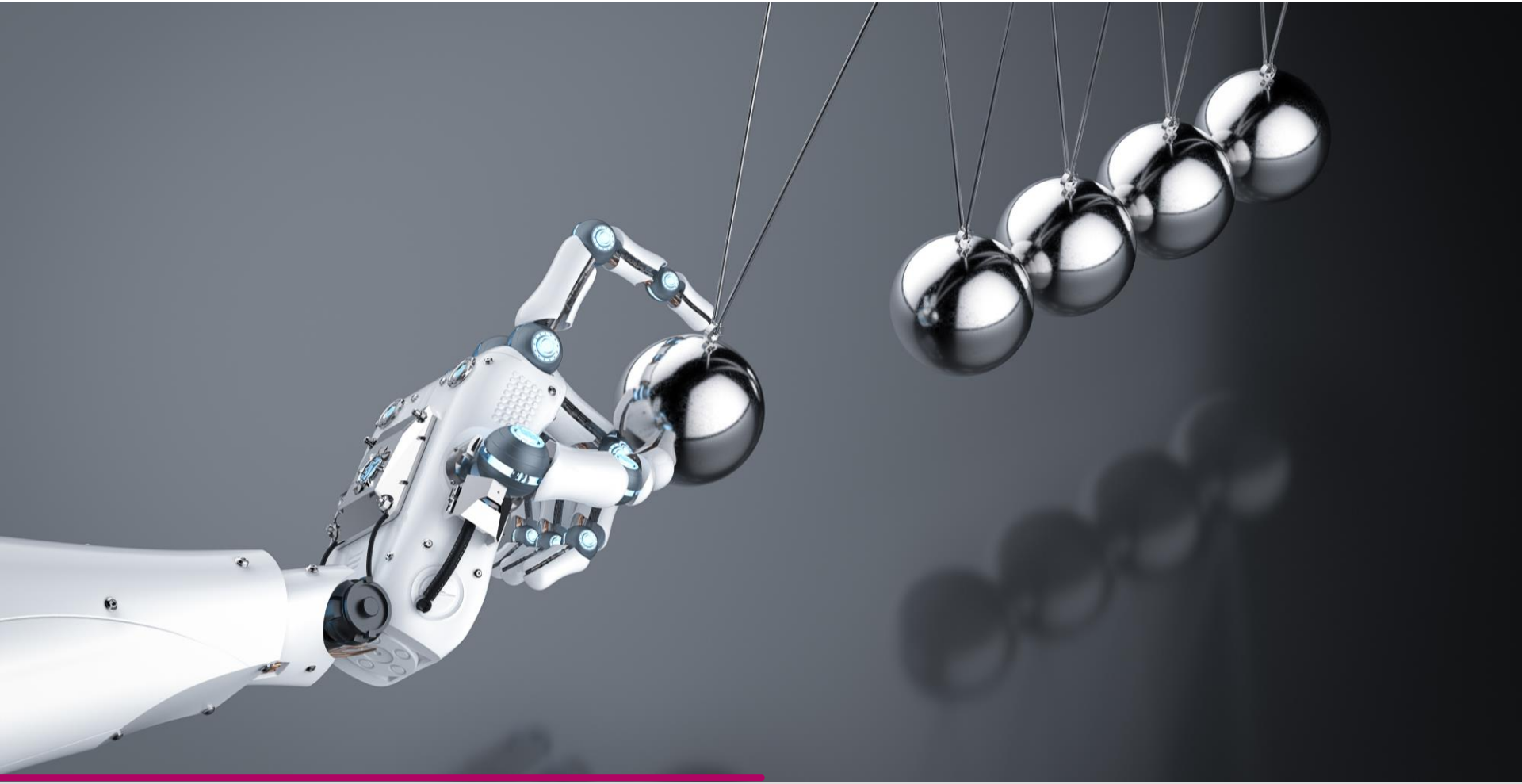
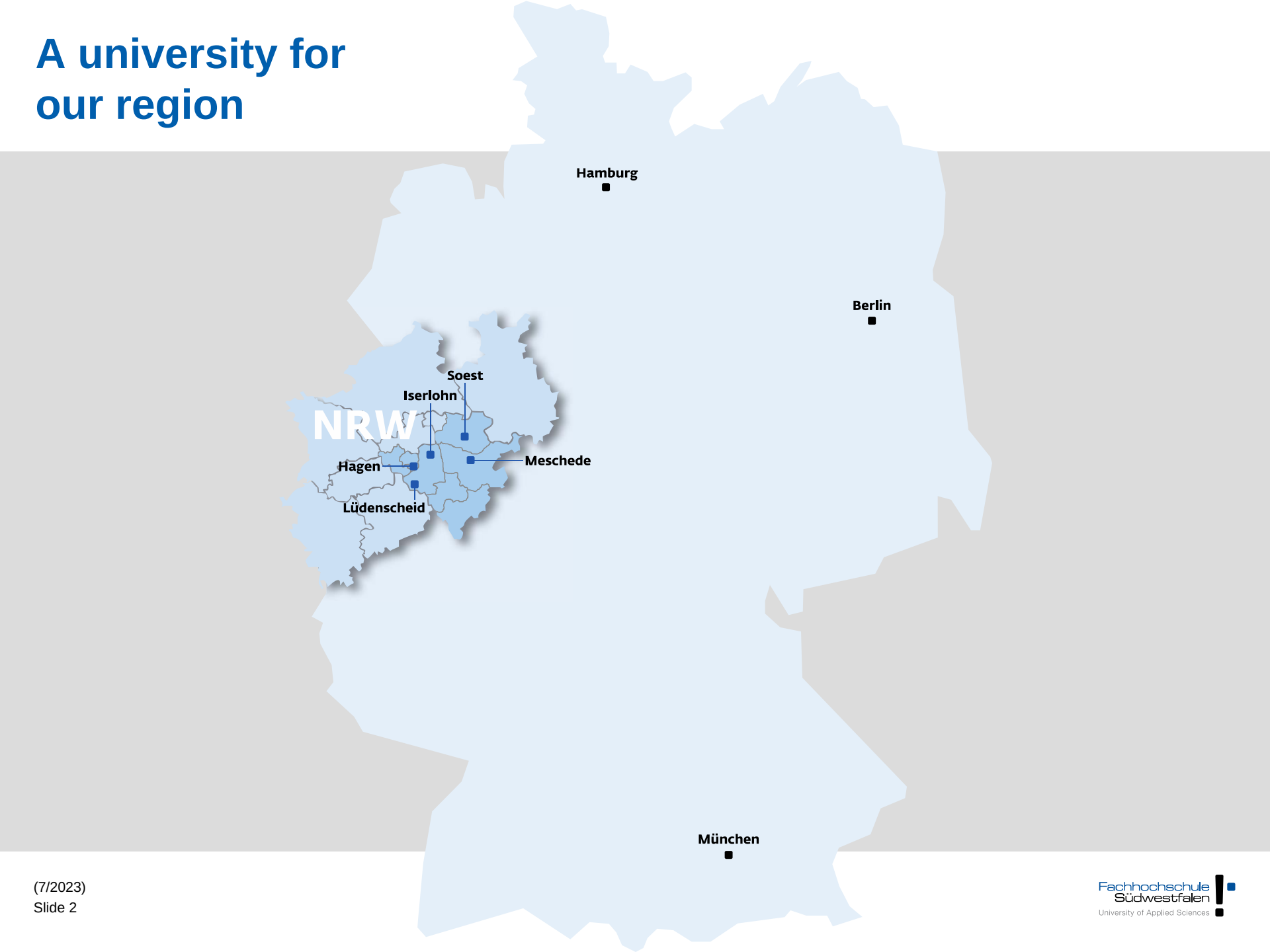
South Westphalia University of Applied Sciences

A strategic approach to implementing blended learning



Fachhochschule Südwestfalen
University of Applied Sciences

A university for our region



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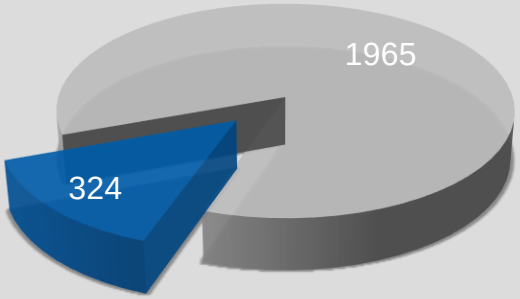
University of Applied Sciences

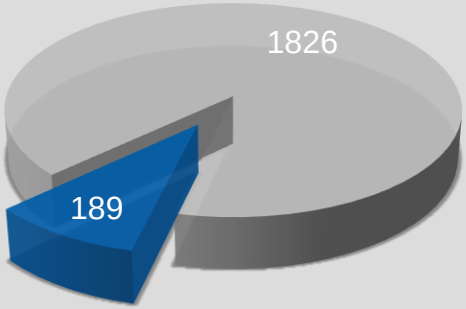
Students and international students sorted by campus

WS 2022/2023

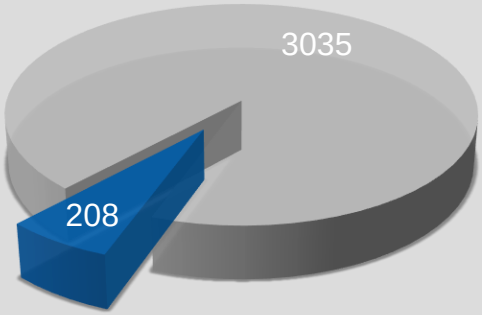
Hagen



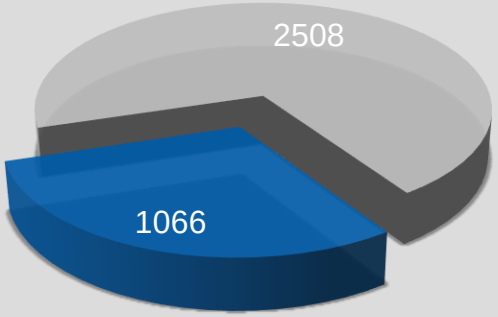
Iserlohn



Meschede



Soest



Facts and figures 2023

- **Degree courses**
  - **Total:** **84**
  - Undergraduate: 59
  - Postgraduate: 25
- **Students**
  - **Total in WS 2022/23:** **11 121**
  - Male: 66 %
  - Female: 33,95 %
  - Diverse: 0,05 %
- **Garduates**
  - **Total in 2022:** **1 581**
  - Undergraduates: 84,2 %
  - Postgraduates: 15,8 %

- **Staff**
  - **Total:** (Status as of 01.12.2022) **982**
  - Professors: 182
  - Research assistants: 419
  - Lecturers: 55
  - Administrative staff: 326

- Budget (2022) **76 mil. euros**
  Status as of 01.02.2023
- Third-party funds (2022) **14,4 mil. euros**
  Status as of 01.02.2023
- Total floor space **104.940 m²**

Full-time Degree Courses

Bachelor`s degrees

Hagen Campus:

- Business Administration (B.Sc.)
- Electrical Engineering (B.Eng.)
- International Business Administration (B.Sc.)
- International Business Administration and Informatics (B.Sc.)
- International Business Administration and Engineering (B.Sc.)
- Media Informatics (B.Sc.)*
- Medical Engineering (B.Eng.)
- Robotics (B.Eng.)*
- Computer Engineering (B.Eng.)
- Business Administration and Computer Science (B.Sc.)
- Business Administration and Engineering (B.Sc.)
- Business Administration and Engineering - Green Civil and Building Engineering (B.Eng.)

Iserlohn Campus:

- Applied Biology (B.Sc.)*
- Automotive (B.Eng.)
- Digital Transformation Mechanical Engineering (B.Eng.)*
- Manufacturing Technology (B.Eng.)
- Computer Science (B.Sc.)
- Plastics Engineering (B.Eng.)
- Mechanical Engineering (B.Eng.)* (planned)
- Mechatronics (B.Eng.)
- Engineering Design (B.Eng.)

** This degree course is currently undergoing an approval procedure.*

Full-time Degree Courses

Bachelor`s degrees

Meschede Campus:

- Applied Business Administration (B.A.)
- Data Science (B.Sc.)
- Electrical Engineering (B.Eng.)
- International Management (B.A.)
- Mechanical Engineering (B.Eng.)
- Business Administration (B.A.)
- Business Administration and Computer Science (B.Sc.)
- Business Administration and Engineering (B.Eng.)
- Business Psychology (B.Sc.)

Lüdenscheid Campus:

- Medical Engineering (B.Eng.)
- Business Administration and Engineering – Green Civil and Building Engineering (B.Eng.)

Soest Campus:

- Agriculture (B.Sc.)
- Business Administration with Informatics (B.A.)
- Data Science for Agriculture (B.Sc.)* (planned)
- Design and Project Management (B.Sc.)
- Digital Technologies (B.Eng.)
- Electrical Engineering (B.Eng.)
- Early Childhood Education (B.A.)
- Mechanical Engineering (B.Eng.)
- Sustainable Food Systems (B.Sc.)* (planned)
- Ecology and Sustainability Management (B.Sc.)* (planned)
- Industrial Engineering (B.Eng.)

** This degree course is currently undergoing an approval procedure.*

Full-time Degree Courses

Master`s degrees

Hagen Campus:

- Applied Sciences in Technology and Economics (M.Sc.)
- Informatics and Business (M.Sc.)
- Business Administration and Engineering (M.Sc.)

Meschede Campus:

- Applied Sciences in Technology and Economics (M.Sc.)
- Electrical Engineering (M.Eng.)
- Strategic Management (M.A.)
- Business Psychology (M.Sc.)

Lüdenscheid Campus:

- Medical Engineering (M.Eng.)

Iserlohn Campus:

- Applied Sciences in Technology and Economics (M.Sc.)
- Integrated Engineering (M.Eng.)

Soest Campus:

- Agriculture (M.Sc.)
- Applied Sciences in Technology and Economics (M.Sc.)
- Digital Technologies (M.Eng.)
- International Management and Information Systems (M.A.)
- Systems Engineering and Engineering Management (M.Sc.)

Part-time Degree Courses (Bachelor)

Studying while working

Hagen Campus:

- Part-time Business Administration and Business Law (B.A.)
- Part-time Electrical Engineering (B.Eng.)
- Part-time Business Administration and Engineering (B.Sc.)
- Part-time Business Law (LL.B.)

Lüdenscheid Campus:

- Part-time Plastics Engineering (B.Eng.)

Iserlohn Campus:

- Part-time Applied Computer Science (B.Sc.)
- Part-time Mechanical Engineering (B.Eng.)
- Part-time Mechatronics (B.Eng.)

Soest Campus:

- Part-time Early Childhood Education (B.A.)
- Part-time Industrial Engineering and Management (B.Eng.)

Part-time Degree Courses (Master)

Studying while working

Hagen Campus:

- Part-time Connected Lighting (M.Eng.)
- Part-time Electrical Engineering (M.Eng.)
- Postgraduate part-time Management for Engineering and Natural Sciences (MBA)
- Postgraduate part-time Business Law (LL.M.)

Meschede Campus:

- Part-time Mechanical Engineering (M.Eng.)
- Postgraduate part-time Management for Engineering and Natural Sciences (MBA)

Part-time-models

- Data Science (M.Sc.)

Iserlohn Campus:

- Part-time Applied Artificial Intelligence (M.Sc.)
- Part-time Applied Computer Science (M.Sc.)
- Part-time Life Science Engineering (M.Sc.)
- Part-time Mechanical Engineering (M.Eng.)

Lüdenscheid Campus:

- Part-time Mechanical Engineering (M.Eng.)

Soest Campus:

- Part-time Early Childhood Education (M.A.)
- Part-time Media Education (M.A.)
- Postgraduate part-time International Management and Information Systems – Online (M.A.)
- Postgraduate part-time Engineering and Enterprise Management (M.Eng.)

Cooperative Study Models

Hagen Campus:

Cooperative study model

Bachelor‘s degrees (full-time)

- Computer Engineering (B.Eng.)
- Business Administration and Engineering - Green Civil and Building Engineering (B.Eng.)

Iserlohn Campus:

Enterprise Mentoring Model

Bachelor‘s degrees (full-time)

- Automotive (B.Eng.)
- Manufacturing Technology (B.Eng.)
- Plastics Engineering (B.Eng.)
- Mechatronics (B.Eng.)
- Engineering Design (B.Eng.)

Meschede Campus:

Cooperative study model

Bachelor‘s degrees (full-time/part-time)

- Applied Business Administration (B.A.)
- Electrical Engineering (B.Eng.)
- International Management (B.A.)
- Mechanical Engineering (B.Eng.)
- Business Admininstration (B.A.)
- Business Administration and Engineering (B.Eng.)
- Business Administration and Computer Science (B.Sc.)

Bachelor‘s degrees (full-time)

- Data Science (B.Sc.)
- Business Psychology (B.Sc.)

Cooperative Study Model

Soest Campus:

Practice-integrating dual study course

+ training-integrating dual study course

Bachelor‘s degrees:

- Dual study course Digital Technologies (B.Eng.)
- Dual study course Electrical Engineering (B.Eng.)
- Dual study course Mechanical Engineering (B.Eng.)
- Dual degree course Industrial Engineering (B.Eng.)

Fields of Research

Applied agricultural research an environmental engineering

- Agrarian biotechnology
- Agrarian economics, especially business management, agricultural markets, agricultural policy
- Agriculture and process engineering
- Rural development
- Sustainable livestock and plant production

Application of artificial intelligence

- Artificial Intelligence (AI) and data science

Digital production and logistics

- Robotics
- Supply chain management and digitalisation of the supply chain
- Logistics
- Industry 4.0
- Autonomous / intelligent systems
- Fuzzy technologies
- Industrial and biotechnological image processing, computer vision

Digital transformation of the economy

- Process optimisation and big data analytics
- E-commerce and e-governance
- Market and social research

Fields of Research

Digital transformation of the work environment

- Competence and change management

Early childhood education

- Participation and inclusion
- Early STEM education

Lighting applications

- Lighting technologies (LED)

Media education

- Media education
- Media didactics
- Media socialisation

Mobility

- Automated mobility
- Chassis technology
- Lightweight construction
- Simulation, Cax
- Alternative drives

Sustainable production

- Plastics engineering
- Forming technology
- Generative manufacturing technology

Safe energy supply

- Energy efficiency
- Renewable energies
- Intelligent grids (smart grids), storage systems

Fields of Research

Materials applications and surface engineering

- Bio- and nanotechnology
- High-strength steels, heat treatment
- Plastics processing:
  thermoplastics and thermosets processing
- Corrosion and surface engineering

Other

- Sensor applications
- Health technology, ethics
- Medical technology

Our 2023 IVAC Projects

Campus Soest

- International Equine Management (with the Netherlands)
- International Learning Network „Net Economy“ (with Austria, Germany, Indonesia, Sweden)
- PIECE – Participation & Inclusion in Early Childhood Education (with Scotland)

Campus Meschede

- Supply Chain Management Business Game (with France)

Our Blended Learning Strategy

Blended learning is the sensible combination of classic face-to-face teaching and e-learning in order to optimally use the advantages of both.

Staff Goals:

- E-learning should not completely replace face-to-face teaching but rather supplement and enrich it at appropriate points.
- E-Learning should be included in teaching as a matter of course.
- Staff should be able to independently create E-Learning material after initial advice and support.

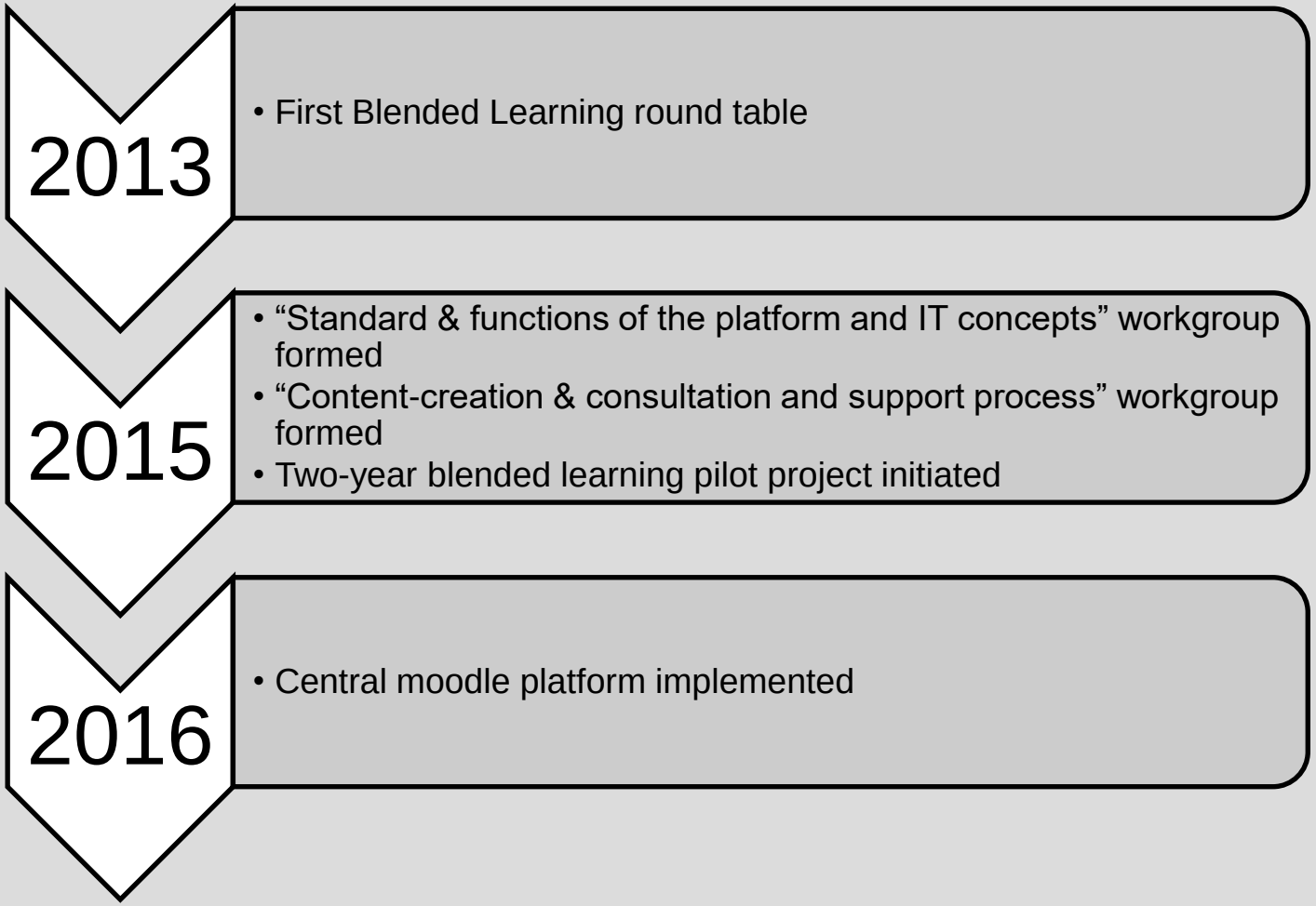
Our Blended Learning Strategy

Student Goals:

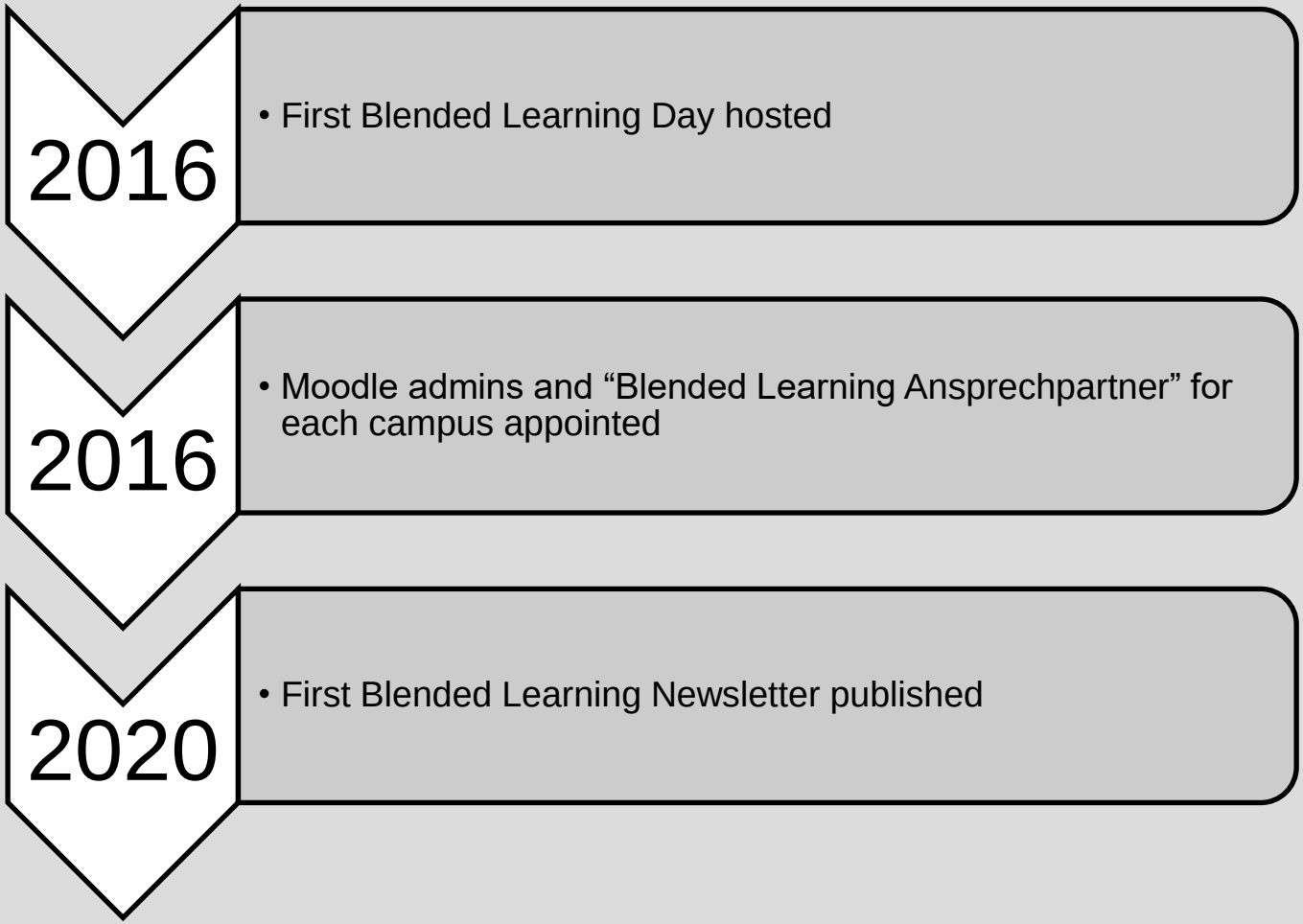
- Better meet the different needs and life situations of increasingly diverse and heterogeneous students and help facilitate inservice and lifelong learning.

- Blended learning should contribute to increased student success!

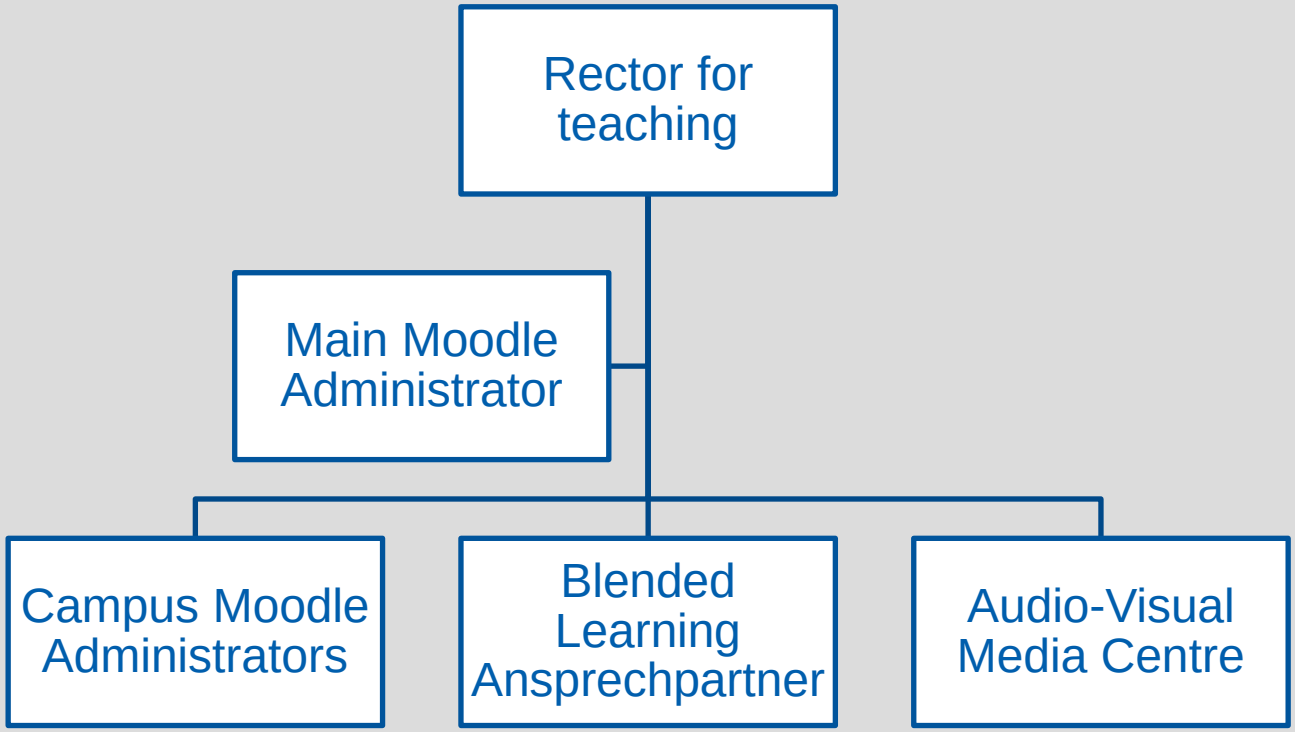
Our Blended Learning History



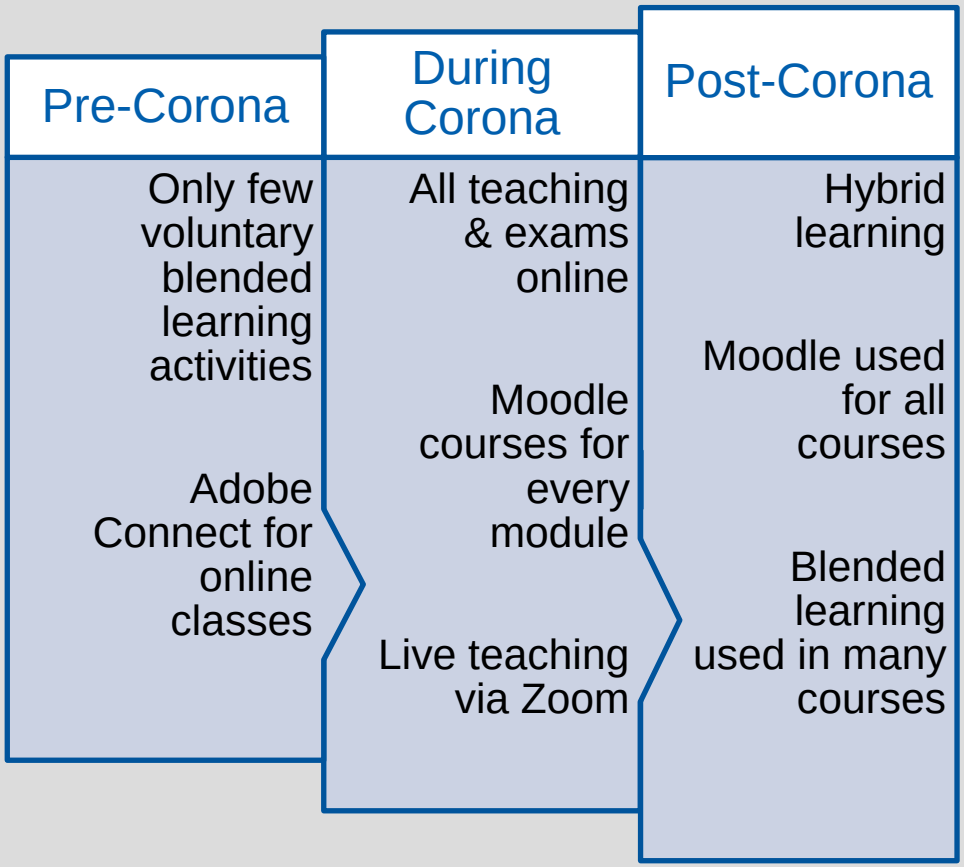
Our Blended Learning History



Our Blended Learning Organisation



Corona and Blended Learning



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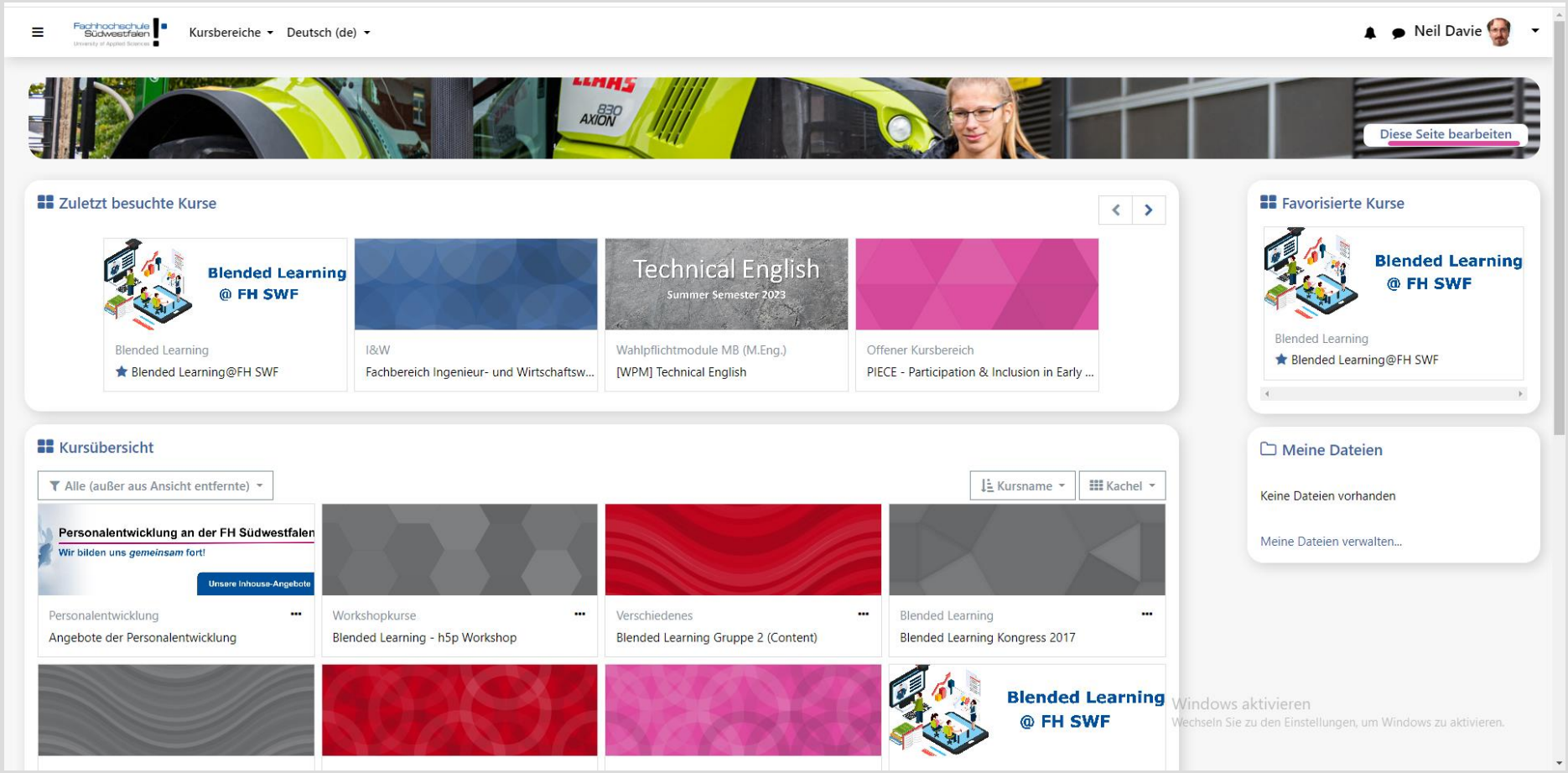
Moodle @ FH SWF



Our Blended Learning Activities

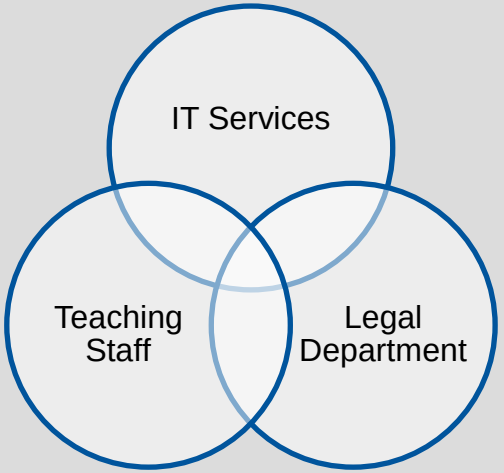
Moodle Admins & Blended Learning Ansprechpartner:

- Produce documentation e.g. Moodle handbook, newsletter, tutorials.
- Host weekly blended learning surgeries.
- Run training sessions, e.g. Introduction to Moodle, h5p, Zoom.
- Offer first and second level technical support.
- Test new features and plug-ins.
- Collect feedback from staff.

International Blended Learning

Challenges:

- Access to E-Learning platform for external participants.
- Creating and hosting multilngual content.
- Working with various time zones.
- Accommodating cultural differences.



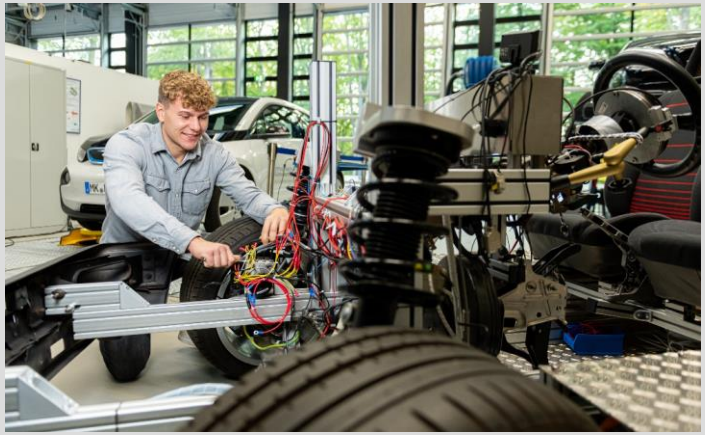
Studying in South Westphalia

Small courses and close contact to teaching staff

Fachhochschule Südwestfalen
University of Applied Sciences

Studying in South Westphalia

Practical teaching through demonstration on industrial objects



Studying in South Westphalia

Latest technologies and integration in research work

Blended Learning in South Westphalia

Thank you for your attention. Any questions?

For more information on our Blended Learning activities:
https://www.fh-swf.de/de/ueber_uns/beschaeftigte_1/blended_learning/index.php

Feel free to contact me at: davie.neil@fh-swf.de