



CENTER OF EXCELLENCE

LOGISTICS

**ACHIEVE MORE
THROUGH RESEARCH & DEVELOPMENT**

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ACHIEVE MORE WITH AUSTRIA'S STRONGEST RESEARCH UNIVERSITY

Successful businesses know from experience: Every euro that goes into research and development pays for itself many times over. This is because innovations give those businesses a decisive competitive edge, generating revenue and securing jobs in the long run.

As a centre of research, Upper Austria is in the fast lane, and the University of Applied Sciences Upper Austria (University of Applied Sciences Upper Austria) has become a driving force. Austria's most research-intensive university of applied sciences offers innovative businesses its four campuses and approximately 400 professors and academic staff. Currently, over 400 projects in 17 specialist areas of research are being implemented.

Areas of Applied Research:

- » IT (Hagenberg Campus)
- » Medical Engineering and Applied Social Sciences (Linz Campus)
- » Management (Steyr Campus)
- » Engineering (Wels Campus)

Perfect networking of the campuses makes it possible to achieve an optimal overall solution for each project.

The State of Upper Austria is undertaking joint initiatives in the areas of education, research and business through the strategic economic and research programme to ensure that Upper Austria retains a clear competitive edge.

The field of logistics is essential for Upper Austria as a business-friendly location. In fact, Upper Austria plays a leading role in areas such as logistics management, supply chain management and transport logistics and mobility. A wide range of companies facilitates tailored solutions and improves competitiveness.

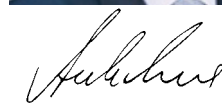
The Center of Excellence Logistics was established in order to meet the requirements of the strategic programme 'Innovative Upper Austria 2020'. The Center's projects support the achievement of the programme's strategic objectives.

The State of Upper Austria has in the University of Applied Sciences Upper Austria a longstanding partner in the field of research and development that actively supports the achievement of its strategic objectives.




Mag. Thomas Stelzer
State Governor of Upper Austria




Markus Achleitner
Minister of Economy of Upper Austria



COOPERATION MADE EASY

With more than 400 researchers, the University of Applied Sciences Upper Austria is on hand as a flexible and reliable partner for addressing research and development issues with businesses and institutions from industry and society.

The possibilities for cooperation are numerous and varied:

- » Applied R&D projects with business partners
- » Academic research projects
- » International R&D projects
- » Symposia and workshops
- » Students' bachelor's and master's theses

Project time frames can range from a few months to up to five years.


The University of Applied Sciences Upper Austria aims its R&D support at businesses and institutions from industry and society.

This includes on the one hand businesses which lack personnel resources or have limited financial resources for their own research and development activities (e.g. small and medium-sized enterprises).


On the other hand, solutions for companies needing specialised support (e.g. in the form of special equipment) are also available. For the University of Applied Sciences Upper Austria's cooperation partners, a joint project is, above all, a financially straightforward and efficient undertaking.

Geared towards the needs of the client, innovative solutions will be developed that can be put directly into practice.




Dr. Gerald Reisinger
President University of Applied Sciences Upper Austria




Prok. Prof. Priv.-Doz. Dipl.-Ing. Dr. Johann Kastner
Vice President FH OÖ Forschungs & Entwicklungs GmbH



Thematic Areas:

- » Logistics Management
- » Supply Chain Management
- » Transport Logistics & Mobility

ACHIEVE MORE THROUGH LOGISTICS

Modern logistics facilitates, accelerates and realises evolutionary and radical changes in the business models of our economy, industry and society. The interdisciplinary approach and methods of the Center of Excellence will reshape modern logistics.

The Center of Excellence has been conceived as a 'one-stop shop' and combines the shortest possible paths of communication with the highest degree of problem-solving expertise.

Specialising in Logistics

Focal Points:

- » Supply chain management
- » Logistics management
- » Use of new media, including user interfaces
- » Logistical and network optimisation
- » Digitalisation, including business models
- » Digital business
- » Transport systems
- » Traffic telematics and traffic automation
- » Logistics technology



Methods/Tools:

- » Visualisation, optimisation and analysis tools such as graphical user interfaces, algorithm prototyping, evolutionary algorithms, genetic analysis, data analysis, simulation-based optimisation, experiment design and analysis, plugin-based architecture
- » Insights and tools from the fields of interaction design and user experience (UX) such as eye tracking, analysis and modelling tools for user models
- » Graphical Information Systems (GIS) and tools from the family of ArcGIS software products for the analysis and visualisation of geodata
- » Simulation tools such as AnyLogic to simulate supply chains and logistics as well as programs for dynamic modelling
- » Methodology for holistic analysis and model simulation of complex and dynamic systems (system dynamics) and the 'Living Lab' methodology

'Break through' Activities:

- » Implementation of Physical Internet solutions
- » Realisation of autonomous driving for B2B

Cutting-Edge Infrastructure on Every Campus

- » Center for Smart Manufacturing laboratory
- » HeuristicLab
- » Logistics technology laboratory
- » Control engineering laboratory
- » Simulation and optimisation tools
- » Control technology laboratory
- » Usability laboratory
- » Train control systems laboratory
- » LogLab
- » Simulations and planning games
- » Mobility Lab

ACHIEVE MORE WITH THE EXPERTS FOR LOGISTICS

Current Research Projects

- » **Atropine** – Fast Track to the Physical Internet – Innovative Upper Austria 2020 strategic programme
- » **autoBAHN2020** – Development of autonomous trains on regional routes with open track access – FFG project
- » **BioBoost** – Biomass-based energy intermediates boosting biofuel production – EU FP7
- » **cargoPV** – Transport of parcels and packets – FFG Mobility of the Future
- » **ChemLog T&T** – Tracking and tracing solutions for improvement of intermodal transport of dangerous goods in CEE – Interreg
- » **EntKuRo** – Development of an automated process for decoupling freight wagons in switchyards – FFG Mobility of the Future
- » **FINCA** – Forecasting indicators – FFG BRIDGE
- » **Food4all@home** – Nationwide home delivery of daily necessities – FFG Mobility of the Future
- » **HINT** – Harmonised Inland Navigation Transport through education and information technology – EU SEE
- » **HOPL** – Heuristic optimisation in production and logistics – FFG COMET – K project
- » **Human-Centered Workplace 4 Industry** – FFG COIN Capacity Building
- » **InnoStrategy** – Strategy-compliant processes at the frontend of innovation – FFG BRIDGE
- » **SME Future Fitness Check-up** – Interreg
- » **KoLaMBra** – Development of an integrated organisational concept for cooperative last-mile industry logistics – FFG Mobility of the Future
- » **Log4Green** – Transport clusters in six regions develop a strategic joint action plan and implementation measures for knowledge-based regional innovation – EU FP7
- » **OPMIN** – Opinion mining in Web 2.0 – FFG COIN Capacity Building
- » **QSAM** – Quick Scan Audit Methodology for Supply Chain Diagnostics – EU Regio 13
- » **ReSCUE** – Contribution of resilience to supply chain and company success – FFG BRIDGE
- » **Bulk material and soil** – Simulation of cohesive bulk materials and soils – FFG BRIDGE
- » **SCIM2.0** – Effective supply chain information management in value-added networks using Enterprise 2.0 – FFG COIN Capacity Building
- » **SmartBox** – FFG Mobility of the Future
- » **Smart Traffic** – EFRE Regio 13
- » **SynChain** – Synchromodal logistics chains – FFG Mobility of the Future
- » **Rail-Based Terminal** – FFG project
- » **TRIUMPH II** – Trimodal transshipment point inland port II – FFG Mobility of the Future
- » **User-Centered Interactive Visualization of Big Data** – FFG COIN Capacity Building

CURRENT DEGREE PROGRAMMES

Hagenberg Campus

- M Human-Centered Computing
- M Software Engineering

Steyr Campus

- M Digital Business Management
- M Digital Transport and Logistics Management
- B International Logistics Management
- M Supply Chain Management

Wels Campus

- B M Automation Engineering
- B M Mechanical Engineering

B = Bachelor's degree programme, M = Master's degree programme

YOUR POINTS OF CONTACT



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