and start-ups shall lead to an effective utilization of results and make a sustainable contribution to the development of an innovative OWL region.
The project presented its vision at a successful kick-off meeting. Project manager Nikolas Rolf emphasized the success of the meeting and the intention to take unconventional paths.
Another highlight was the first "TransferTalk", an intensive exchange between research, business, and science. The focus was on ideas and research approaches. Impulse and innovation projects were presented, including fascinating initiatives for energy efficiency and sustainable cultural landscape development.
The CIIT Science Slam bridged the gap between science and entertainment. Researchers presented their work in entertaining formats, and the slam showed how lively science communication can be.
TRInnovationOWL also opened its doors to the "young leaders", a group of committed young people. The seminar day offered insights into robotics, artificial intelligence, and Industry 4.0. The "young leaders" had the opportunity to explore the SmartFactoryOWL and discuss their own visions for the future.
With TRInnovationOWL, TH OWL focusses on promoting innovation and involving the community to jointly shape a sustainable and exciting future in the region.

The TRInnovationOWL team

**S(KIM) – SERVICE COMMUNICATION INFORMATION MEDIA**

# Lots of work behind the scenes: One year under the banner of cyber security

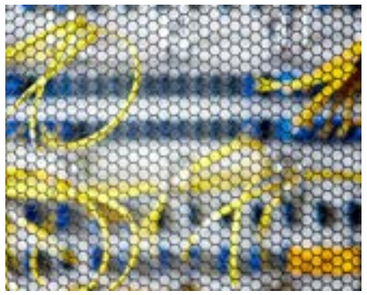
In terms of IT security, around 350 million decisions had to be made in the past academic year. Daily. This is the average number of data packets that want to pass through the TH OWL firewall within one day. Only about half of the data packets are ultimately allowed through. This shows the enormous effort that S(kim) puts into maintaining the firewall filters. In conjunction with the Sophos anti-virus software, which reported potentially dangerous files on university computers about once a day, the university's IT network was kept free of damage.

While these and many other security efforts took place in the background, the introduction of two-factor authentication was certainly noticed by the university public. Not always positively.

But according to IT security experts worldwide, it is the essential building block for protecting a network. With the knowledge of this importance and after initial skepticism, the service has now become part of everyday student and work life.
A lot of time has been and continues to be invested in IT security. A look at the consequences of successful cyber attacks reveals that it is worth it.
The S(kim) team was also actively involved in many construction projects.

The InnovationSPIN, the Future Food Factory OWL, the Kreativinstitut.OWL, and the media production building in Detmold were equipped with the IT infrastructure. In addition, the refurbishment measures in the main building in Lemgo had to be accompanied. The network components at all locations were brought up to date, largely financed by state funds from the large-equipment network application.

As part of the library section of S(kim), a switch to a new library system was due in August 2023. The changeover took months of intensive preparation. The cloud-based Alma system is now in use at 42 libraries across the country. This is the first time that a joint solution has been implemented in the NRW network.



The system enables even better networking of libraries, supports cooperation and the shared use of data or media.
Another challenge for S(kim) was reorganizing a central data processing center for the state's art academies and conservatories under the TH OWL umbrella. This data processing center, originally located at Hochschule für Musik (HfM) in Detmold, was in a critical situation due to various challenges. In view of an existing cooperation between the data processing center and S(kim), the Ministry of Culture and Science NRW approached TH OWL with the task of supporting the restructuring of the data processing center with S(kim)'s expertise. This means a lot of work – but also an enormous gain in reputation for the entire university.


DIGITAL TEACHING AND LEARNING

# Digitization at universities: Focus on the ILIAS.nrw project

As the central learning platform of TH OWL, the eCampus provides access to digital teaching content. In addition to course content, examinations are also taken via this learning management system (LMS). It facilitates access to teaching materials, promotes interaction between teachers and students, and provides a platform for effective e-learning. The importance of LMSs for effective e-learning at North Rhine-Westphalian universities is underlined by the ILIAS.nrw project.

Funded by Digitale Hochschule NRW and running until the end of 2024, the ILIAS.nrw project aims to support universities in NRW that use ILIAS as their preferred LMS for e-learning and e-assessment. The consortium for this project consists of Dortmund University of Applied Sciences and Arts, Bielefeld University of Applied Sciences and Arts (HSBI), Cologne University of Applied Sciences, Heinrich Heine University Düsseldorf, and TH OWL.

The focus areas of the network partners include topics such as communication and networking, information and support as well as media technology concepts and eAssessment.

The Technology and Development sub-project, which is based at TH OWL in cooperation with HSBI, focuses on three pillars: Simplification of collaboration, mobile working, and streamlining. Improvements in these areas should help to increase the acceptance of ILIAS for teaching and research and make it more attractive to use.

A central aspect of the sub-project is the simplification of collaboration. Collaborative teaching and learning as well as the simple collection of exam feedback are facilitated. Mobile working is also taken into account by optimizing the mobile display and functionality. The focus here is on adaptation to different end devices. Streamlining aims to optimize the presentation and operating concepts of ILIAS to further improve user-friendliness.

The ILIAS.nrw project is part of the Teaching and Learning (TeLL) team at S(kim). On the one hand, this enables close links with other teaching projects and, on the other hand, promotes a holistic view of the development projects through close cooperation with colleagues from the university IT department.

As part of this project, TH OWL benefits from the expansion of the previous ILIAS expertise at the university and direct connection to the community. This proximity not only enables the integration of input from teaching staff into the further development of ILIAS, but also provides an important point of contact for technical questions.

One highlight for the entire project team was certainly the joint exhibition stand with the Baden-Württemberg sister project bwILIAS at the 22nd ILIAS conference, which took place at the University of Cologne in September 2023.

# CREATIVE CAMPUS DETMOLD




HOTSPOT FOR THE CULTURAL AND CREATIVE INDUSTRIES

# How KIO made great strides forward

The KreativInstitut.OWL, or KIO for short, celebrated its topping-out ceremony in November 2022. The project, set up jointly by TH OWL, Paderborn University, and HfM Detmold, is intended to become a hotspot for the cultural and creative industries, to conduct research in the fields of digital media production, music and film informatics and digital humanities, and to offer space for collaborative work and discourse. The aim is to translate scientific findings into marketable products and develop sustainable business models. Construction was already making good progress in the summer of 2023. Almost finished on the outside, the interior work was in full swing and the first users were able to move in in the fall.



CHANGES IN ARCHITECTURE

# Institute for Design Strategies offers a look behind the scenes

The Institute for Design Strategies (IDS) at TH OWL was presented at the OpenLab on the Creative Campus Detmold in May 2023. The interdisciplinary institute combines four different research focuses in the planning disciplines. IDS aims to accompany the change in architecture and planning disciplines towards a responsible and sustainable design of the human habitat. Synergies for sustainable design strategies are discussed at the IDS through inter- and transdisciplinary cooperation and international networking.

INTERNATIONAL PERSPECTIVE

# Shining light(s) on the Kreativ Campus

Internationally renowned cameraman Djordje Arambasic has been a guest lecturer at the Kreativ Campus in Detmold since the end of 2022. Arambasic has been involved in several award-winning films and taught at a leading art and design school in Singapore. In Detmold, he gives courses in film production, lighting design, and cinematography. His public inaugural lecture entitled "Cinematography as a Creative Interpretation" offered special insights. Arambasic brings with him international perspective and specialist knowledge – an additional enrichment for the students.

# STUDY WHERE OTHERS GO ON VACATION

★★★★★

**Great university atmosphere in a small town**

"I'm in my first Master's semester at TH OWL in Detmold and initially had little idea what the city was like. But after four months, I can say that even in a small town you can get your money's worth as a student. The university has a wide range of offers and is very inviting!"

Quote from a student of the Master's program Media Production*

★★★★½

**Computational Design**

"A relatively unknown university, but the Master's program is actually relatively unique in Germany; in other cities you get that at most as a paid program. Although you have to teach yourself a lot of content through "self-study", you get important support and the necessary time to do so. The Master's program is very small (approx. ten students per semester) and very international (teaching language English). I really liked that, you meet people from all over the world in little Detmold."

Quote from a student of the Master's program Integrated Design*

SUCCESSFUL JOINT PROJECT

# International award

Detmold School of Design's magazine received the "International Creative Media Award" in gold for the first time in December 2022. In the "Customer Magazines B2C Print" category, "52 GRAD" was able to prevail against global competition. The teaching transfer project, which is realized annually with changing student editorial teams, integrates teaching with partners from the design and furniture industry. More than 250 students have been involved so far. They were supported by experts such as Markus Tiggemann and Heide Teschner. The jury evaluated almost 400 entries from 23 countries.

# Be daring! New "52 GRAD" presented

The release party for the new issue of "52 GRAD" focused on the message "Be daring!". Despite current challenges such as climate change or economic uncertainty, Professor Hofmann emphasizes the power of designers to bring about change. The almost two-meter tall sculpture of a fist symbolized self-empowerment and diversity. The award-winning magazine of the faculty Detmold School of Design was developed by students under the direction of Professor Martin Hofmann.




CENTER FOR SUSTAINABLE DIGITAL BUILDING

# Lighthouse project for the region and university

The planned Centre for Sustainable Digital Building (ZNDB) in Detmold will focus on the digitalization of production and the environmentally friendly use of materials in the construction industry. The potential analysis demonstrated the uniqueness of the interdisciplinary and transdisciplinary conceptual approach in research and teaching. The feasibility study came to the conclusion that the ZNDB is feasible and can achieve special networking with regional players. The interest of the industry has long been aroused by the mapping of the entire value chain and the high level of application orientation. State Secretary Sieveke praised the concept and emphasized the importance of sustainability and digital construction. The ZNDB is intended to be a unique selling point in NRW and is supported by a strong partnership of specialist departments from TH OWL and the construction industry. In the fall, the university was a guest at the NRW.URBAN stand at EXPO REAL in Munich and was able to convince the expert audience and politicians of the idea and the concept.

# EXPERIENCE HISTORY UP CLOSE

★★★★½

**Future prospects**

"The civil engineering profession offers security. Engineers are needed everywhere. I learned many things about everyday life and how technical processes work and how they have a positive effect on the economy. It is also interesting to understand how buildings are constructed and the mathematical art behind it."

Quote from a student of the Bachelor's degree course Civil Engineering*

★★★★★

**Very contemporary**

"We used all the edge cutting techniques and I was very satisfied with the equipment TH OWL provided.  Mostly the FabLab, it was a very friendly environment, too. A KUKA was missing, but we didn't miss the training as our prof. organized the course near a private company which welcomed us and we had the robotic course done properly and fully."

Quote from a student of the Master's program Integrated Design*

**OUR NUMBER ONE FOOD**

# All for water? Water for all!

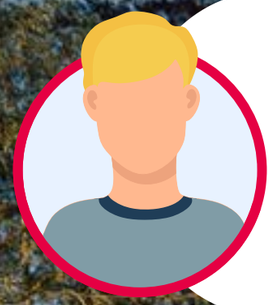
Detmold was the venue for World Water Day 2023, which was dedicated to the importance of drinking water and the challenges in this area. The event offered a variety of activities such as an exhibition on emergency water supply by the THW Lemgo, a "water bar" by the Detmold public utility company, and short presentations by regional players. TH OWL also presented its commitment to tap water and supported projects such as the "Water Quarter" in Detmold city center.



# INNOVATION CAMPUS LEMGO




# GREEN ALL AROUND



★★★★½

**Perfect mix of courses**

"In my opinion, the mix of courses is just right. On the one hand, this includes more demanding, very theoretical courses and, on the other hand, more practice-oriented courses which provide a comprehensive overview of various topics."

Quote from a student of the Master's program Electrical Engineering*

★★★★½

**Friendly professors**

"The close contact with the friendly professors offers a detailed and intensive exchange about the teaching content. The professors do not shy away from explaining things clearly and repeatedly when you have questions or problems. For me, it was very easy to make contact at the university."

Quote from a student of the Bachelor's degree course Business Psychology*

★★★★½

**Perfect mix of business & technology!**

"Many modules can be repeated with e-learning. Everything is very well documented and there is a great exchange between lecturer and student if you still have questions. Of course, occasionally there are lecturers you don't get on with, but where is that not the case?

The content is a good mix if you can't decide between technology and business. There are blackboards but also projectors that are easy to connect to. Documents are always uploaded online, and there is often additional material that you can but don't have to deal with. There are also opportunities to hold lectures online and the professors are also available online."

Quote from a student of the Bachelor's degree course Industrial Engineering*

★★★★★

**Satisfied all round**

"Very nice and competent professors and staff who are happy to help if you have any questions. There is a relaxed and laid-back atmosphere at the university. Demanding content is explained clearly and well in a reasonable amount of time. There are also many opportunities to get involved, for example in the student councils or the AStA. You can put together your own timetable and study at your own pace.

In general, I'm very happy with my studies; I've just completed my Bachelor's degree and will continue with my Master's immediately afterwards. I can only recommend the university."

Quote from a student of the Master's program Mechanical Engineering*

IMPRESSIVE INTERIM RESULTS

# First Master Entrepreneurs receive their certificates

The first graduates of the "Master Applied Entrepreneurship" program have received their certificates. The course began two years ago as an experiment and has since recorded an impressive success rate. Of the 43 students, 37 completed the course, 15 of them successfully. In 2022, a further 99 students had enrolled for the Master's degree. The innovative concept of the program enables students to study along the lines of their own start-up idea and immediately put what they have learned into practice. Due to the high proportion of online courses, the degree course is also popular with international students. Graduates are able to implement and support innovation and change using modern management methods. Practitioners from the regional economy supplement the course with their specialist knowledge.

MASTER INFORMATION TECHNOLOGY

# Two decades on the pulse of time

20 years ago, the Master's degree program "Information Technology" was introduced at the Department of Electrical Engineering and Computer Science at TH OWL. It was the first ever Master's degree program at TH OWL, founded in 2003 by Professor Dr. Ernst Beckmann, Professor Dr. Thomas Korte, and Professor Dr. Uwe Meier. The program began with a trilateral rotation between Halmstad University in Sweden, the Danish study location Esbjerg, and TH OWL in Lemgo. This gave students the opportunity to get to know three different countries and their education systems. The study model was unique in Germany at the time.

The department found important support in the local industry, which promoted the career prospects of the graduates. The Master's program has established itself as a pioneer in its field and has been continuously developed since its foundation. The current focus is on the "Future World Empowerment Programme", which enables students to take responsibility in a complex world. This course of study is of great importance not only for TH OWL, but also for the city of Lemgo. It represents innovation, academic excellence, and a welcoming culture.



THINK TANK FOR RESEARCH, VOCATIONAL TRAINING, AND ACADEMIC TEACHING

# InnovationSPIN inaugurated after two years of construction

InnovationSPIN was officially opened after two years of construction. The joint project of the district of Lippe, the Paderborn-Lippe District Craftsmen's Association, and TH OWL aims to strengthen the innovative capacity of regional companies and contribute to strengthening rural areas through the transfer of knowledge between vocational and academic education as well as through the training and further education of junior staff and skilled workers. As a think tank for research, vocational training, and academic teaching, InnovationSPIN develops concepts for digitalization and education. The project received a total of 27 million euros in funding from the state, the federal government, and the EU. The open room design and shared work areas promote interdisciplinary exchange and innovation. InnovationSPIN is a place where science, education, and trade work together to develop new ideas and innovations. It imparts practical and tangible knowledge and offers a platform for the development and implementation of innovations and start-up ideas.

Video about the InnovationSPIN

INNOVATION LANDLAB DÖRENTRUP

# Nationwide interest in the Land power plant

At the Innovation LandLab Dörentrup, some of the region's brightest minds are researching solutions to the technological, social, and cultural challenges of our time. This includes TH OWL employees. In the "KraftwerkLand" project, they investigate the production and storage of hydrogen as a sustainable alternative to fossil fuels. Decentralized installation in autonomous regions enables comprehensive supply, also in cooperation with agriculturally potent countries.
Last year, numerous guests from all over Germany visited KraftwerkLand. Frank Bonaldo (Federal Ministry for Economic Affairs and Climate Action) and Dieter Bockey (UFOP advisor), MP Christian Sauter (FDP, Extertal) and MP Frank Schäffler (FDP, Bünde) as well as Professor Dr. Ravi Fernandes and Dr. Sumit Agarwal (German National Metrology Institute) were on site and had the test facility explained to them.


FULL SPEED AHEAD!

# OWL Racing Team celebrates its 15th anniversary

TH OWL's OWL Racing Team celebrated its 15th anniversary in June 2023 and proudly presented the new OWL 2.3 electric racing car. The team had invested countless hours in the development of this model. The presentation of the racing car and the anniversary celebration took place in the new workshop at InnovationSPIN in Lemgo. The OWL 2.3 is characterized by innovative and sustainable new features. The aerodynamics have been improved and a new fault code system has been developed. Sensors also collect data on the chassis and driving behavior. The team is planning to set up a start-up to recycle old electric car batteries. The OWL Racing Team consists of around 25 students from various faculties and has been successfully taking part in international races since it was founded in 2008.



RESEARCH AND DEMONSTRATION PLATFORM

# New Future Food Factory OWL tests food production of tomorrow

The Future Food Factory OWL was opened on the Innovation Campus Lemgo. It offers a unique research and development environment for the food technology of the future. In cooperation with partner companies, innovative production processes, and individual solutions for food technology are to be developed to improve the quality, safety, sustainability, and cost-effectiveness of food production. Various projects were presented at the opening, including an intelligent sterilization system for drinks and an investigation into the shelf life of food. The Future Food Factory OWL is a research and demonstration platform for the digital transformation in food technology, funded by the European Regional Development Fund.

# HAPPENING HERE

★★★★½

**Everything is fine and professional**

"Very good quality and excellent, they are professional with the very helpful staff and services that are delivered to the students. I highly recommend the TH OWL Lemgo. They are also founded in a very good place. Totally I highly recommend for students."

Quote from a student of the Master's program Life Science Technologies*

★★★★★

**B.Ed. Nutritional Science**

"Overall, I can only recommend TH OWL as a university.
Most of the lecturers are very friendly and happy to help with problems and questions. The content of the lectures is also appropriate, as far as I can tell. Hwever, there was one rotten egg here at the university, one who is not really interested in the students and generally sees them as a nuisance and a waste of time, which the professor even says in his lectures in a roundabout way. In general, the Lemo campus is currently undergoing a lot of renovation and expansion work, including asbestos removal in the main building. Nevertheless, there are still lecture halls where the Wi-Fi doesn't work well or where there is hardly any ventilation in summer and there are no windows. Overall, the university is quite small (in the first semester I only had 180 first-year students in my department), but in my opinion this is a plus. The city itself is also very beautiful and I have no regrets about moving here."

Quote from a student studying for a Bachelor of Education degree in Nutritional Science, Home Economics and Food Technology*

START-UP PROMOTION

# Campus Foundery OWL: New brand, new location, and limitless possibilities

Campus Foundery OWL, TH OWL's start-up center, presented itself in June 2023 with a new name and at a new location at InnovationSPIN. The center's goals and strategies were presented at a networking event: Entrepreneurial education and support for students and employees, promotion of start-ups in the food and industrial information technologies and creative sectors, and expansion of the entrepreneurial ecosystem. The event included a tour of the premises and an inspiring talk on New York. Finally, a pitch competition took place in which talented start-ups were honored. The new brand marks a significant milestone for Campus Foundery OWL and stands for innovation, further development, networking, trust, and collaboration.


LIGHT BEAM STIMULATES GENDER-SPECIFIC SUBSTANCES

# Three million euros for the "egg sorting machine"

A team at TH OWL led by Professor Dr. Helene Dörksen has developed an innovative laboratory procedure to improve animal welfare: Using time-resolved laser fluorescence spectroscopy, the sex of a developing chick in a hen's egg can be determined from the third day of incubation without damaging the egg shell. The accuracy rate is 98 percent. The federal government is providing a total of three million euros to build sexing facilities for large and small hatcheries that are suitable for everyday use.



CAMPUS DEVELOPMENT PROGRESSES

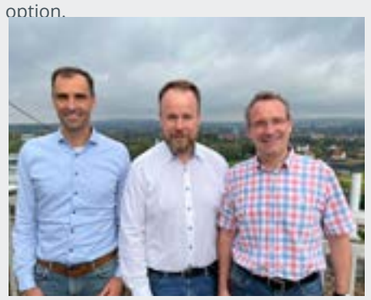
# New laboratory buildings in Lemgo – The first walls are up

In June 2023, construction work on the new TH OWL laboratory buildings in Lemgo was progressing well, as the first walls had already been erected. BLB NRW is realizing the new building for the departments of Electrical Engineering and Computer Science as well as Mechanical Engineering and Mechatronics at the Innovation Campus Lemgo. The first floor was almost complete and construction work on the second level was about to start. The gross floor area of the building totals 4,837 square meters. In addition, a new laboratory building with a gross floor area of 3,379 square meters is being built for the Life Science Technologies department. In future, both buildings will meet the specific teaching and research requirements of the departments and will be equipped with state-of-the-art facilities.

SECOND LARGEST DEPARTMENT

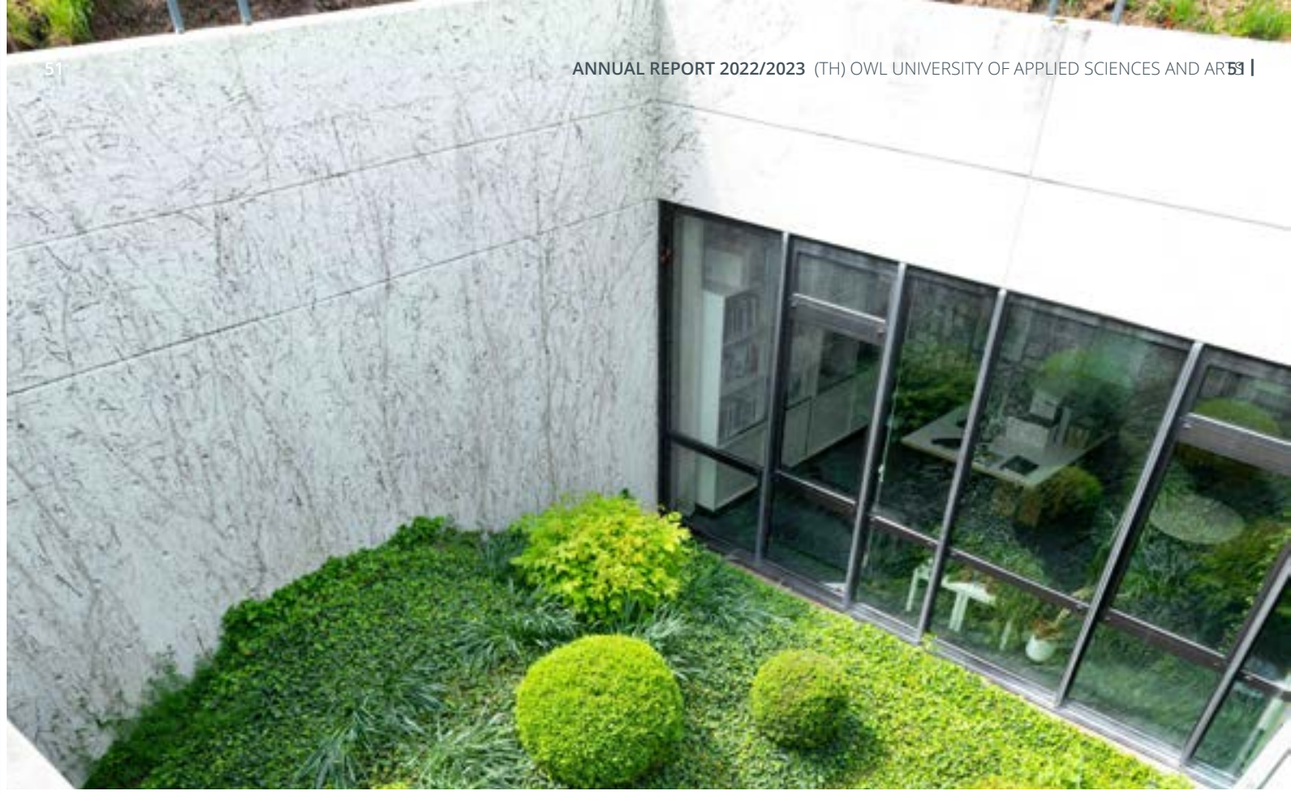
# 20 years of Business Administration and Economics at TH OWL

The Department of Business Administration and Economics scores with tradition and topicality, looking back on a good 20 years of experience. Initially part of the former Department of Production and Economics (now: Production Engineering and Wood Technology), it now offers a wide range of courses of study as an independent department, including Business Administration, Logistics Management, and Business Psychology. With around 700 students, it is the second largest department at the university. Teaching is characterized by a strong practical orientation and offers students insights into the working methods of medium-sized companies. The department works closely with the regional industry and attaches great importance to current and future-oriented content. The excellent study conditions and the opportunity for an academic career make studying business at the TH OWL an attractive option.



# SUSTAINABLE CAMPUS HÖXTER



AT THE GRÜNE WOCHE TRADEFAIR

# What robots and drones have to do with sustainable agriculture

The Mobile SmartFarm OWL project and the Precision Farming course of study at TH OWL presented themselves at the trade-fair Grüne Woche in Berlin. The visitors were impressed by the possibilities for optimizing agricultural production through digitalization and the precise use of fertilizers and pesticides with the help of drones and robot technology. Minister Silke Gorißen and State Secretary Dr. Martin Berges were also very interested. At the stand, topics such as early sex recognition in hen's eggs, the post-fossil model region, and the Future Food Factory in Lemgo were discussed. The State Garden Show was also a topic, as was the good cooperation between the city of Höxter and TH OWL. The joint stand "Genussregion Ostwestfalen-Lippe" attracted visitors with local products.

POLLUTANT REMOVAL AND DUST BARRIERS

# Fresh cell treatment for Campus Höxter

The renovation work in Administration Building 1 (building section 1000) on the Sustainable Campus Höxter started at the beginning of 2023. The first step was to remove pollutants. Formaldehyde levels were above the guideline value. Dust barriers and tunnels were installed. The concrete renovation of the exterior façade of building 2 (building section 2000) had also begun. The façades of all the buildings in Höxter were gradually cleaned, repaired, and repainted.



ON THE TRAIL OF RENEWABLE RAW MATERIALS

# More than one reason to celebrate at the State Garden Show

Landesgartenschau (LGS), the “State Garden Show”, was opened in Höxter in April 2023. State premier Hendrik Wüst emphasized the close connection to Corvey Monastery as a bridge between nature and culture. Numerous other high-ranking guests were present, including representatives of TH OWL. The university was significantly involved in the design of the LGS, including with a fungus mycelium pavilion and a weather station. Students presented their projects and emphasized the importance of renewable raw materials and digital construction processes. The porcelain garden was also presented as a unique regional project.

2023 LANDESGARTENSCHAU HÖXTER *an der Weser*

Impressions of the 2023 State Garden Show in Höxter

# END THE DAY ON THE BEACH

★★★★★

**Pragmatic, personal, good**

"Practical linking of theoretical content and lecturers, some of whom are still working in practice and can give tips. Basically, you meet the lecturers as equals and they are always approachable if you have problems or questions. Furthermore, the size of the learning groups is positive. Timetables can be changed in consultation with lecturers to generate more learning time and also to make days more compact. There are no overcrowded lecture halls! The entire course content prepares you well for the practical side of things and helps everyone to reach their individual level of knowledge."

Quote from a student of the Bachelor's degree course in Landscaping and Landscape Management*

★★★★½

**Second study – a different world**

"What I was able to experience at TH OWL in Höxter during my studies changed my perspective. Before that, I had already completed another degree at another university. There, I was simply a number in the system. Not so at TH OWL. Here, the lecturers took the time to engage personally with the students. The way teaching is practiced should be the standard for a degree course. The lecturers want the students to understand the content and invest a lot on their part. The content covered in the course is also varied and has often helped me after my studies. In conclusion, I can only say that before studying at TH OWL in Höxter, I was quite unsure whether I was doing the right thing by studying there, and in retrospect I can only say that it was the best decision I could have made."

Quote from a student of the Bachelor's degree course Environmental Engineering*

STATE GARDEN SHOW 2023 IN HÖXTER

# Wild gardens, living fences, and a pavilion made of mushrooms - what on earth?

The State Garden Show (LGS) in Höxter offered unique experiences for the whole family from April to October 2023: Art, culture, inspiration for garden fans and plenty of educational information for all age groups made the changing program at least as colorful as the splendor of flowers and plants.
The special thing about this LGS was that it was not simply created on the green field, but that the guests were guided from the old town and on the rampart along the Weser to the Corvey World Heritage Site and vice versa. TH OWL was represented with many projects from different departments!




# Four hectares to relax and explore

The botanical garden on the Sustainable Campus was embedded in the overall concept. Plant-related and application-oriented research go hand in hand on four hectares. With around 2,000 plant species and varieties as well as different areas, the educational park is a beautiful place for students to relax, experience, discover, and explore at any time of year.
Students had already started planting "living fences" near Corvey Castle in the fall of 2022. What may sound a little like science fiction is science in harmony with tradition. The so-called Nieheim Flechthecken have existed in nearby Nieheim for centuries. In 2018, the Nieheim braided hedge was even recognized as intangible cultural heritage.
The three 160-meter-long braided hedges on the LGS grounds consist of 350 hazelnut, hawthorn, and maple plants, whose branches are braided or woven together using the Nieheim weaving technique and resemble a trellis-work fence. For the 40 students and budding landscape architects, the project was "hands-on teaching" and something to remember.
The Nieheim braided hedges have also been the subject of final theses by students of landscape architecture, as they form a green wall and have a high ecological value as a breeding ground, habitat or shelter.

# ENJOY NATURE AND CULTURE

★★★★★

**I am very enthusiastic about the TH!**

"Because the school is very informal, you can always go to the professors if you have any questions. The course content is very interesting and well explained. The lecture slides & exercises are uploaded regularly. Someone from our degree program was allowed to sit on the examination board and was allowed to help decide when we wanted to take which exam (i.e. all in the respective semester, of course, but spread out from January to April), which I personally thought was really good, as the exams are often piled on top of each other. You can tell that the university is putting a lot of effort into the new degree program!
I can only recommend this program at the TH in Höxter!!!"

Quote from a student of the Bachelor's degree course Environmental Sciences*

★★★★★

**Miscellaneous and independent studying**

"I am particularly impressed by the diversity of this degree program. Since the beginning of the first semester, an incredible amount of topics and content have been addressed and developed, so that the course always has something new to offer and is also a lot of fun in the higher semester. The lecturers have done their best during the coronavirus pandemic to enable us to study in a good and goal-oriented way. I recommend the course of study to those who want to express themselves creatively, have a passion for nature and nature conservation, and want to work for our future."

Quote from a student of the Bachelor's degree course Landscape Architecture*

STATE GARDEN SHOW 2023 IN HÖXTER

# Innovative alternative to conventional building materials

Another special feature and a real eye-catcher at the LGS was the pavilion made of fungus mycelium. Fungi are a versatile and fascinating subject of research, not only in biomedicine – or in the frying pan. They are a life form in their own right. Under the direction of Professor Hans Sachs and as part of an interdisciplinary competition, the idea for this eye-catching building made of fungus-bound fiber substrate was born.

The background to this project was the practical use of an alternative, sustainable building material in conjunction with digital construction planning. Sachs: "Mycelium materials can be a cost-effective and climate-friendly alternative to conventional building materials." Small robotic lawnmowers busily mowing the front garden are a great thing – and old news. Those who look into the future will turn the bot into a gardener! Tuning for the vegetable garden, so to speak. Sowing, watering, fertilizing, you can do it all yourself, but you don't have to. Under the direction of Professor Dr. Burkhard Wrenger from the Department of Environmental Engineering and Applied Information Technology at TH OWL, the project team demonstrated an agricultural robot. On a small scale, a "FarmBot" automates and controls many aspects of food cultivation. Plantings can be planned on the drawing board using open source software. Professor Wrenger and his students installed the automated vegetable patch on the LGS grounds in spring 2023. The presentation also included information about TH OWL itself and the Precision Farming degree program.

**STATE GARDEN SHOW 2023 IN HÖXTER**

# Fragile only at first glance

It is no coincidence that the guiding principle of TH OWL is "Creative, Innovative, Sustainable". The work referenced above stands for innovative strength and sustainability. But what about creativity? If you let your gaze wander carefully over the green spaces, you can't miss the "porcelain garden". Students of Landscape Architecture and Environmental Planning at TH OWL realized this joint artistic project in collaboration with the Museum Schloss Fürstenberg and the Fürstenberg Porcelain Manufactory.

The rows of around 1,600 plates and platters traced the course of the Weser and the Weserbergland in the themed garden on the rampart. The design was created by a landscape architecture student who won the ideas competition led by Professor Dr. Hans-Peter Rohler and Professor Ute Aufmkolk.

No less worth seeing were the 22 display beds that students from the Department of Landscape Architecture and Environmental Planning had developed, planted, and maintained throughout the entire State Garden Show for Höxter's city center.

Or the phase garden, which documented the development stages of a private outdoor area section by section, making the processes and work normally hidden underground visible. This gave garden owners valuable insights into the planning, implementation, and financial aspects.

Last but not least: The "wild gardens on the rampart". Two budding landscape architects from TH OWL decided to give thistles, nettles, burdocks and the like a chance in their garden instead of pulling them out, root and all, as unloved wild herbs. The innovative design by the two students illustrated how you can contribute to biodiversity in your own garden by highlighting and staging weeds. No wonder the duo came first in the competition organized by the Association of German Landscape Architects (bdla) and the implementation company of the North Rhine-Westphalian state garden shows, winning a handsome prize.
By the way: Anyone interested in how landscape architects design sustainable and green living spaces or make cities and landscapes fit for climate change should listen to the "Landesgartenschall" podcast.

EXCHANGE BETWEEN ADMINISTRATION, BUSINESS, AND SCIENCE

# Workshop on novel environmental information systems

The workshop of the "Environmental Information Systems" working group focused on digitalization in the context of climate change and the energy transition. This hybrid event was attended by 40 experts on site and 60 via video call to discuss the latest research findings and developments in the field of environmental informatics. Technologies to support environmental information systems were presented and discussed. The open workshop offered experts from administration, business, and science the opportunity to exchange ideas. Developers presented their solutions and discussed their usability. Experiences and requirements were discussed and new ideas and research approaches were examined for their practical suitability.



SOMETHING TO LISTEN TO

# Podcast launched on Landesgartenschau Höxter Garden Show

The podcast "Landesgartenschall" has been online since June 2023. Students from the Landscape Architecture course of study at TH OWL invited former graduates for talks at the Landesgartenschau (LGS), the “State Garden Show”, and captured original sound bites. The guests, successful landscape architects from various fields, were interviewed to publicize the diversity of the profession. The podcast is aimed at students, interested parties, and anyone who is enthusiastic about landscape architecture. A total of six episodes offer exciting insights.


FORTUNA CAME IN FROG FORM

# Höxter Botanical Garden: Winner of the photo competition

The Höxter Botanical Garden chose the winner of its photo competition in summer 2023. Wolfgang Hentschel was awarded first place with his impressive picture of a swimming frog. The award ceremony took place during a potluck picnic. The botanical garden offers visitors a picturesque atmosphere with beautiful and special places. The photo competition is currently taking a break, but will return for the 20th anniversary in 2024. The garden is open all year round. Visitors can explore plantings and tours via app. The Friends of the Botanic Garden are committed to its preservation and promotion and offer specialist seminars on various topics.

# LOCATION HERFORD AND LOCATION MINDEN

ONLY ONE ATTENDANCE DAY AT THE HERFORD EDUCATIONAL CAMPUS

# Promising study model

The "Digital Management Solutions" (DiMS) course of study at the BildungsCampus Herford is as promising as it is practice-oriented. By using digital tools such as podcasts or videos, classroom teaching can be condensed so that people with other commitments can study as well.

Students from different age and professional groups find a dynamic and enriching learning environment. Cooperation between science, business, and administration is an opportunity to attract qualified personnel and managers for the challenges of the modern business world and to further develop the region.



ON THE FAST TRACK

# InnoDay celebrates premiere in Minden

The first InnoDay of the RailCampus OWL in Minden focused on the topic of rail and brought together around 130 participants to discuss current trends and innovations in sustainable and networked mobility. Hans-Peter Lang, CTO of DB Systemtechnik GmbH, emphasized the importance of innovations and challenges in rail operations. The specialist presentations and exhibitions covered topics such as autonomous rail systems, data-based life cycle management, and networked transport logistics. Tours of laboratories and test stands as well as a visit to the MONOCAB rounded off the program. The "Digital Railway Systems" Bachelor's degree program trains specialists for the railroad sector.

FUNDED WITH 12.5 MILLION EUROS

# Researching the mobility of the future


The Bundestag's Budget Committee approved funding for a research project on the future of mobility at the RailCampus OWL in Minden: 12.5 million euros were awarded for the first phase of the project, with funding secured until 2027. The RailCampus OWL is researching the digitalization of rail transport and the development of innovative technologies, particularly in the field of automated driving. The project focuses on the area around Minden station and is concerned with the acceptance of new technologies. As an innovation network, the RailCampus OWL brings together universities, railroads, and business partners. Its location allows Minden to play a central role.

# ADMINISTRATION

SECOND TERM OF OFFICE

# Appointments for the Chancellor and the President

The Chancellor and the President of TH OWL, Nicole Soltwedel and Professor Dr. Jürgen Krahl, were appointed for their second term of office. Ina Brandes, NRW Minister for Culture and Science, presented the certificates of appointment. They were confirmed for a second term of office by the University Council and Senate in summer 2021. The President's second term of office began on December 1, 2022, while the Chancellor began her second term of office on January 1, 2023.

ANALOG IS HISTORY

# First time: Online committee elections


The TH OWL committee elections were held online for the first time at the beginning of December 2022. All members of the university were called upon to elect the new members of the Senate, the Department Councils, the IWD Institute Council, the Equal Opportunities Commission, and the Representation of Student Assistants.
As part of the introduction of electronic elections, a new landing page was created for the committee elections area. It contains all the necessary information and documents, contact persons, FAQs with interesting tips and access to the election portal. Since then, all committee elections have been held online.

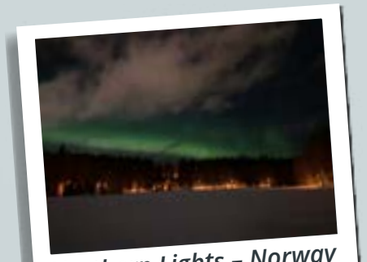


A NEW FACE

# University election meeting elects vice presidents of the TH OWL

TH OWL started the new year 2023 with a new Executive Board. After University President Professor Dr. Jürgen Krahl and Chancellor Nicole Soltwedel were confirmed in their positions at TH OWL in September 2021, the 9th university election meeting took place on December 7, 2022 to elect the vice presidents of the university's Executive Board. Professor Dr. Yvonne-Christin Knepper-Bartel and Professor Dr. Stefan Witte were confirmed in their previous positions, while Professor Dr. Uta Pottgiesser was elected as a new member of the Executive Board. The election took place in the Congress Center of the Phoenix Contact Arena in Lemgo. The individual sections have been partially realigned in line with the strategic objectives of the TH OWL. The new sections are Education and Sustainability (Professor Dr. Yvonne-Christin Knepper-Bartel), Research and Transfer (Professor Dr. Stefan Witte), and Culture, Communication, and International Affairs (Professor Dr. Uta Pottgiesser).

# INTERNATIONAL

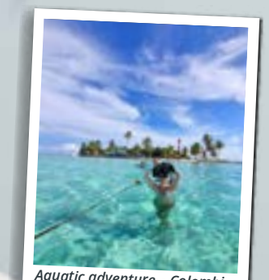


*Northern Lights – Norway*

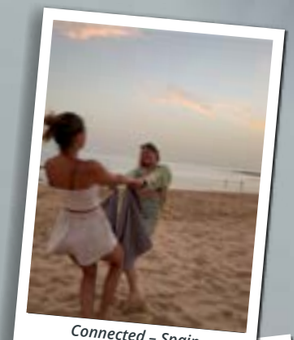
*Icy heights – Austria*

*Surfing in the Norwegian sea – Norway*

*Thirst for adventure – Norway*



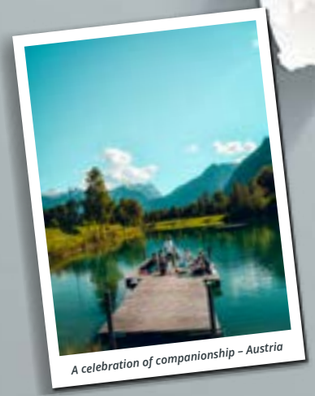
*Aquatic adventure – Colombia*



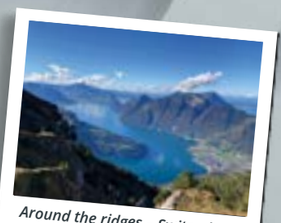
*Connected – Spain*

*Paths intertwine – Turkey*

*Jump high and enjoy! – Spain*



*A celebration of companionship – Austria*



*Around the ridges – Switzerland*

# International Office

The future of the university is international. Against this background and on the basis of its profile, TH OWL strives to improve and expand mobility and interculturality by developing an international teaching, study, and research culture. TH OWL's internationalization activities were further expanded and strengthened in the 2022/2023 academic year.

# Intercultural Competence

***Strengthening the social and intercultural skills of students, employees, and professors is an integral goal of the internationalization strategy.***

## Campus life

An open and diverse welcoming culture – this is what the International Office of TH OWL strives for with its numerous activities. These include, for example, the Welcome Days at the beginning of each semester, consisting of an informative part with lots of important information on topics such as contact persons within and outside the university or offers from the International Office. In addition, there are joint activities such as campus tours, bowling or a visit to the open-air museum in Detmold.

During the semester, international students can become active themselves as part of the Social Engagement Program and offer small activities for other students, such as mini golf, a climbing park or a visit to the Detmold brewery.

These activities are supported financially and organizationally by the International Office. Small cooking competitions were held as part of the International Café and cozy "International Meet-Ups" took place every month to get to know each other and exchange ideas.
Furthermore, the foreign students were able to take part in several hikes in the region as well as concerts, cinema, and theater visits.

## Student commitment

The DAAD Prize is awarded annually to international students who have shown particular commitment alongside their studies.

This year's prizewinner, who comes from Cameroon, is studying for a Master's degree in Mechatronic Systems.
Even during her Bachelor's degree in Electrical Engineering, she impressed with expertise and commitment far beyond her studies.

As a student assistant and tutor, she not only demonstrated her specialist knowledge, but also her ability to help other students with patience and empathy. She looks after new international students, making it easier for them to settle in Germany.
The prizewinner is also a volunteer assistant in the Protestant student community in Lemgo.



# Funding and mobility

***Internationalization is promoted, among other things, by subsidizing international conference and networking trips for scientists. Various funding programs also enabled many students to spend time abroad during the reporting period.***

## Internationalization funds

Last year's sponsored activities included a visit by three professors from Lviv National Polytechnical University (LNPU) in Ukraine, which was initiated by Professor Dr. Li Li from the Department of Production Engineering and Wood Technology.

In addition, Professor Katja Frühwald-König from the same department traveled to Riyadh, Saudi Arabia, and to Oslo, Norway, for the World Congress on Timber Engineering (WCTE 2023) and the World Conference on By-Products.

Finally, Professor Sholpan Gaisina from the Department of Business Administration and Economics was supported during her study visit to Virginia Commenwealth University (VCU) in the USA.

## Studies and internships abroad

**153**
students were sponsored to study and do an internship abroad

**22** DAAD PROMOS scholarship
(Total of 16,850 Euro)

**118**
students took part in the Erasmus+ program

**2**
received a Cross-Border Studies Scholarship by the Phoenix Contact Foundation
(6,000 euros in total)

**28**
in scholarship of the university or the university society
(20,100 euros in total)

**2**
students at TH OWL participated in the Professional Experience Program (PEP) in New York


## Guests at the university

Due to years of continuity and strong networking, the majority of exchange students come from our partner university in Jordan, the German Jordanian University (GJU). Thanks to Detmold School of Design and its partnership with Jefferson University and the University of Florida, more students from the USA also attended programs in Detmold.

**44**

**visiting students from TH OWL took part in a semester exchange last year**
**How do universities of applied sciences work in Germany?**

HOW DO UNIVERSITIES OF APPLIED SCIENCES WORK IN GERMANY?

# Working together and learning from each other

Two delegations of Ethiopian higher education presidents, who are establishing new universities of applied sciences, visited TH OWL in Lemgo and Detmold. Here are some of the questions that the meeting focussed on: How do universities of applied sciences (UASs) work in Germany? What can Ethiopian higher education institutes learn from this? How does an academic career progress at UASs and how do they differ from universities? How do German universities of applied sciences cooperate with industry?
The presidents were impressed by the practical implementation of applied research at TH OWL and were interested in future collaboration. The focus was on food technology, agriculture, healthcare, and construction.

## ERASMUS+

This year, applications were successfully submitted in the Erasmus+ area, including in the field of mobility with partner countries, strategic partnerships, and capacity-building programs.

The expansion of Erasmus+ mobility for continuing education and teaching for university staff is also continuing.

As part of the new funding opportunities for Blended Intensive Programs (BIP), Professor Stephanie Stratmann from the Detmold School of Design developed two short joint mobility curricula together with the University of Ghent and La Salle Barcelona University of Applied Sciences.

**12**

**TH OWL employees were successfully supported by the Erasmus+ program**

**32**

**TH OWL students took the opportunity to travel to Barcelona to take part in this innovative course concept**

INTEGRATION PROJECT

# Post-qualification program QualifyING approved

The QualifyING post-qualification program for international engineers, primarily from refugee backgrounds, was approved by the Ministry of Culture and Science of the State of North Rhine-Westphalia. The cooperation program between Bielefeld University of Applied Sciences and Arts, THGA Bochum, and TH OWL helps people with a foreign university degree who have fled to Germany to prepare for the German job market and improve their chances of applying. It is one of the various integration projects at TH OWL and is currently geared towards the study programs Mechanical Engineering and Mechatronics as well as Civil Engineering.



# New bilingual Bachelor's degree program coming

The recruitment and training of skilled workers for the regional economy is one of TH OWL's core concerns. The bilingual "General Engineering" degree program, which is unique in North Rhine-Westphalia, begins in English and continues in German after the third semester. Preparations have been underway since summer 2023.

The Bachelor's degree program starts in the winter semester 2024/2025 and is the first in the university's portfolio to be consistently offered bilingually. It is aimed equally at propsective international and German students who are enthusiastic about engineering and want to gain direct practical experience in a German industrial company with an international environment.

"With the approach of integrating international students in OWL and qualifying German students for the global job market, we want to counteract the shortage of skilled workers. Constructive cooperation with companies and institutions in the region is important to us," emphasizes Vice President Professor Dr. Uta Pottgiesser, who coordinates the program with four departments in Lemgo.

The structure of the degree program is divided into two parts: In the first three semesters, students complete modules from all STEM disciplines at TH OWL to deal with the engineering sciences in an interdisciplinary, practical, and project-oriented manner. The courses are taught in English. In the third semester, students then choose a specialization from the engineering courses of study. They gain professional experience during an internship in the fourth semester.

International students acquire a language certificate in German during their studies so that they can continue studying their chosen specialization in German together with their fellow students from the fifth semester onwards. German students acquire in-depth English language skills at the same time.

With the introduction of this bilingual Bachelor's degree program, TH OWL is addressing the increasing demand for well-trained specialists in the industry. Potential students shall acquire technical skills and practical experience through their involvement in research projects and interdisciplinary teams – together with partners from industry.

# EQUALITY



**EQUALITY**

## Events around International Women's Day

To mark International Women's Day 2023, the equal opportunities team and other female professors and employees of TH OWL took part in the "Marktplatz für Chancen" on March 7. This ‘marketplace for opportunities’ is a special format for women at the Innovation Campus Lemgo, which took place for the first time in 2023. In particular, TH OWL provided information on career paths for young academics, the integration program for refugee students, and on vocational or educational courses at TH OWL.

One particular highlight of the events for International Women's Day 2023 was the reading by bestselling author Alexandra Zykunov from her book "Wir sind doch alle längst gleichberechtigt!", which took place in the TH OWL Audimax and was very well received.

SOCIAL RESPONSIBILITY

# New family fund for TH OWL students

Since spring 2023, TH OWL students who find themselves in family emergency situations can apply for a one-off financial grant of 500 euros from the university's new family fund.

The family fund supports students to continue or complete their studies, for example when they have family obligations and, at the same time, only have limited funds available for living expenses. The TH OWL family fund is intended to help students in family emergencies to better reconcile their studies and family responsibilities financially.

Students who are pregnant, caring for a biological or adopted child or a minor child living in their own household or caring for relatives are eligible for funding. Students are considered to have limited means of subsistence if they have less than 800 euros per month plus 200 euros for each child available for their own living expenses during the funding semester.
A written application must be submitted to the Family Service for funding.

An online form is provided for this purpose, which must be printed out, signed, and submitted together with the required documents and a declaration of consent under data protection law.
Around 20 applications for support have already been approved under the family fund.





ANOTHER AWARD

# Total E-Quality award and "family-friendly university audit"

In October 2022, TH OWL was awarded the TOTAL E-QUALITY (TEQ) award for the seventh time in a row. The TOTAL E-QUALITY award recognizes companies and organizations from business, science, and administration for their commitment to anchoring and expanding equal opportunities and diversity within the organization.

Secondly, in June 2023, TH OWL was awarded the "audit family-friendly university" certificate by berufundfamilie Service GmbH for its family-friendly working and study conditions for the fourth time.

The measures that led to these awards were designed and implemented by the Equal Opportunities Team, the Diversity Team, and many other stakeholders at the university.

The jury of the TEQ award particularly emphasized that the promotion of equal opportunities is a goal that is comprehensively reflected in the strategy of TH OWL. HR work and the compatibility of work or studies and private life are dealt with particularly comprehensively. The establishment of the diversity team, which is intended to drive forward the expansion of measures to include all dimensions of diversity, was also positively highlighted.

The TH OWL Family Service continues to be a core element in the area of family-friendly universities. Key topics for the coming years in the area of the "audit family-friendly university" are the further improvement of disadvantage compensation for students in practice, the strengthening of fathers in science, and the expansion and deepening of cooperation with regard to childcare, in particular with the new campus daycare center on the Innovation Campus in Lemgo. We are also working on an even stronger focus on diversity management and the continuous development and optimization of mobile working and family-conscious management.

INCLUSION, PARTICIPATION, DIGITALIZATION, AND SUSTAINABLE EDUCATION

# Day care center for more than four dozen children

Campus KiTa, the daycare center on the Innovation Campus Lemgo, has started operations for the 2023/2024 nursery year. The three-group facility currently looks after 53 children. The Campus Kita is the successful result of the cooperation of a network consisting in particular of the Eben-Ezer Foundation (sponsor of the Kita), TH OWL, the city of Lemgo, the district of Lippe, Innovation Campus Lemgo e.V., TV Lemgo, and an architectural firm from Lemgo.

A brief history of the Campus KiTa: The core team for the Campus KiTa on the Innovation Campus Lemgo (ICL), consisting of the Head of Kinder und Jugendliche at the Eben-Ezer Foundation, the Family Service of TH OWL, and the ICL management, was formed back in 2019 and began its work. Further milestones on the way to Campus Kita were a kick-off event for the network partners with a collection of ideas for the Campus KiTa at the end of winter semester 2019/2020 as well as more meetings of the core team and network partners in the following years, the holding of two student competitions for an interior concept, and a lighting concept for the Campus KiTa in winter semester 2020/2021 and summer semester 2021, the first symbolic ground-breaking ceremony for the construction project in summer semester 2022 and the topping-out ceremony at the beginning of winter semester 2022/2023, followed by the opening of the Campus KiTa and the official opening ceremony at the end of summer semester 2023. A university employee is currently the Chair of the Parents' Council of the Campus KiTa.

In addition to inclusion and participation, digitalization, and sustainable education are the main focuses of the Campus KiTa. The Campus KiTa increases the attractiveness of TH OWL as a place of study for students with children and as a place of work for employees with children in the sense of a family-friendly university.



GENDER-SENSITIVE LANGUAGE MADE EASY

# Guide with tips and practical examples

The debate on gender-sensitive language has become increasingly important in recent years. The aim is to address all genders equally and to rethink discriminatory or stereotypical language habits. Higher education institutions as places of critical thinking and education play a key role in the implementation and dissemination of this approach.

With this in mind, the central Equal Opportunities Officer at TH OWL has drawn up "Guidelines for gender-sensitive language" in consultation with the university's diversity team and the representative for people with sever dissabilities. This handy leaflet is intended to help university staff, students, and other interested parties to use a language in an academic context that is inclusive of as many people as possible.

The most important principles of gender-sensitive language are clearly explained and specific recommendations are given for use in the university environment. Practical examples, instructions, and tips to promote linguistic equality in lectures, seminars, research papers or administrative texts, for example, make implementation easy.

The guide has been available in digital form on the website of the Equal Opportunities Officer since the winter semester 2023/2024 and can be downloaded there.

# DIVERSITY



UNIVERSITY NETWORKING

## TH OWL Diversity

Since July 2022, Professor Dr. Jessica Rubart (Department of Environmental Engineering and Applied Information Technology), Professor Ulrich Nether (Department of Detmold School of Design, Institute for Design Strategies), Professor Dr. Michael Minge (Department of Business Administration and Economics), and research assistant Kristina Herrmann (Institute for Design Strategies) have been working together on the teaching and research project "DiversityLab TH OWL" (DivLab). This consortium of three departments at the Höxter, Lemgo, and Detmold campuses is investigating ways to improve analog, digital, and hybrid teaching in light of the diversity of students and teaching staff.

Over 300 students were involved in the project. On German Diversity Day (May 23, 2023), the DivLab organized the interdisciplinary forum "D:E:I Perspectives for Diversity (Diversity:Equity:Inclusion)" at the Creative Campus Detmold. The first results of the project were discussed, and the day also included enriching keynote speeches by external and internal experts and workshops with the participants.

On Open Day (May 13, 2023), various areas of TH OWL that are active in the context of diversity, equal opportunities, and participation presented their activities on the Detmold campus: The DivLab presented the results of the research project, the representative body for people with severe disabilities demonstrated visual impairments, the AStA Queer Department presented plans for the events for the first Christopher Street Day in Detmold, and the Detmold School of Design exhibited final theses from the field of diversity. Students invited visitors to test the first prototypes of the participatory Diversity Street Lab.
The "TH OWL Diversity Inclusivity Hub" project was launched in September 2023: As part of a PROFuture focus professorship, a team led by Professor Ulrich Nether will be researching and developing a DEIB mission statement in the coming years, building on the diversity concept developed in 2021 and 2022, in order to develop a diversity policy, develop and consolidate a "culture of diversity", and use this culture to create corresponding sustainable formats. It is intended to serve as a model for social transformation in line with the 17 Sustainable Development Goals, whereby the project is understood as a participatory design process, research topic, and incubator.

# RESEARCH AND TRANSFER

RESEARCH AND TRANSFER

# “Working for a smarter region“

As a research-strong university of applied sciences, TH OWL is an important participant and partner of the dynamic scientific and economic region of Ostwestfalen-Lippe (OWL). Our three university locations play a key role in shaping this economically strong and rural region. With our self-image of creativity, innovation, and sustainability, we work for a smarter region and act as a partner in the regional economic, innovation, and social system – true to our mission "Working for a smarter region".

The OWL region and its neighboring areas are characterized by a diverse mix of industries, medium-sized structures, and family-run companies. Industry, technology, food and agriculture, healthcare, construction, creative, and cultural industries play a major role. In view of the digital transformation, the shortage of skilled workers and other impending changes, all players in the region are facing challenges. Regionalentwicklungsgesellschaft OstWestfalenLippe GmbH has developed the mission statement "We are shaping the new UrbanLand OWL" in order to create a polycentric, economically strong and sustainable region. The exchange between stakeholders from the region and the university is crucial to secure the high quality of life in the long term and to shape transformative fields of action for the future.

Higher education and research institutions are tasked with strengthening the regional innovation system, meeting the demand for skilled workers, promoting innovative start-ups, and fostering the climate for innovation. At the university locations in Lemgo, Detmold, and Höxter, TH OWL develops innovation systems with partners from research, education, business, and society. The Innovation Campus Lemgo is dedicated to digital transformation, the Creative Campus Detmold shapes innovations in society, municipalities, and industry, and the Sustainable Campus in Höxter helps to shape ecological, economic, and social transformation processes towards greater sustainability in rural areas.

These topics are primarily dealt with at the TH OWL locations, but have an overall effect within the university and the region.

The basis for anchoring our university in the regional innovation system is and remains strong profile-building research. This basis is created in high-performance research areas and institutes in the four strategic research fields of our university: Production and automation, environment and resources, health and life as well as space and culture. The research fields bundle the majority of the research activities at the university and, at the same time, form the basis for regional transfer areas in OWL, which are subject-specific and geared towards economic sectors.




NUMEROUS RESEARCH PROJECTS

# The question of tomorrow's mobility connects the region

Take the on-demand, gyro-stabilized monorail to the nearest major station, and from there use the latest technologies to the major cities of Germany and Europe. Or take your own automated vehicle directly from your front door to the next convoy meeting point and continue your journey in a relaxed and resource-efficient manner in a swarm mobility model. What about freight transport? Goods are transported by rail vehicles that can also be automated on the road – with little loss of time due to loading and without the need for infrastructure measures. Ideas from OWL could change mobility in a few years' time. These are just a few of the numerous reesearch projects that TH OWL is conducting in this area.

PUBLIC TRANSPORT ALMOST AS COMFORTABLE AS DRIVING YOUR OWN CAR

# Seven million euros for MONOCAB OWL

Initially presented to the public at the end of 2022, "Hermann" and "Thusnelda" have since been test-running on a disused section of the Extertalbahn in Bösingfeld. The two are intended to improve the connection between rural areas and the regional and medium-sized centers in Ostwestfalen-Lippe and facilitate the mobility of people without their own car. They are MONOCABs: Compact and narrow, riding on one track only. The big advantage of the small cabins is that on single-track railroad lines, two automatic MONOCABs could run in both directions at the same time. A gyroscopic system that balances the vehicle during the journey gives the very narrow vehicles stability, which are to be bookable on demand in the future.

After their first appearance at the end of 2022, the MONOCABs quickly gained a high profile during the reporting period: They were presented at HannoverMesse and polisMOBILITY in 2023, among others. Federal, state, and local politicians, citizens, scientists, and entrepreneurs took the opportunity to sit in the vehicles and talk to the developers. The press also showed great interest: Numerous nationwide print, radio, and tv formats reported on the event. The challenge now is to quickly transform the first two prototypes into the next generation of vehicles. In summer 2023, the federal government provided a further 7 million euros to this end. The partners are now working flat out to implement regular test operations in 2028.

The first section, including a maintenance hall, is to be completed by 2025 on the Innovation Campus in Lemgo. This allows future partners for series production or buyers to experience the demonstrator in action. In 2027, visitors will be able to experience the MONOCABs in the Dortmund Future Garden as part of the International Garden Exhibition Metropole Ruhr (IGA).
MONOCAB runs under the consortium leadership of TH OWL. The Research Institute Future Energy, the Institute Industrial IT, and the Institute for Design Strategies are involved in the research. Students are also actively involved in the scientific work.

NO TIME LOSS AND NEW INFRASTRUCTURE

# AuToRail OWL - Mobile on rail and road

The "AuToRail – Automated Transport of Road and Rail Goods" project aims to combine the rail and road approaches: The vision is a rail vehicle that can also drive automatically on the road. Switching from road to rail and vice versa would mean no loss of time and no new infrastructure measures. For companies, this would enable attractive, ecologically sustainable freight transportation, allowing them to switch from truck to rail, even without an expensive rail connection. A test track is being set up at Kaunitz station in Verl for this purpose. This project is one of the three projects that provided new impetus for the future at the end of the REGIONALE 2022. The funding is made up of EU funding and co-financing from the state of North Rhine-Westphalia; with the corresponding own contributions, this means a total of around 4.5 million euros in project funding. TH OWL is working on this project under the consortium leadership of Bielefeld University of Applied Sciences and Arts and with numerous other partners.

HIGH-TECH CENTER FOR INTELLIGENT RAIL TECHNOLOGY

# Researching, teaching, and working at the RailCampus OWL

The "RailCampus OWL" project is all about the digitalization of the railways: Universities, manufacturing companies, and Deutsche Bahn are working together to create an innovation ecosystem and high-tech center for intelligent rail technology in Minden. The focus is on autonomous rail systems, intelligent maintenance, and networked logistics. The RailCampus OWL has a direct connection to the Cologne-Berlin railroad line thanks to its proximity to Minden station, and potential test routes for autonomous rail transport are in the immediate vicinity. The site on the DB Systemtechnik premises is also internationally recognized as a railroad technology center with unique access to test environments with vehicles and infrastructure.

In the winter semester of 2022, the innovative Bachelor's degree program Digital Railway Systems, based at Bielefeld University of Applied Sciences, was launched with the first seven students. It trains specialist and management staff with a high level of expertise in the fields of IT, data science, and systems engineering as well as know-how in the railroad system. The four participating universities – Bielefeld University of Applied Sciences and Arts, Bielefeld University, Paderborn University, and TH OWL – conceptualized it together. In addition, politicians, companies, and citizens were invited to several events: The first InnoDay focused on powerful technology to solve production problems and the green railroad. At the first symposium on mobility in rural areas in the fall of 2023, participants discussed various aspects of mobility in rural areas, technological requirements for networked, automated, digital transport systems, and exemplary solutions and projects.

Launched as a REGIONALE 2022 project, the news came in summer 2023: The Bundestag Budget Committee decided on funding for the future of mobility at the RailCampus OWL. As one of four locations in the German Center for Mobility (DZM), the project "Automated rail transport as a backbone for sustainable, networked mobility in rural areas (enableATO)" was launched by the BMDV. The project is researching technological systems, components, methods, development boundary conditions, and validation procedures in the context of automated driving (ATO). In addition, issues relating to user acceptance of new technologies will be addressed. 12.5 million euros have been earmarked for the first phase of the project. Long-term funding until 2027 has also been secured by a decision of the Budget Committee.

RailCampus OWL was also able to acquire funding for Minden station during the reporting period as part of the remaining funds from REGIONALE 2022: In the future, mobility-impaired users will be provided with a service robot. The robot accompanies passengers on their journey at the station, provides orientation and safety, and is even supposed to take over their luggage. Rail passengers and students from the RailCampus OWL are directly involved in the development of the robot.

The RailCampus OWL e.V. is responsible for the rail innovation ecosystem at the DB Systemtechnik site and is initiated by four universities (TH OWL, Bielefeld University of Applied Sciences and Arts, Bielefeld University, Paderborn University), two Deutsche Bahn companies (DB Cargo, DB Systemtechnik), two companies from the rail supplier industry (Harting, WAGO), and two local authorities (City of Minden, Minden-Lübbecke district). New partners have joined this initiative – the network is growing.



SWARM MOBILITY SYSTEM

# Traveling sustainably in convoy: NeMo.Bil

To solve the problem of the "last mile", scientists are working on another idea: In addition to the MONOCAB, a swarm mobility system could enable a new form of sustainable and needs-based passenger and freight transportation in rural areas: On longer routes, smaller automated e-vehicles (Cabs) join together to form a convoy, which is pulled by a larger automated vehicle (Pro). The Cabs weigh a maximum of 450 kilograms plus battery and offer space for up to four people. The development of the automated driving function is being led at the TH OWL. The Pros serve as mobile charging stations and enable higher ranges and speeds in convoy. By combining both types of vehicle, the overall system could achieve a previously unattainable level of energy efficiency. The system thus enables individual public mobility that will be as convenient as using your own car. The project consortium from all over Germany comprises 20 partners from industry and science. Start-ups, SMEs, and large companies from a wide range of sectors are working together with scientific institutions to achieve this ambitious goal.

**DIRECT CURRENT TECHNOLOGY AND BIDIRECTIONAL ENERGY TRANSMISSION**

# Holistic research in the energy sector

TH OWL underlines its leading role in energy research with pioneering projects that are actively shaping the future of industrial processes and electromobility. Particularly outstanding research projects are "DCI4CHARGE", "NachLadBaR", and the project on "Virtual simulation of vibration loads on connector cable systems". These initiatives are exploring the potential of direct current technology and bidirectional energy transmission to not only increase efficiency in production, but also to take electromobility to a new level. In addition, the "Smart-E-Factory" plays a decisive role in the integration of digital solutions for the energy optimization of factories.

**„NACHLADBAR“**

## Sustainable charging electronics with flexible power electronic components

The prerequisite for the widespread use of electric vehicles is a demand-oriented expansion of the charging infrastructure. The "NachLadBaR" research project, led by Professor Dr. Rainer Rasche (Department of Electrical Engineering and Computer Science and Research Institute Future Energy), is investigating sustainable charging systems based on flexible power electronic components. The so-called Power Electronic Building Blocks (PEBBs) enable a cross-manufacturer, cross-generation, and cross-technology design of a charging system. The modular design also allows individual modules to be replaced in the event of a fault, which was impossible previously. Furthermore, intact modules can continue to be used as part of a 2nd life strategy, even in other applications.

The focus of TH OWL in this project is on model-based testing, the selection of operating points, and the optimization of load distribution between the PEBBs. The focus is also on digitalizing the product life cycle to support 2nd life applications and recycling.



**„DCI4CHARGE“**

# Innovations for electromobility

The "DCI4Charge" project was launched in September 2023. Under the leadership of Professor Dr. Holger Borcherding, the project members are researching the connection of industrial direct current grids with the charging of electric vehicles. The research project focuses on increasing efficiency through the use of direct current and the development of bidirectional energy transmission solutions. DCI4CHARGE" aims to create standardized solutions for charging parks. It  is supported by the renowned Open DC Alliance, which is committed to the dissemination of direct current technologies.
The vision behind "DCI4CHARGE" is to make electric mobility even more efficient and suitable for everyday use. The implementation of direct current grids in charging stations not only achieves greater efficiency in energy transmission, but also opens up the possibility of bidirectional energy transmission. This not only makes it possible to charge electric vehicles, but also to feed energy back into the grid – a decisive step towards sustainable energy concepts.
The Institute Future Energy (iFE) at TH OWL plays a central role in this endeavor. The interdisciplinary team will develop insulating DC/DC converters to efficiently convert the direct current from company DC grids for charging vehicle batteries. The project will run from August 2023 to January 2026 and is funded by the Federal Ministry for Economic Affairs and Climate Action.

This makes "DCI4CHARGE" a milestone on the road to sustainable and efficient electromobility. The project builds on the results of the previous projects "DC-INDUSTRIE" and "DC-INDUSTRIE2".

SUSTAINABLE BUILDING

# Innovative building materials and digital transformation

TH OWL presents pioneering research projects in the field of sustainable construction. These projects not only contribute to the scientific excellence of the university, but also have the potential to transform the construction industry in the long term and create forward-looking solutions.

GREEN CONTAINER

## Sustainable architecture made from cattail

The innovative project by Professor Manfred Lux from the Detmold School of Design deserves special mention. The development of a stable fiber material from the leaves of the cattail (*Typha*) opens up the possibility of creating sustainable and versatile building materials. The resulting material is not only load-bearing and weather-resistant, but also has first-class insulating properties. Typha technology enables the use of renewable raw materials. The Green Container, which is made entirely of Typha material, can be used for a variety of purposes, from tiny houses to mass housing.
The Typha plant, which grows in temperate climate zones worldwide, not only offers excellent load-bearing and insulating properties, but also ecological benefits. Professor Lux's innovative approach could not only revolutionize the way we build, but also provide sustainable solutions for the construction industry.



CENTER FOR SUSTAINABLE DIGITAL BUILDING (ZNDB)

## Feasibility study and future plans

TH OWL's Center for sustainable and digital construction (ZNDB) pursues the goal of advancing the digitalization of production and the environmentally friendly use of materials in the construction industry. The feasibility study completed in July 2023 not only underlines the technical and financial feasibility of the ZNDB, but also emphasizes the social added value and the enormous benefits that result from the integration of sustainability and digitalization in the construction industry.
Digitalization in the construction industry is crucial to increasing sustainability in the construction sector.
The results of the study suggest that the ZNDB is not only feasible, but can also achieve special networking with regional actors and global players. It offers a promising approach to sustainably transforming the construction industry and creating pioneering solutions.
The photo above shows the participants of the information event at the SmartFactoryOWL on the Innovation Campus in Lemgo. Concepts similar to those planned for the ZNDB have already been successfully implemented here.

TWINAIR

## Digital twins for optimized indoor air

Launched in September 2022, the EU-funded TwinAIR project aims to optimize indoor air quality through digital twins. A secure data platform is being developed under the leadership of Professor Dr. Lukasz Wisniewski from the Institute Industrial IT (inIT) at TH OWL. With the help of digital twins of buildings and technical systems, algorithms are to determine the optimum settings for heating and ventilation systems to ensure healthy indoor air.
The TwinAIR project, which runs until August 2026 and involves 23 partners from nine European countries, demonstrates TH OWL's research expertise in the field of digital transformation for healthier and more sustainable indoor air.
TH OWL is thus at the forefront of innovations in sustainable construction and digitalization in the construction industry. Through pioneering research projects, the university contributes to the sustainable transformation of the construction industry and the creation of future-proof solutions.

# Comprehensive and interdisciplinary for our environment and resources

Climate change, dwindling resources, and ever-increasing energy demands are among the key challenges of our time. Scientists at TH OWL are therefore working together with industry and administration in an interdisciplinary and cross-location manner to tackle the pressing issues of preserving our natural areas, water, and water body protection and much more.

## Infrastructure for more recreational potential

How high is the recreational potential in the Lippe region? Professor Dr. Boris Stemmer and his team addressed this question in the first part of the "Green infrastructure in rural regions" project. The Lippe district, Osnabrück University of Applied Sciences, and the Westphalia-Lippe regional association were involved as project partners. The assessment of the recreational potential was based on the overall aesthetic value of the landscape and the recreational infrastructure. Overlaying the results of the recreation potential and the demand for recreation produced an overall impression of recreation in the district of Lippe. Seven priority areas in the district of Lippe were derived from these results as part of the project. These are located around Bad Salzuflen and Lügde as well as in the Teutoburg Forest. Based on in-depth studies, cross-thematic concepts, objectives, and measures were developed for these priority areas.

The district of Lippe has created four positions to implement the measures in the main project. As local area managers, they are to further specify the measures planned in the individual priority areas in consultation with local stakeholders, landowners, and managers and support their implementation.

Thomas Kaltenberg (TH OWL), Heike Witte (TH OWL), Markus Beine (Stadtentwässerungsbetrieb Paderborn), Dr. Kathrin Weiß (Kreis Höxter), Birgit Rehsies (Bezirksregierung Detmold), Rüdiger Kuhlemann (Kreis Lippe), Professorin Dr. Martina Flörke (RUB), Dirk Kornhoff (Stadtentwässerung Detmold), Anna Ostermann (TH OWL), Andreas Hoffmann (Stadt Detmold), Irem Yavuz (TH OWL), Professor Dr. Martin Oldenburg (TH OWL), Yvonne Vetisch (TH OWL), Professor Dr. Jörg Felmeden (TH OWL), and Roberto Debus Dosal (RUB) (L to R)

The core team of the "MaPro" project in front of the Stone house of Landschaftsstation e.V. in Borgentreich (L to R): Professor Dr. Martin Oldenburg, Professor Dr. Klaus Maas, Verena Weber (TH OWL), Sven Mindermann, Frank Grawe (Landschaftsstation im Kreis Höxter e.V.), and Katharina Pilar von Pilchau (TH OWL)

## Sustainable flood prevention

In the Höxter district, towns and villages have been affected by mudslides caused by heavy rainfall on several occasions in recent years. The consequences include blocked roads, damage to buildings and vehicles, arable land that is damaged for years and watercourses whose gravel banks are colmatized by fine sediment. The "MaPro" project, led by Professor Dr. Klaus Maas from the Department of Environmental Engineering and Applied Information Technology in Höxter, aims to develop a master plan that will enable municipalities to implement site-appropriate and ecologically sustainable flash flood prevention and identify suitable settings for the activating and conflict-free involvement of climate-sensitive stakeholders. The project team at the Höxter campus, together with the Landschaftsstation im Kreis Höxter e. V. and the Westfälisches Umweltzentrum, have almost 300,000 euros at their disposal from funds provided by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection.

## Cooperation platform "wasserplus OWL"

A cross-sector network to make water management in the rural OWL region fit for the future in the face of increasingly complex challenges – that is the aim of the "wasserplus OWL" project, funded by the Ministry of Culture and Science NRW (MKW NRW). Project manager Professor Dr. Jörg Felmeden from the Department of Civil Engineering wants to use the cooperation platform to promote interdisciplinary and transdisciplinary approaches to water management, in which both cooperation between local institutions and stakeholders and cooperation at regional level are of central importance. The various water-related specialist areas at TH OWL will also be more closely networked. Ruhr University Bochum (RUB) is involved as a partner, as are the city of Detmold, the district government of Detmold, the districts of Lippe and Höxter, Stadtwerke Detmold GmbH, and Stadtentwässerung Paderborn.

The representatives of the joint project “Grüne Infrastruktur in ländlichen Regionen” (L to R): Bernd Milde from the Landschaftsverband Westfalen-Lippe, Daniel Telaar, Head of the Lower Nature Conservation Authority in the district of Lippe, Professor Dr. Boris Stemmer from the Department of Landscape Architecture and Environmental Planning at TH OWL, Alissa Schäffner from the Animal Ecology and Nature Conservation working group at Osnabrück University of Applied Sciences, Dr. Ute Röder, Head of Administration in the district of Lippe, Professor Dr. Jürgen Krahl, President of TH OWL, and District Administrator Dr. Axel Lehmann want to make the cultural landscape Lippe more accessible and attractive. Photo: TH OWL

RESEARCH AND TRANSFER

# Sustainable AI research and digital transformation

TH OWL has established itself as a leader in research by driving forward pioneering projects in the fields of artificial intelligence (AI) and sustainability. This research expedition not only explores the fascinating possibilities of AI, but also anchors it firmly in a sustainable context. From the design of sustainable AI components to digital transformation in various areas, the university is using its expertise to shape an innovative and forward-looking research landscape. The focus is on the development of technologies that not only meet current scientific standards, but also lay the foundations for the sustainable and responsible use of AI.

INTERDISCIPLINARY COOPERATION

# Starting shot for AI research project SAIL

March 2023 saw the official launch of the SAIL research network at Paderborn University. With a duration of four years and funding of up to 14.8 million euros from the North Rhine-Westphalian state government, around 90 scientists are involved. The aim is to develop a basis for the sustainable design of AI components over the entire product life cycle. The interdisciplinary cooperation between Paderborn University, Bielefeld University, Bielefeld University of Applied Sciences and Arts, and TH OWL makes SAIL a pioneering project that focuses on transparency, safety, and resource conservation.
The kick-off event offered insights into the diverse research. The topics presented by renowned scientists ranged from the simulation of complex physical systems and linguistic communication between humans and AI to the sexing of chicken embryos by AI.



PROJECT APPROVED

# On the road to AI excellence

TH OWL plans to play a key role in shaping the future of artificial intelligence (AI). The Federal Ministry of Education and Research has approved the project "KI-Nachwuchs@FH2-2021: KI-Kompetenz-Netzwerk TH OWL (KI-NET)". In an impressive initiative, nine professors from six different departments have joined forces to drive the AI revolution forward. The investment in a powerful AI server and an AI real demonstrator forms the core of the project. The AI server, managed by the university computing center, provides a quick introduction to applied research.

The project aims to turn AI expertise into a lighthouse project for the region and to promote innovative ideas and application-related research projects.
Professor Dr. Li Li, head of "Technical Logistics" in the Production Engineering and Wood Technology department, emphasizes the importance of the investment and sees KI-NET as an opportunity to explore innovative ideas and create long-term infrastructures for teaching and research in the field of artificial intelligence.

PLATFORM FOR KNOWLEDGE TRANSFER

# East Westphalian universities establish KI-Akademie OWL

TH OWL will play a leading role in setting up an AI academy, the KI-Akademie OWL. This pioneering project, as approved by the Budget Committee of the German Bundestag, is being realized in cooperation with Bielefeld University, Bielefeld University of Applied Sciences and Arts, and Paderborn University. The AI academy will receive up to 7.4 million euros in funding from the Federal Ministry of Education and Research over a period of five years, with the exact funding conditions being clarified in consultation with the participating universities.
This ambitious project aims to intensify AI research in the region and, at the same time, create a platform for knowledge transfer and applied AI research work. The close cooperation between the state universities in the region creates a synergetic environment that drives the research dynamics in AI.

The AI academy will not only serve as a center for research and innovation, but also as a catalyst for the training of specialists in this forward-looking field. Students have the opportunity to participate in practice-oriented projects and benefit from the expertise of renowned professors in order to gain an early insight into the world of artificial intelligence.




IT TASTES BETTER THIS WAY

# Breaking new ground in the production of plant-based milk alternatives with AI

The "Food Production 4.0" research project, led by Professor Dr. Jan Schneider and Professor Dr. Martina Sokolowsky, plays a leading role in the development of sustainable nutrition. Supported by the Federal Ministry of Education and Research in the FH-Impuls funding program, the project aims to redefine the production of plant-based milk alternatives with the help of artificial intelligence (AI).
The integration of AI and food technology not only enables more efficient production, but also the creation of products with improved taste and greater consumer acceptance. The researchers are developing a pilot plant in which AI-controlled processes combine sensory and analytical product research. This innovative approach not only opens up the production of high-quality plant-based milk alternatives, but also enables the sustainable utilization of side streams in food production.
Professor Schneider emphasizes the uniqueness of the project, which advances research into AI-controlled production processes and sets new standards through the integration of sensory and analytical product research.

# INSTITUTES




**INSTITUTE INDUSTRIAL IT (INIT)**

## Sustainable research for society

In 2023, at a time of major social challenges, the Institute Industrial IT (inIT) at the (TH) OWL University of Applied Sciences and Arts remains to be excellently positioned. The focus on intelligent automation was further sharpened without abandoning the technological basis of industrial information and communication technologies as defined by inIT.

As a leading research institution in the field of intelligent automation, inIT has strengthened its position and embraced future trends in the context of sustainability in order to expand into interdisciplinary fields of application. This also includes the future strategy developed by the Management Board, which focuses on the strong networking of different players on the "Innovation Campus Lemgo" to further advance intelligent automation as an umbrella principle. Based on experience and expertise, interdisciplinary cooperation, practical relevance, excellent infrastructure, and numerous successful projects, we have succeeded in translating our know-how into projects with social relevance and sustainability. InIT has in-depth expertise with excellent interdisciplinary know-how at the interface between computer science and engineering for intelligent automation in a wide range of applications.

With the interdisciplinary composition of the Executive Board consisting of nine professors of engineering, computer science, mathematics, physics, and perceptual psychology, a team of researchers from 29 nations and around 70 employees, the success story of inIT continued in 2023.

In addition to excellent international research work presented at conferences and published in peer-reviewed journals, the organization of the international IEEE flagship conference Industrial Informatics (INDIN2023) deserves special mention: A highlight of the academic year 2023, which inIT organized together with Fraunhofer IOSB-INA at TH OWL. Over 250 participating scientists were enthusiastic.


RESEARCH INSTITUTE FUTURE ENERGY (IFE)

# Pioneering solutions for different challenges

The challenge of ensuring a secure and sustainable energy supply in the future has become even more important in the last two years. Due to the large and varied dependencies, energy supply technologies and concepts can never be considered independently.
For this reason, the Research institute Future Energy (iFE) at the TH OWL relies on an interdisciplinary team of scientists and engineers.

Since 2017, the iFE has been working on innovative solutions for a future climate-neutral society in the core areas of "Building infrastructure and user comfort", "Renewable energy supply and storage" and "Drive and automation technology": The iFE is significantly involved in the "MONOCAB OWL" project, the development of a gyro-stabilized monorail vehicle to reactivate old railroad lines and improve mobility in rural areas.

One of the highlights of the project was the presentation of the first experimental vehicle named "Thusnelda" on October 3, 2022 in front of many guests. Thusnelda also attracted a great deal of attention on many other occasions, such as the Hanover Trade Fair Industry in April 2023.

In the "Sustainable Museum" project, the iFE research team is working on pioneering solutions for climate-neutral construction with a model character for museum buildings. The results were incorporated into the concept for the new CO2-neutral entrance and exhibition building of the LWL Open-Air Museum in Detmold, for which construction work began in June 2022. The innovative building project relies on environmentally friendly measures such as photovoltaic systems, green roofs, the use of rainwater, and geothermal energy as well as environmentally friendly building materials.

The iFE initiated the DC-INDUSTRIE 1 and 2 projects and has been working for several years with over 40 companies and research institutes on solutions for energy distribution using direct current in industrial production facilities. With energy savings of 20 percent and a 50 percent reduction in copper consumption, the DC industry is an important building block for resource-conserving, climate-friendly production. The projects led to the founding of the "Open Direct Current Alliance" in 2022, comprising 33 companies and research institutions, with the aim of accelerating the market launch.

The "KraftwerkLand" project is researching technologies for the sustainable energy supply of tomorrow. In summer 2023, the UrbanLand mobility center, a research building that combines the topics of sustainable energy supply and mobility in connection with direct current technology, was successfully applied for.

**Insight into the project MONOCAB OWL**

INSTITUTE FOR LIFE SCIENCE TECHNOLOGIES (ILT.NRW)

# In the context of the food and energy transition

The ILT.NRW has found its new home and contact point in the newly built Future Food Factory OWL (FFF). This milestone, which began with the office moving in in January 2023, culminated in an opening event on May 4, 2023. The FFF is also the site of the smartfoodtechnologyOWL research partnership. The combination of food technology, life sciences, and IT technologies is at the heart of the research, which is dedicated to major research questions in the context of the food and energy transition. An initial event entitled "Digitalization as an opportunity for a climate-neutral food industry" was held with partner organizations at the FFF back in January. This was followed by others such as the sustainability focus day and the open day.

In terms of research, ILT.NRW was able to increase its volume of third-party funding to 2.6 million euros for the first time. The team of researchers has been significantly strengthened with Professor Dr. Miriam Pein-Hackelbusch and her working group. About the project TRInnovationOWL, the Institute's transfer activities were intensified with Dr. Imke Weishaupt in her role as transfer manager. She and her colleague Dr. Patrick Wefing also successfully completed their doctoral theses. Finally, professorial members of the Institute have been able to carry out doctorates independently since 2023 thanks to their full membership of the NRW Doctoral College. The first new doctoral students have already started this year.

ILT.NRW is a co-initiator of the Campus Foundery OWL. University-wide activities to promote start-ups are bundled under this brand. Following the establishment of the Foodlab, the ILT.NRW has now also created the Scale-up Lab at the FFF for this purpose. In addition to numerous regular events, the food team held the first speed dating event "LEH vs Start-up" and organized a start-up fair at Bielefeld's Harmsmarkt with great success. In total, there have been over 350 visits to the Foodlab since 2021, 70 meetups, twelve teams in the prototyping phase, three in the start-up phase and four start-ups.



INSTITUTE FOR DESIGN STRATEGIES (IDS)

# Sustainable design of the human habitat

The Institute for Design Strategies (IDS) consolidated successfully in the year following its foundation. The former four research focus areas merged, which increased their visibility both inside and outside the university.
At the end of 2022, Professor Dipl.-Ing. Jens-Uwe Schulz took over the management of IDS from Professor Dr. Uta Pottgiesser. Professor Dipl.-Ing. Oliver Hall was elected as his deputy. The Scientific Advisory Board, which advises the Executive Board on matters of strategic research orientation, held its constituent meeting at the end of March. In May, university members and network partners visited the IDS laboratories at the OpenLab event and gained insights and information on current research projects. The aim of the IDS is to drive forward the change in architecture and planning disciplines towards responsible and sustainable design of the human habitat, as the claim "Shaping the Human Habitat" makes clear. The IDS focuses on research projects on interactions between people and space. Strategies for a climate-resilient built environment are being developed, with digitalization

serving as the basis for innovative approaches. The research landscape is characterized by interdisciplinary and transdisciplinary cooperation with stakeholders from business and society. The Regenerative Design, Human Centered Design, and Data Driven Design clusters seek synergies between environmental and sustainability aspects. IDS members have been cooperating with business and municipal partners for over ten years, creating a strong network.
In order to promote the transfer between teaching, research, business, and society, the IDS offers formats such as the Detmold Conference Week (November 15-18, 2022) and the "Design Strategies – Journal for the Built Environment". Eight professors and twelve research assistants work together at the IDS. Over 750,000 euros in third-party funding was raised in 2022. In cooperation with TU Delft, the IDS is supervising four international doctoral students.

INSTITUTE FOR SCIENTIFIC DIALOG (IWD)

# A successful year with many innovations and changes

The supported prospective female founders in EXIST Woman: 1. row (from left): Heike Timmermann, Anna Kramer, Lorena Becker, Amrita Gilsdorf, Professor Dr. Daniel Hunold, and Professor Dr. habil. Andreas Welling / 2. row (from left): Donya Karami, Kristina Nißler, Elham Sarvandy / 3. row (from left): Melina Meier, Klara Mikova, Romana Haake

The Institute for Scientific Dialog (IWD) was officially divided into a cross-sectional area for the organization and three content areas – the "Future Dialogue" area, the "School of Education" area, and the "Founding" area, which together with the IA Lab of the Institute for Industrial IT (inIT) and the Food Lab of the Institute for Life Science Technologies (ILT.NRW) forms the Campus Foundery OWL.

There were also personnel changes. Professor Dr. habil. Andreas Welling was elected by the IWD Board of Directors to succeed Professor Dr. Josef Löffl, who moved to Coburg University of Applied Sciences, as the new Institute Director for two years. In addition, the number of employees at the institute increased further to 27 (excluding SHK and WHK) as of September 30, 2023.

Organized by the Future Dialogue department, the "Digital Management Solutions (DiMS)" course of study, which is based at the Department of Electrical Engineering and Computer Science, started in the winter semester 2022/2023, an important step towards adapting teaching and learning to the digital future.

Together with Paderborn University and other university partners in the "Edu-Tech Net OWL" cooperation network, the School of Education celebrated ten years of joint teacher training.

Panel discussion by Bildungsbrücken OWL at the State Garden Show Höxter: Gero Brinkmann (TH OWL), Michael Stickeln (Landrat Kreis Höxter), Petra Görtz (BK Höxter, Standortleitung Höxter), Matthias Goeken (Landtagsabgeordneter Kreis Höxter), Annika Breternitz (TH OWL), Michael Krakow (Moderation), Johannes Üpping (TH OWL), Boris Stemmer (TH OWL), and Sabine Heinemann (Verein Natur und Technik e.V.)

In addition, the last year of teachers from general education schools successfully completed the joint further training format for steering group qualification with the Detmold district government. One highlight of the "Bildungsbrücken OWL" project last year was the events held as part of the Landesgartenschau, the “State Garden Show”, in Höxter. Educational cooperation between academic and vocational training has been intensified through various concepts and measures such as the [Komplementar!um].

TH OWL is now bundling all of its start-up support under the new "Campus Foundery OWL" brand. The pitch event as part of the grand opening on June 1, 2023 was won by the start-up. It is very pleasing that two start-ups from Campus Foundery OWL have been recommended for funding in the highly competitive EXIST start-up grant: the Valetudoo and PLC ONE teams. Other teams also received funding from the NRW start-up grant and the TH OWL Kickstart program. In the future, Campus Foundery OWL will increasingly focus on promoting female founders – also thanks to the funding obtained in the EXIST Woman program. The Master's degree course in Applied Entrepreneurship was also in high demand once again, with 99 enrolments for the winter semester 2022/2023.

KREATIVINSTITUT.OWL (KIO) IN DETMOLD

# A home for creative minds

With the KreativInstitut.OWL (KIO), another building on the Creative Campus Detmold was occupied after a construction period of just 16 months. Since September 1, 2023, the research network of TH OWL, the University of Paderborn, and HfM Detmold has finally been working interdisciplinary in the fields of digital media production, composition, and sound design as well as digital humanities under one roof. Since summer 2022, a team has been set up in this triad with the participating universities. This interplay of creative disciplines is already bearing fruit: The development of the game "Rock Paper Shoot!" won first place in the "Best Game" category and second place in the "Best Multiplayer Game" category in the international "ReactJam" competition.

Affectionately called KIO by the team, the building characterizes the entrance to the city on Bielefelder Straße with its special architecture. On the outside and inside, many wooden components create a pleasant and inviting working atmosphere. This is supported by a consistent color concept and many details that only catch the eye at second glance.

For transfer with the cultural and creative industries, there are laboratories with a 3D full-body scanner for creating realistic characters for virtual worlds and a 3D audio lab for simulating acoustics in virtual worlds. There is also a free-field room for analyzing the sound of instruments and measuring noise emissions. Creative professionals, employees, and students can develop and realize joint projects with business and society by using various work zones on the first floor of the KIO. The modular furniture concept also makes it possible to hold networking events and temporary exhibitions. There was very positive feedback on the staging of an exhibition and a sip 'n' sketch. The KIO is looking forward to many innovative events and projects with the creative minds of the region.

# Study program

**BACHELOR AND MASTER**

## Creative Campus Detmold

### Detmold School of Design

- Architecture (B.A.)
- Interior Architecture (B.A.)
- Interior Architecture - Spatial Art (M.A.)
- Integrated Architectural Design (M.Sc.)
- Integrated Design (M.Eng.)
- Urban Planning (B.A.)

### Media Production

- Media Production (B.A.)
- Media Production (M.A.)

### Civil Engineering

- Civil Engineering (B.Eng.)
- Infrastructure Management - Water and Traffic (M.Eng.)
- Structural Engineering and Digital Construction Processes (M.Eng.)

## Innovation Campus Lemgo

### Life Science Technologies

- Industrial Biotechnology (B.Sc.)
- Food Technology (B.Sc.)
- Teaching degree at vocational colleges: Specialization Nutritional Science and Home Economics as well as Food Technology (B.Ed.)
- Life Science Technologies (M.Eng.)
- Medical and Health Technology (B.Sc.)
- Pharmaceutical Engineering (B.Sc.)
- Smart Health Sciences (M.Sc.)
- Cosmetics and Detergents Technology (B.Sc.)

### Electrical Engineering and Computer Science

- Data Science (B.Sc.)
- Electrical Engineering (B.Sc.)
- Electrical Engineering (M.Sc.)
- Information Technology (M.Sc.)
- Electrical Engineering for Vocational College Instructors (B.Sc.)
- Mechatronics (B.Sc.)
- Mechatronic Systems (M.Sc.)
- Medical and Health Technology (B.Sc.)
- Smart Health Sciences (M.Sc.)
- Computer Engineering (B.Sc.)

### Mechanical Engineering and Mechatronics

- Mechanical Engineering and Manufacturing Engineering for Vocational College Instructors (B.Sc.)
- Mechanical Engineering (B.Sc.)
- Mechanical Engineering (M.Sc.)
- Mechatronics (B.Sc.)
- Mechatronic Systems (M.Sc.)
- Virtual Product Development (B.Sc.)

### Production Engineering and Wood Technology

- Digital Engineering (B.Eng.)
- Wood Technology (B.Eng.)
- Innovative Production Systems (B.Eng.)
- Production and Management (M.Sc.)
- Industrial Engineering in the Timber Industry (M.Sc.)
- Industrial Engineering (B.Eng.)

### Business Administration and Economics

- Business Administration (B.Sc.)
- International Logistics Management (M.Sc.)
- Logistics Management (B.Sc.)
- Management of Mid-Sized Companies (M.Sc.)
- Business Psychology (B.Sc.)

### Institute for Scientific Dialog

- Applied Entrepreneurship (M.Sc.)
- Teaching degree at vocational colleges: Specialization Nutritional Science and Home Economics as well as Food Technology (B.Ed.)
- Electrical Engineering for Vocational College Instructors (B.Sc.)
- Mechanical Engineering and Manufacturing Engineering for Vocational College Instructors (B.Sc.)

## Sustainable Campus Höxter

### Environmental Engineering and Applied Information Technology

- Applied Information Technology (B.Sc.)
- Precision Farming (B.Sc.)
- Environmental Engineering (B.Eng.)
- Environmental Engineering and Modeling (M.Eng.)
- Environmental Sciences (B.Sc.)

### Landscape Architecture and Environmental Planning

- Open Space Management (B.Eng.)
- Landscape Architecture (B.Sc.)
- Landscape Architecture (M.Sc.)
- Landscaping and Landscape Management (B.Sc.)
- Sustainable Landscape Design anfd Development (M.A.)

## BildungsCampus Herford

### Electrical Engineering and Computer Science and Institute for Scientific Dialog

- Digital Management Solutions (B.Sc.)

## RailCampus OWL in Minden

### in cooperation with Bielefeld University, Paderborn University and Bielefeld University of Applied Sciences and Arts.

### Electrical Engineering and Computer Science

- Digital Railway Systems (B.Sc.)

# Personnel

## Employees

**779** total employees

335

*173* professorial positions

117

320 scientific staff

274 employees in technology and administration

175

23 apprentices

7

2 volunteers/interns



177 employees in Detmold

531 employees in Lemgo

71 employees in Höxter



## Endowed professorships

| Endowed professorship | Sponsored by |
|---|---|
| Computer science with a focus on knowledge-based systems | Phoenix Contact GmbH<br>Phoenix Contact Stiftung |
| Mathematics and authentication | Koenig & Bauer AG |
| Digital building | Goldbeck GmbH<br>Schüco International KG |
| Networked automation systems | KEB Automation KG<br>Stiftung Standortsicherung Kreis Lippe |
| Entrepreneurship | IHK Lippe zu Detmold<br>Sparkasse Lemgo<br>Stiftung Standortsicherung Kreis Lippe<br>POS Tuning Udo Voßhenrich GmbH & Co. KG<br>Stifterverband für die Deutsche Wissenschaft e. V. |

## Retired

in the period from October 1, 2022 to September 30, 2023

**Professor Dr. Hans-Jürgen Geyer**
Department Landscape Architecture and Environmental Planning

**Professor Ph.D. Lucia Mühlhoff**
Department Electrical Engineering and Computer Science

**Professor Dr.-Ing Schwesig**
Department of Civil Engineering

**Professor Dirk Slawski**
Department Landscape Architecture and Environmental Planning

**Professor Dr. Frank Stolze**
Department of Civil Engineering

**Professor Dr. Marietta Ehret**
Department of Media Production

**Professor Dr.-Ing. Salman Ajib**
Department Environmental Engineering and Applied Information Technology

## Appointments

in the period from October 1, 2022 to September 30, 2023

**Professor Dr. Susanne Kost**
Department Detmold School of Design

**Professor Dr. Lukasz Wisniewski**
Department Electrical Engineering and Computer Science

**Professor Dr. Daniel Hunold**
Department of Media Production

**Professor Dr. Alexander Kutter**
Department of Media Production

**Professor Nicolas Rauch**
Department Detmold School of Design

**Professor Dr. Tobias Haelke**
Department Landscape Architecture and Environmental Planning

**Professor Dr.-Ing. Benedikt Andrew Latos**
Department Business Administration and Economics

# Committees

## Presidium

**President**
Professor Dr. Jürgen Krahl

**Chancellor**
Nicole Soltwedel

**Vice President for Education and Sustainability**
Professor Dr. Yvonne-Christin Knepper-Bartel

**Vice President for Research and Transfer**
Professor Dr. Stefan Witte

**Vice President for Culture, Communication and International Affairs**
Professor Dr. Uta Pottgiesser

## University Council

**Chairwoman**
Professor Dr. Antonia B. Kesel

**Deputy Chairman**
Klaus Böhme

**Other members**
Ernst-Michael Hasse
Andrea Frank
Professor Dr. Klaus Maas
Claudia Schare
Professor Barbara Schwarze
Dr. Walter Stadlbauer

## Senate

**Chairman**
President Prof. Dr. Jürgen Krahl

**Lecturers**
Prof. Katja Frühwald-König
(Department of Production Engineering and Wood Technology)
Prof. Jens-Uwe Schulz
(Department Detmold School of Design)
Prof. Carsten Wiewiorra
(Department Detmold School of Design)
Prof. Oliver Hall
(Department Detmold School of Design)
Prof. Dr. Nikolai Gerzen
(Department of Civil Engineering)
Prof. Dr. Christian Jolk
(Department Landscape Architecture and Environmental Planning)
Prof. Dr. Felix Möhring
(Department Landscape Architecture and Environmental Planning)
Prof. Dr. Andreas Paa
(Department Mechanical Engineering and Mechatronics)
Prof. Dr. Henning Trsek
(Department Electrical Engineering and Computer Science)
Prof. Dr. Helene Dörksen
(Department Electrical Engineering and Computer Science)
Prof. Dr. Ulrich Odefey
(Department Life Science Technologies)
Prof. Dr. Elke Kottmann
(Department Business Administration and Economics)
Prof. Dr. Miriam Pein-Hackelbusch
(Department Life Science Technologies)

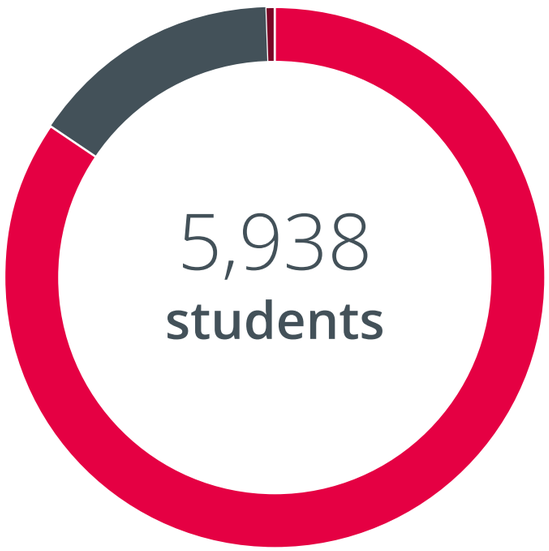
**Employees**
*Scientific employees*
Rainer Kammler
(Department Electrical Engineering and Computer Science)
Christian Koch
(Department Mechanical Engineering and Mechatronics)
Carsten Halm
(S(kim) – Service Communication Information Media)
Christoph-Alexander Holst
(Department Electrical Engineering and Computer Science)

*Employees in technology and administration*
Anja Strüßmann
(FTZ - Research and Transfer Center)
Dr. Sabine Brunklaus
(FTZ - Research and Transfer Center)
Stefan Schreich
(S(kim) – Service Communication Information Media)
Andreas Knehans
(Department Electrical Engineering and Computer Science)

**Students**
Tim Lohrmeier
Anna Zora Peitzmann
Sven Strathmann
Hannah Fetkenheuer


# Students

## total

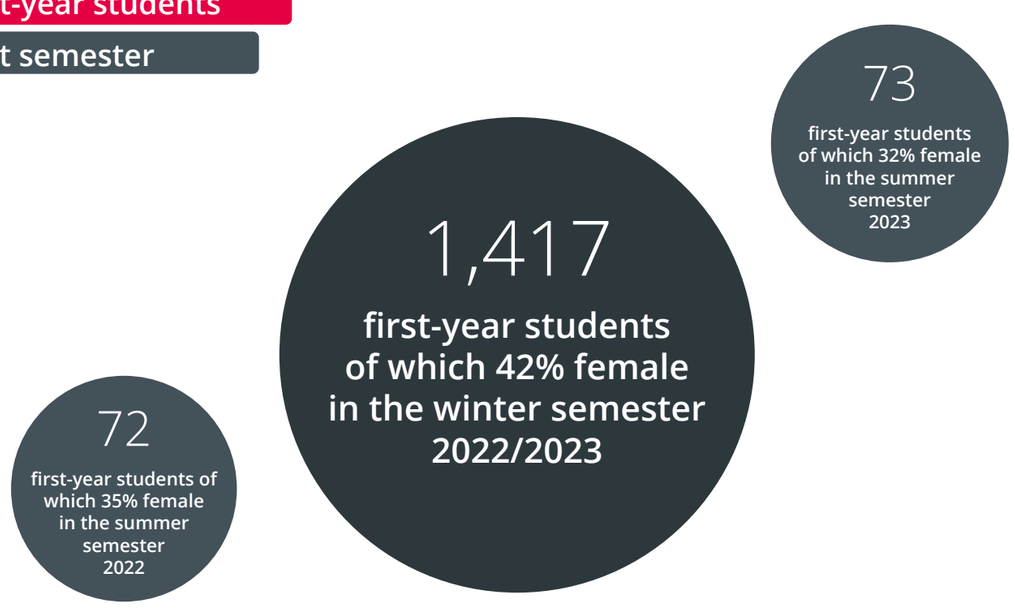



41%

- 5.026 Bachelor's students
- 893 Master's students
- 19 Exchange students

## First-year students

### First semester




Full-time students, excluding students on leave of absence and exmatriculated students, reference date official statistics (01.06./01.12.)



## Students

### by location and department


### Sustainable Campus Höxter: 806 students

- 465 students
  Department of Environmental Engineering and Applied Information Technology
- 341 students
  Department of Landscape Architecture and Environmental Planning

### Innovation Campus Lemgo: 2.908 students

- 576 students
  Department Life Science Technologies
- 680 students
  Department Electrical Engineering and Computer Science
- 394 students
  Department Mechanical Engineering and Mechatronics
- 436 students
  Department of Production Engineering and Wood Technology
- 665 students
  Department Business Administration and Economics
- 157 students
  Institute for Scientific Dialog

### Creative Campus Detmold: 2,224 students

- 1.214 students
  Department Detmold School of Design
- 467 students
  Department of Media Production
- 543 students
  Department of Civil Engineering

Full-time students, excluding students on leave of absence and exmatriculated students, reference date official statistics (01.06./01.12.)

# International students

## total

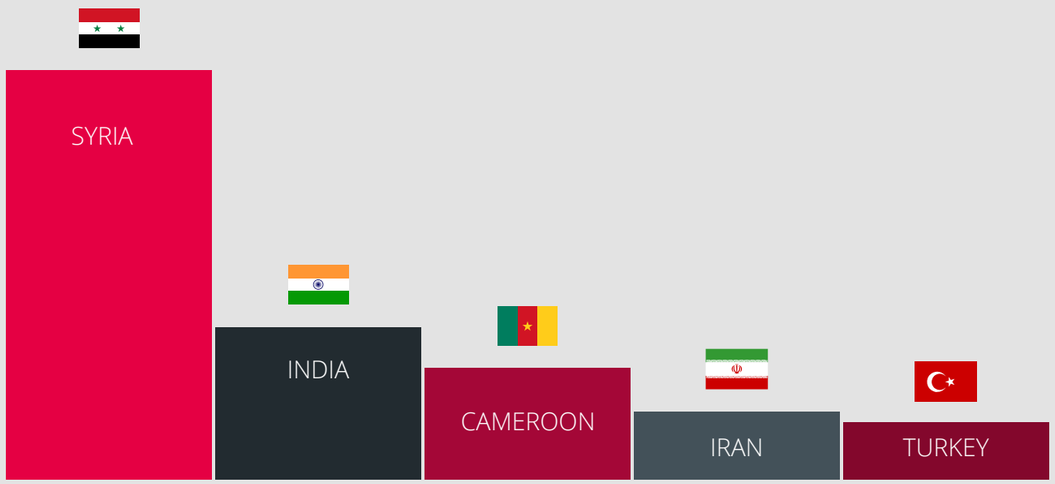
Winter semester 2022/23

**14%**
of the entire student body


- 469 Bachelor's degree students
- 346 Master's degree students
- 18 exchange students

## TOP 5 countries of origin

### Nationality




### Other countries of origin


Full-time students who obtained their higher education entrance qualification abroad or at a preparatory college, excluding students on leave of absence and exmatriculated students, official statistics reference date (01.06./01.12.)

# Graduates

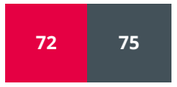
## by location and department

Exam year 2022

**417 graduates Detmold total**
274 graduates from the Detmold School of Design
79 graduates from the Media Production Department
64 graduates from the Department of Civil Engineering

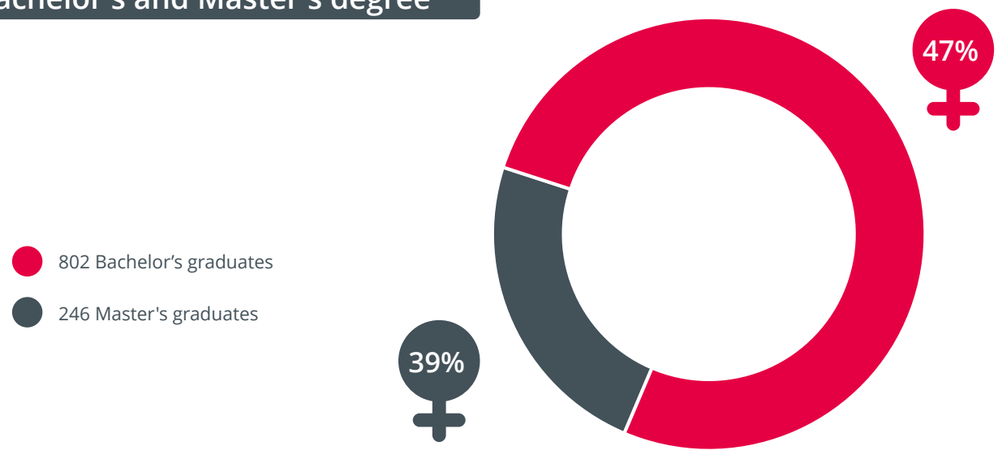

**484 graduates Lemgo total**
118 graduates from the Department of Life Science Technologies
76 graduates from the Department of Electrical Engineering and Computer Science
81 graduates from the Department of Mechanical Engineering and Mechatronics
111 graduates from the Department of Production Engineering and Wood Technology
91 graduates from the Department of Business Administration and Economics
7 graduates at the Institute for Scientific Dialog


**147 graduates Höxter total**
72 graduates from the Department of Electrical Engineering and Applied Information Technology
75 graduates from the Department of Landscape Architecture and Environmental Planning




## Graduates

## by Bachelor's and Master's degree




Number of cases, status: 27.11.2023



# Doctoral candidates

## by campus

**69**

26

**total ongoing doctorates**

16

50 doctoral theses at Innovation Campus Lemgo

6

10 *doctoral theses at Creative Campus Detmold*

9 doctoral theses at Sustainable Campus Höxter

4

## Completed doctorates

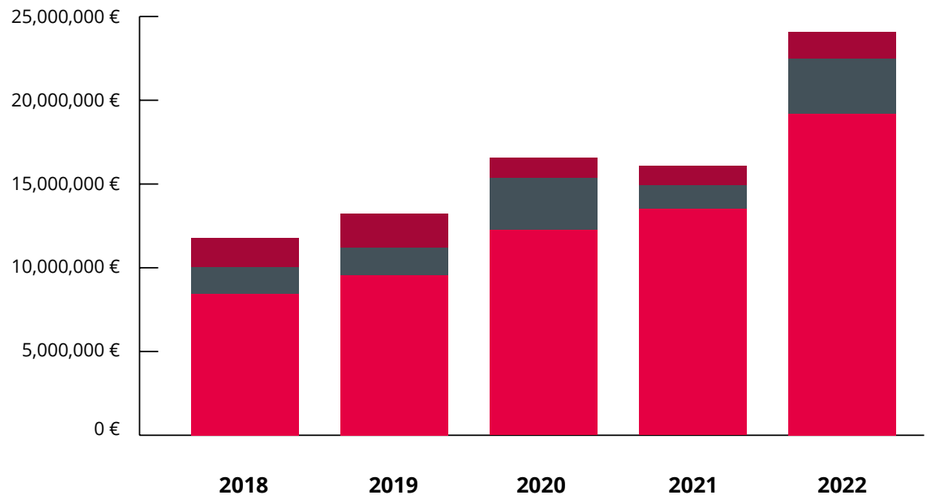
**Dr. Stefan Geng**
Modellgestützte Entwicklung von Getriebekonzepten für plug-in-hybrid-elektrische Fahrzeuge
Department Electrical Engineering and Computer Science

**Dr. Sven Bendzioch**
Entwicklung eines Handlungsleitfadens zur bedarfsgerechten Auswahl und Konfiguration von informatorischen Montageassistenzsystemen
Department of Production Engineering and Wood Technology

**Dr. Imke Weishaupt**
Produktangepasste Getränke- und Lebensmittelpasteurisierung unter Anwendung der IR-Spektroskopie und der Implementierung eines cyber-physischen Systems
Department Life Science Technologies

**Dr. Partrick Wefing**
Closed-loop controlled continuous Mashing in beer production (by employing artificial intelligence)
Department Life Science Technologies

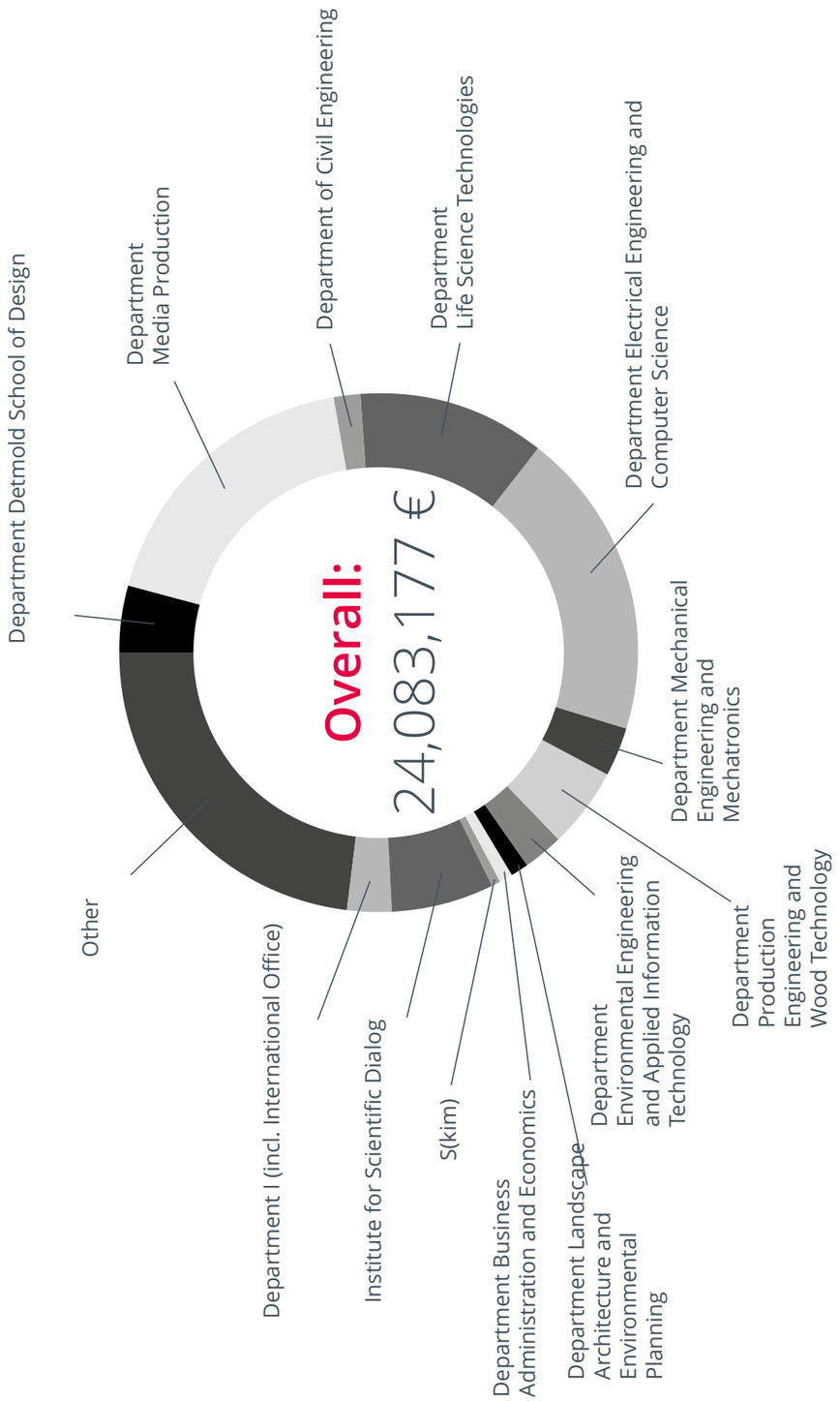
# Project income




| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| Project income private | 1,754,304 € | 2,071,512 € | 1,214,966 € | 1,162,466 € | 1,637,258 € |
| Competitive state funds | 1,555,374 € | 1,603,957 € | 3,120,629 € | 1,416,003 € | 3,249,747 € |
| Project income public | 8,454,970 € | 9,559,580 € | 12,237,222 € | 13,512,470 € | 19,196,171 € |



## Project income
## by department



# Research projects

## Creative Campus Detmold

**Department Detmold School of Design**

Period: 01.10.2022 - 31.03.2026
Prof. Dr. Axel Häusler
Die co-kreative Stadt
Development of a data-driven design

Period: 01.03.2023 - 28.02.2025
Prof. Dr. Susanne Kost
Territoriale Raumbild(n)er
Historical landscape references as a political challenge

Period: 01.10.2023 - 21.12.2026
Prof. Dr.-Ing. Uta Pottgiesser
Konstruktionserbe
Longitudinal truss churches and hidden steel constructions in the sacred buildings of high modernism

Period: 01.08.2022 - 30.09.2024
Prof. Dr.-Ing. Uta Pottgiesser
Theatre of Mass Musical Action for 4000 seats in Kharkiv (Ukraine, 1930)

Period: 01.01.2023 - 31.12.2023
Prof. Hans Sachs
ROB.BAU
Digital fabrication plant with a collaborative industrial robot

Period: 06.09.2019 - 31.12.2022
Prof. Jens-Uwe Schulz
KliMo
Product chains from fen biomass

Period: 24.11.2022 - 15.02.2023
Prof. Dr.-Ing. Susanne Schwickert
zirkulärer Tummelplatz
Circular approach to the use of materials and object groups for public spaces

Period: 01.10.2022 - 31.12.2026
Prof. Dr.-Ing. Susanne Schwickert
accessLIVINGLAB
Best practice learning by means of a digital twin

Period: 09.12.2020 - 09.06.2024
Prof. Dr.-Ing. Susanne Schwickert
ECOsights-IFE(B)
Development of architectural, building climate and didactic measures for the construction and operation of sustainable museums using the example of the entrance and exhibition building of the LWL Open Air Museum Detmold, Westfälisches Landesmuseum für Alltagskultur

Period: 01.04.2021 - 31.03.2024
Prof. Dr.-Ing. Susanne Schwickert
passPART2
Reduction of energy consumption and greenhouse gas emissions through the use of low-investment measures using the example of the Lippe district building based on the comparison of the participatory gamification approach with the passive measure of intelligent room heating management

Period: 01.06.2018 - 30.11.2023
Prof. Kathrin Volk
URBiNAT
Urban inclusive Nature: Healthy corridors as drivers for regeneration of social housing neighborhoods through co-creation of social, environmental and marketable NBS

**Department of Media Production**

Period: 10.03.2021 - 31.12.2023
Prof. Dr. Guido Falkemeier
Kreativinstitut.OWL
Development and research into new forms of digital media products through the project "KreativInstitut.OWL - Zukunftsfähigkeit der Kreativwirtschaft"

Period: 01.07.2022 - 31.12.2026
Prof. Dr. Guido Falkemeier
Kreativinstitut.OWL (II)
Future viability of the creative industries

Period: 09.12.2020 - 09.06.2024
Prof. Dr. Tobias Schmohl
ECOsights-IWD
Development of architectural, building climate and didactic measures for the construction and operation of sustainable museums using the example of the entrance and exhibition building of the LWL Open Air Museum Detmold, Westfälisches Landesmuseum für Alltagskultur

Period: 01.08.2021 - 30.11.2023
Prof. Sebastian Grobler
VFP – Virtual Film Playground

Period: 01.02.2022 - 28.02.2023
Prof. Dr. Tobias Schmohl
Virtuelle Rhetorik
Preparation and implementation of teaching/learning videos for the blended learning platform Virtual Rhetoric and tutorials

Period: 01.12.2021 - 30.11.2025
Prof. Dr. Tobias Schmohl
HAnS
Development and implementation of an intelligent assistance systems for higher education

Period: 01.10.2022 - 30.09.2024
Prof. Dr. Tobias Schmohl
Beyond Disciplinary Boundaries

Period: 1.10.2022 - 30.09.2024
Prof. Dr. Tobias Schmohl
Di2Design2
Digital construction kit for motivating didactics on the basis of empirical game design elements

Period: 01.07.2023 - 31.12.2024
Prof. Dr. Tobias Schmohl
Expert für Zukunftsorientierte Lernräume
From concept to implementation "Community of Practice Program" Learning Architecture

Period: 01.09.2019 - 31.03.2023
Dr. Axel Berndt
MPM - Music Performance Markup

Period: 01.01.2023 - 31.12.2023
Dr. Axel Berndt
MusicXML
Further development of MusicXML in meico

**Department of Civil Engineering**

Period: 01.05.2023 - 30.04.2027
Prof. Dr.-Ing. Jörg Felmeden
wasserplus OWL
Future network wasser^plus for knowledge transfer in the East Westphalia-Lippe region

## Innovation Campus Lemgo

Period: 05.09.2019 - 31.12.2023
Prof. Dr.-Ing. Stefan Witte
InnovationSPIN
Space to make

**Department Life Science Technologies**

Food Factory OWL
Period: 01.10.2018 - 31.05.2023
Prof. Dr.-Ing. Jan Schneider
Smart FOODFACTORY

Period: 01.10.2020 - 31.12.2024
Prof. Dr.-Ing. Ulrich Müller
Ätherisches Öl
Studies on the bactericidal effect of essential oils depending on the extraction process

Period: 01.07.2021 - 31.10.2023
Prof. Dr.-Ing. Ulrich Müller
Ätherische Öle
Rapid extraction of essential oils from freshly harvested plant material

Period: 01.04.2023 - 31.03.2025
Prof. Dr. Barbara Becker
Deo-Kinetik
Improved long-term effect of deodorants through lipid-encapsulated active ingredients

Period: 01.08.2018 - 30.04.2023
Prof. Dr.-Ing. Jan Schneider
BioCO2nvert
Implementation of a demand-driven power-to-gas concept in C02-emitting fermentation plants

Period: 15.11.2020 - 14.11.2023
Prof. Dr. Matthias Upmann
KontRed
Development and implementation of technological processes for the reduction of microbial contaminants in the poultry and pig slaughter process

**Department Electrical Engineering and Computer Science**

Period: 01.08.2019 - 31.10.2022
Prof. Dr.-Ing. Holger Borcherding
3D-MC2B
3D-Metalcore-LDS-Circuit-Board: 3D circuit board structure by means of polymer coatings on metal substrates and laser direct structuring for compact electronic power applications

Period: 01.10.2019 - 31.03.2023
Prof. Dr.-Ing. Holger Borcherding
DC-Industrie2
Direct current for the factory of the future. Components for coupling and safe operation of DC grids

Period: 01.12.2019 - 31.05.2023
Prof. Dr.-Ing. Holger Borcherding
STIM
Smart transformers as the power supply of the future for industrial mechanical engineering (STIM). Development of the supply, control and output unit for an electronic isolating transformer

Period: 01.03.2021 - 31.08.2023
Prof. Dr.-Ing. Holger Borcherding
Merlin_IFE
Smart wireless MID sensor systems for IOT applications: Setup, analysis and qualification of highly integrated application-specific sensor systems on CMID technology

# Research projects

Period: 01.05.2023 - 30.04.2026
Prof. Dr.-Ing. Borcherding
DC-Schiene
Highly efficient, resource-saving
DC power rail systems in production and manufacturing

Period: 01.05.2023 - 30.04.2026
Prof. Dr.-Ing. Holger Borcherding
IDEALER
EMC-optimized input and output filters using 3D simulation

Period: 01.08.2023 - 31.01.2026
Prof. Dr.-Ing. Holger Borcherding
DCI4CHARGE
Extension of the DC-INDUSTRIE system concept for open low-voltage DC grids for the application area of bidirectional charging: Device development and qualification

Period: 01.07.2023 - 30.06.2026
Prof. Dr.-Ing. Ulrich Büker
NeMo.bil
System of cooperating vehicles for individualized public transport

Period: 15.11.2019 - 31.03.2023
Prof. Dr. Helene Dörksen
work & care
Development of a competence network that links, bundles, and innovatively develops social and digital consulting and support services for small and mid-sized enterprises and caretakers in the East Westphalia-Lippe region

Period: 01.01.2021 - 31.12.2022
Prof. Dr. Helene Dörksen
Mob-In-Ovo
Development of a mobile device for determining the sex of fertilized eggs

Period: 01.04.2023 - 31.03.2026
Prof. Dr. Helene Dörksen
Mini6Ei
Minimally invasive gender recognition for six-day-old hatching eggs

Period: 01.01.2021 - 31.03.2023
Prof. Dr.-Ing. Jürgen Jasperneite
5G4Industry
5G networks for industrial use - from Core to Access, 5G networks for industrial application – end-to-end QoS

Period: 01.10.2021 - 31.12.2023
Prof. Dr. Markus Lange-Hegermann
SyDaPro
Synthetic data in production

Period: 01.12.2020 - 30.11.2024
Prof. Dr. Markus Lange-Hegermann
GAIA
Gaussian processes for automatic and interpretable anomaly detection

Period: 01.01.2021 - 31.12.2023
Prof. Dr. Markus Lange-Hegermann
MetalClass
AI-based real-time classification of metallic secondary raw materials using PGNAA

Period: 01.01.2020 - 30.06.2023
Prof. Dr.-Ing. Volker Lohweg
AI marketplace
The ecosystem for artificial intelligence in product development: AI building block development and information processing in heterogeneous data structures for product development

Period: 01.10.2020 - 30.09.2025
Prof. Dr.-Ing. Volker Lohweg
KIAM
Competence center AI in the working world of industrial SMEs in OstWestfalenLippe: Research and transfer activities to increase technology acceptance in human-technology interaction

Period: 01.04.2022 - 31.03.2025
Prof. Dr.-Ing. Volker Lohweg
AI4ScaDa
AI for ScarceData – machine learning and information fusion for the sustainable use of laboratory and customer data

Period: 01.01.2021 - 31.12.2023
Prof. Dr.-Ing. Rainer Rasche
NachLadBaR
Systematic model-based testing and optimization of sustainable charging electronics; Systematic model-based testing and optimization of sustainable charging electronics

Period: 01.02.2019 - 31.01.2023
Prof. Dr.-Ing. Carsten Röcker
enableIT
Technology-supported inclusion through human-centered system analysis and assistance in the industry

Period: 01.08.2022 - 31.07.2026
Prof. Dr.-Ing. Carsten Röcker
KIAssist
AI-supported assistance to promote decentralized inclusion

Period: 01.08.2022 - 31.07.2026
Prof. Dr.-Ing. Carsten Röcker
SAIL
SustAInable Life-cycle of Intelligent Socio-Technical Systems

Period: 01.09.2020 - 30.06.2023
Prof. Dr.-Ing. Thomas Schulte
MonoCab OWL
Construction and demonstration of mono-cabs

Period: 01.07.2023 - 31.12.2023
Prof. Dr.-Ing. Thomas Schulte
MONOCAB_alpha
Supplementary project to the MonoCab OWL project

Period: 01.01.2023 - 31.12.2025
Prof. Dr.-Ing. Thomas Schulte
Smart-E-Factory
Energetically smart factory for resource-saving production

Period: 01.10.2020 - 29.02.2024
Prof. Dr.-Ing. Thomas Schulte
SMARTOPTION
Smart Yeast Filtration - Self-optimizing process automation of dynamic microfiltration with AI support for the economic recovery of yeast by-product flows in breweries

Period: 23.02.2022 - 22.02.2025
Prof. Dr.-Ing. Oliver Stübbe
AMUSE
Additively manufactured multispectral near-infrared & terahertz sensor systems

Period: 01.07.2022 - 30.06.2024
Prof. Dr.-Ing. Oliver Stübbe
iOrt
Development of an intelligent orthosis with innovative, optical sensor system

Period: 01.12.2020 - 31.01.2024
Prof. Dr.-Ing. Henning Trsek
REBAKO
Controller-based coexistence management of various radio communication systems

Period: 01.01.2018 - 31.12.2022
Prof. Dr.-Ing. Henning Trsek
KOARCH
Cognitive architecture for cyberphysical production systems and Industry 4.0

Period: 01.02.2023 - 31.01.2025
Prof. Dr.-Ing. Henning Trsek
PHARE
Prototype of a highly integrated skill-based embedded feeder (vibratory feeder)

Period: 15.04.2023 - 14.04.2026
Prof. Dr.-Ing. Henning Trsek
SUSI
Software-based support for security risk assessments in the industry

Period: 01.06.2023 - 30.11.2024
Prof. Dr.-Ing. Henning Trsek
DeSiRe
Dependable and Secure Infrastructure for Resilient Next

Period: 09.12.2020 - 09.06.2024
Prof. Dr. Johannes Üpping
ECOsights-iFE
Development of architectural, building climate and didactic measures for the construction and operation of sustainable museums using the example of the entrance and exhibition building of the LWL Open Air Museum Detmold, Westfälisches Landesmuseum für Alltagskultur

Period: 01.09.2022 - 30.11.2023
Prof. Dr. Johannes Üpping
PIA - Physics is awesome

Period: 15.07.2020 - 14.10.2023
Prof. Dr.-Ing. Jürgen Jasperneite
itsowl-AutoS²
Automatic evaluation and monitoring of safety & security properties for intelligent technical systems

Period: 01.09.2022 - 31.08.2026
Prof. Dr.-Ing. Lukasz Wisniewski
TwinAIR
Digital Twins Enabled Indoor Air Quality Management for Healthy Living

Period: 01.11.2020 - 31.10.2023
Prof. Dr.-Ing. Lukasz Wisniewski
TwinERGY
Intelligent interconnection of prosumers in positive energy communities with twins of things for digital energy markets

Period: 01.08.2021 - 31.07.2023
Prof. Dr.-Ing. Jürgen Jasperneite
CINI 4.0
Converging Industrial Networks for Industry 4.0

Period: 06.05.2021 - 30.06.2024
Prof. Dr.-Ing. Stefan Witte
Mobi_NWL
Research work in the field of automated/ autonomous mobility solutions for public transport - NWL

# Research projects

Period: 06.05.2021 - 30.06.2024
Prof. Dr.-Ing. Stefan Witte
Mobi_VVOWL
Research work in the field of automated/
autonomous mobility solutions for public transport - VVOWL

Period: 06.07.2021 - 31.12.2023
Prof. Dr.-Ing. Stefan Witte
Aufbau RailCampus OWL

Period: 15.02.2022 - 31.12.2024
Prof. Dr.-Ing. Jürgen Jasperneite
SIMONE
secure.mobile.connected with 5G

**Department Mechanical Engineering and Mechatronics**

Period: 01.07.2020 - 31.12.2022
Prof. Dr.-Ing. Georg Heinrich Klepp
FES_FieldLab
Field laboratory for fluid energy storage

Period: 01.08.2022 - 31.12.2024
Prof. Dr.-Ing. Georg Heinrich Klepp
Klein-WEA
Klein wind turbines research project

Period: 01.06.2023 - 30.11.2025
Prof. Dr.-Ing. Jian Song
ViSVib
Virtual simulation of vibration loads on plug connections

**Department of Production Engineering and Wood Technology**

Period: 01.11.2020 - 31.10.2023
Prof. Dr. Andreas Deuter
FuPEP
Function-oriented complexity management
in all phases of product development:
System design and implementation of the
DSM simulation methods in the form of an
assistance system

Period: 01.03.2021 - 29.02.2024
Prof. Dr. Andreas Deuter
KIAAA
An AI assistant for training in automation:
Development of a didactic framework for AI-based university teaching using simulation models of automation technology

Period: 01.05.2019 - 30.04.2023
Prof. Katja Frühwald-König
Oilpalmsugar
Synergistic use of oil palm wood for the production of compacted fiber material and use of residual materials for the sustainable production of chemicals from the fermentation of carbohydrates

Period: 01.08.2021 - 31.07.2023
Prof. Katja Frühwald-König
SWC – Aufbau Smart Wood Center

Period: 01.05.2023 - 30.04.2027
Prof. Katja Frühwald-König
CO2Bau
Sustainable construction and renovation – decarbonization of the building stock with minimized use of resources

Period: 01.12.2020 - 30.11.2023
Prof. Dr. Sven Hinrichsen
SinnAssist

Period: 01.03.2021 - 31.12.2023
Prof. Dr. Sven Hinrichsen
Pro-LowCode
Development and implementation of a holistic approach to the digitalization of processes in industrial companies using low-code software

Period: 01.06.2021 - 31.12.2024
Prof. Dr. Sven Hinrichsen
KIPro
AI-based assistance system platform for complex
production processes in mechanical and plant engineering

Period: 01.01.2021 - 31.08.2023
Prof. Dr.-Ing. Li Li
KonVa-LaDe
Technological and systemic basic developments and realization of a laboratory demonstrator for KonVa vehicles

Period: 01.05.2023 - 31.10.2024
Prof. Dr.-Ing. Li Li
KI-NET – KI-Kompetenz-Netzwerk TH OWL

Period: 01.03.2021 - 31.08.2023
Prof. Dr.-Ing. André Springer
Merlin_FB7
Smart wireless MID sensor systems for IOT applications: Setup, analysis and qualification of highly integrated application-specific sensor systems on CMID technology

Period: 01.06.2022 - 31.05.2025
Prof. Martin Stosch
InPeiro
Development of functionally integrated PANELS

**Department Business Administration and Economics**

Period: 01.08.2020 - 31.12.2023
Prof. Dr. Anja Iseke
Predicteams
Agile teamwork through predictive competence management

Period: 01.09.2022 - 29.02.2024
Prof. Dr. Korbinian von Blanckenburg
Uni.META.versum
Metaverse at universities and colleges

**Institute for Scientific Dialog**

Period: 01.11.2020 - 31.10.2024
Svenja Claes
BB OWL "Bildungsbrücken OWL: Establishment and Conceptualization of an excellent vocational training ecosystem through the cooperation of experienced educational partners from school-based vocational education, commercial and vocational education, academic education and research as well as network partners and SMEs"

Period: 01.07.2022 - 31.07.2023
Prof. Dr. Andreas Welling
Future Mobility Dialogue
Developing communication methods to achieve a credible and attention-catching science in dialogue about the mobility of the furture in a BANI society

Period: 01.07.2023 - 31.01.2024
Prof. Dr. Andreas Welling
Future Mobility Dialogue II
Developing communication methods to achieve a credible and attention-catching science in dialogue about the mobility of the future in a VUCA society

***smart*FoodTechnology$^{OWL}$ (abb.: SFT)**

Period: 01.09.2021 - 31.08.2024
Prof. Dr.-Ing. Jan Schneider
Management SFT
FH Impulse partnership: smartFoodTechnologyOWL

Period: 01.05.2019 - 31.03.2023
Prof. Dr. Hans-Jürgen Danneel
SFT: DProFood
Data analysis and autonomous forecasting to improve food transparency and safety

Period: 01.09.2021 - 29.02.2024
Prof. Dr.-Ing. Ulrich Müller
SFT: TEIG 4.0
Real-time recording of quality-relevant characteristics of raw materials, intermediate and end products

Period: 01.05.2021 - 30.04.2024
Prof. Dr.-Ing. Jan Schneider
SFT: Food
LifeTimeTracking Use of multimodal
information fusion for the realization of a
monitoring device and a life cycle simulator
for the investigation and quantification of
quality-determining parameters and the
shelf life of food and its ingredients

Period: 01.05.2021 - 31.01.2023
Prof. Dr.-Ing. Jan Schneider
SFT: PETransparency
Recyclate Transparency – Use of data-intensive and inline-capable sensors for real-time capable,
cross-stage investigation of recycled PET

Period: 01.02.2023 - 30.04.2024
Prof. Dr.-Ing. Jan Schneider
SFT: PETauthent
Authentication of PET recyclate for food packaging using data-intensive sensors and machine learning methods

Period: 01.06.2023 - 31.05.2026
Prof. Dr.-Ing. Jan Schneider
SFT: FoodProduction 4.0
Sustainable non-dairy milk production –
holistic raw material utilization

Period: 01.05.2023 - 30.04.2026
Prof. Dr.-Ing. Henning Trsek
SFT: DiPP
Digital product passport for reliable
information exchange in the supply chain

Period: 01.10.2021 - 31.12.2023
Prof. Dr. Matthias Upmann
SFT: progniTENDER
Investigation of the suitability of vibroacoustic
methods for determining meat tenderness
during meat maturation

**S(kim)- Service Communication Information Media**

Period: 01.09.2022 - 31.08.2025
Dr. Lars Köller
UFOowl
Dealing with research data at HAW in OWL. TH OWL focus on structure and support

# Research projects

## Sustainable Campus Höxter

**Department of Environmental Engineering and Applied Computer Science**

Period: 01.03.2023 - 28.02.2026
Prof. Dr.-Ing. Klaus Maas

MaPro
Master plan for sustainable and transferable municipal flash flood prevention as a transdisciplinary process

Period: 04.10.2021 - 30.09.2024
Prof. Dr. Martin Oldenburg
AFS63 Schmutzfrachtmodell
Implementation of AFS and AFS63 in a pollution load model - AFS63 pollution load model

Period: 18.03.2020 - 30.09.2023
Prof. Dr. Martin Oldenburg
PeEV
Eliminate and recycle phosphorus efficiently – Investigations into increasing the efficiency of phosphorus recovery from sewage sludge

Period: 01.12.2019 - 31.05.2024
Prof. Dr. Jessica Rubart
Gekonnt hanDeln
Employees in household-related services are among the most vulnerable population groups due to multiple social and health-related disadvantages. Gekonnt hanDeln develops innovative offers to promote their work-related social and health-related skills.

Period: 01.07.2022 - 14.04.2023
Prof. Dr. Jessica Rubart
InstandXAI
Industrial application of explanatory artificial intelligence using the example of predictive maintenance planning for hydraulic presses through learning pattern recognition and contextual-ized, individual human-machine interaction

Period: 01.03.2021 - 30.06.2023
Prof. Dr. Burkhard Wrenger
Mobile SmartFarmOWL

**Department of Landscape Architecture and Environmental Planning**

Period: 01.06.2022 - 31.12.2023
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
ZDB.NRW
Digitalization of the construction industry and innovative construction

Period: 01.09.2021 - 01.07.2023
Prof. Dr.-Ing. Hendrik Laue
BNF – Bewertungssystem nachhaltige Freianlagen

Period: 14.09.2020 - 31.10.2022
Prof. Dr. Boris Stemmer
Grüne Infrastruktur
Green infrastructure

Period: 01.12.2022 - 31.12.2028
Prof. Dr. Boris Stemmer
WB-EE-GI
Accompanying scientific research E+E Green infrastructure in rural regions

**S(kim)- Service Communication Information Media**

Period: 01.08.2021 - 31.07.2024
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
DigikoS
Digital toolkit for competence-oriented self-study

## Other research projects

**Research and Transfer Center**

Period: 01.01.2023 - 31.12.2027
Prof. Dr.-Ing. Stefan Witte
TRInnovationOWL
Transfer reinforcement of TH OWL through cyclical innovation processes

Period: 01.12.2022 - 31.05.2024
Prof. Dr.-Ing. Stefan Witte
Transfer:Square($T^2$)
Opening up new transfer paths and strengthen interactions

Period: 01.12.2022 - 31.05.2024
Prof. Sebastian Grobler
AzubiRecruiting Social Media 4.0

Period: 01.12.2022 - 31.05.2024
Prof. Dr.-Ing. Volker Lohweg
DeepConcrete

Patent promotion
Period: 01.02.2020 - 31.12.2023
Prof. Dr.-Ing. Stefan Witte
WIPANO_2020

**Digital teaching**

Institute for Scientific Dialog
Period: 01.02.2019 - 31.12.2022
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
Höhere Mathematik (HM) I online

Period: 01.07.2020 - 31.12.2023
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
HD@DH.nrw

Period: 01.07.2020 - 31.12.2024
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
Netzwerk ORCA.nrw

Department Life Science Technologies
Period: 01.07.2020 - 31.12.2023
Prof. Dr. Matthias Upmann
inverted-classroom-Konzept
Fellowship_inverted-classroom concept

Department Business Administration and Economics
Period: 01.07.2020 - 31.12.2023
Prof. Dr. Korbinian von Blanckenburg
Virtual Reality Tutorials
Fellowship_Virtual Reality Tutorials

Department Detmold School of Design
Period: 01.07.2020 - 31.12.2023
Prof. Dr.-Ing. Susanne Schwickert
DigiReflexAssist
Digital reflection assistant

Department of Environmental Engineering and Applied Information Technology
Period: 01.07.2020 - 31.12.2023
Prof. Dr. Martin Oldenburg
VITAL –Videotouren als Lernmethode im digitalen Umfeld

Department Landscape Architecture and Environmental Planning
Period: 01.07.2020 - 31.03.2023
Prof. Dr. Martin Oldenburg
Curriculum 4.0.nrw_Living Lab WuU

DH.NRW
Period: 01.07.2020 - 31.03.2023
Prof. Dr. Ralf Steffen
Curriculum 4.0.nrw_Lernlandschaft

**Campus Foundary**

Institute for Scientific Dialog
Period: 01.09.2019 - 31.12.2024
Prof. Dr. Andreas Welling
ESC.OWL
Excellence Start-up Center NRW

Institute for Scientific Dialog
Period: 01.04.2020 - 31.03.2024
Prof. Dr. Andreas Welling
TechneHubOWL II
Providing founders with space, infrastructure and competence and integrate them into strong regional networks with the business community.

Institute for Scientific Dialog
Period: 01.09.2021 - 31.08.2025
Prof. Dr. Andreas Welling
HardwareLab OWL
Prototyping infrastructures and personnel implementation support for start-up concepts with physical products

**Additional sponsoring**

Innnovation Campus Lemgo
Research and Transfer Center
Period: 12.07.2022 - 31.07.2023
Prof. Dr.-Ing. Stefan Witte
Prämie Innovative Hochschule 2021

(TH) OWL University of Applied Sciences and Arts and Arts
Period: 01.01.2023 - 31.12.2028
Nicole Soltwedel
PROFuture@TH-OWL - working for a smarter region

Innnovation Campus Lemgo
Institute for Scientific Dialog
Period: 10.05.2021 - 31.12.2026
Prof. Dr. Josef Löffl
DiMS - Akkreditierung
Digital Management Solutions

# Research projects

Innnovation Campus Lemgo
smartFoodTechnologyOWL
Period: 01.01.2021 - 31.12.2024
Prof. Dr.-Ing. Stefan Witte
SFT Intensivierungsphase MKW Prämie
FH-Impuls-Vorhaben

Innovation Campus Lemgo
Department of Production Engineering and Wood Technology
Period: 16.05.2022 - 18.12.2022
Prof. Katja Frühwald-König
Holz-Wissen 2022

Innovation Campus Lemgo
Department Business Administration and Economics
Period: 01.07.2022 - 31.12.2023
Prof. Dr. Martin Stawinoga
Symposium Nachhaltigkeitsbericht
Sustainability reporting in the district of Lippe.
Current regulatory developments and
implementation prospects in the economy

(TH) OWL University of Applied Sciences and Arts
Period: 01.01.2022 - 31.12.2023
Simon Strüßmann
Online-Bewerbung, -Zulassung und -Einschreibung ab 2022

(TH) OWL University of Applied Sciences and Arts
Period: 01.07.2020 - 31.12.2023
Dr. Lars Köller
FDMScouts.nrw
Strategic and operationally sustainable anchoring
the topic of research data management (RDM) at the universities of applied sciences

(TH) OWL University of Applied Sciences and Arts
Period: 01.07.2020 - 31.12.2024
Prof. Dr.-Ing. Yvonne-Christin Knepper-Bartel
ILIAS.nrw

(TH) OWL University of Applied Sciences and Arts
Research and Transfer Center
Period: 01.06.2021 - 31.05.2023
Dr. Sabine Brunklaus
CRIS.NRW
Introduction of a research information system
at TH OWL

(TH) OWL University of Applied Sciences and Arts
S(kim) – Service Communication Information Media
Period: 06.05.2020 - 31.12.2024
Dr. Lars Köller
IT-Netzwerkinfrastruktur
Modernization and expansion of the network infrastructure

(TH) OWL University of Applied Sciences and Arts
S(kim) – Service Communication Information Media
Period: 01.04.2023 - 31.12.2023
Dr. Lars Köller
VRZ@TH-OWL
Provision of IT services for the universities of art and music by
TH OWL

(TH) OWL University of Applied Sciences and Arts
S(kim) – Service Communication Information Media
Period: 01.06.2023 - 31.05.2026
Dr. Lars Köller
Hochschul-IT-Services.NRW


# IMPRINT

**PUBLISHER**

(TH) OWL University of Applied Sciences and Arts
The President
Professor Dr. Jürgen Krahl
Campusallee 12
32657 Lemgo

**EDITORS**

(TH) OWL University of Applied Sciences and Arts
Communications and Marketing Department
Bianca Lukas, Harald Fichtner,
Carolin Seelig, Christin Wehrmann,
Aylisa Argun
Phone: +49 (0) 52 61 - 702 25 10
E-Mail: pressestelle@th-owl.de

Editorial contributions
Diversity, e-ducatio GmbH, Forschungs- und Transferzentrum, Gleichstellung, Hochschulentwicklung und Digitalisierung, Hochschulgesellschaft, International Office, Institut für Wissenschaftsdialog, Institut für Life Science Technologies, Institut für Industrielle Informationstechnik, Institut für Energieforschung, Institut für Designstrategien, KreativInstitut.OWL, Nachhaltigkeitsmanagement, OWL Racing Team, PROFuture, TRinnovation OWL, S(KIM)

**DESIGN**

(TH) OWL University of Applied Sciences and Arts
Communication and Marketing Department
Lilli Wulfert, Isabelle Keuntje

**EDITORIAL DEADLINE**

November 2023

**PHOTOS**

OWL Racing-Team, Arthur Isaak, Pixel-Shot – stock.adobe.com, RailCampus OWL, Dominik Leusmann, Eray Demirbilek, Jennifer Pflume, Lea Seibel, Lisa Graf, Maike Halfmann, Mareike Schweers, Michelle Gitina, Nina Schmid, Tobias Niemeier, Campus OWL New York, Loreen Wüllner, Christin Lange, Dean Sabrotzky, Jakob Wagner, tonjung – stock.adobe.com, pressmaster – stock.adobe.com, Neue Mobilität Paderborn, Manfred Lux, Universität Paderborn/Tanja Dittmann, AVP Group/ACMS, perfectlab – stock.adobe.com, Feng Yu – stock.adobe.com

All others: TH OWL

Follow us

www.th-owl.de

* The student evaluations are taken from the StudyCHECK portal (www.studycheck.de/hochschulen/th-owl/bewertungen). The quotes have been edited for significant typing errors. The contents and statements have not been changed.

# CAMPUS

**DETMOLD**

Emilienstraße 45
32756 Detmold, Germany

Phone +49 (0) 52 31 – 769 0
Fax +49 (0) 52 31 – 769 17 12

**LEMGO**

Campusallee 12
32657 Lemgo, Germany

Phone +49 (0) 52 61 - 702 0
Fax +49 (0) 52 61 - 702 17 11

**HÖXTER**

An der Wilhelmshöhe 44
37671 Höxter, Germany

Phone +49 (0) 52 71 – 687 0
Fax +49 (0) 52 71 – 687 17 13

# LOCATION

**BILDUNGSCAMPUS HERFORD**

DCC building
Mary-Somerville-Boulevard 4
32049 Herford, Germany

**RAILCAMPUS OWL**

Pionierstraße 10
Building IIA, Room 101
32423 Minden, Germany

Version: March 2024

TECHNISCHE HOCHSCHULE
OSTWESTFALEN-LIPPE
UNIVERSITY OF
APPLIED SCIENCES
AND ARTS