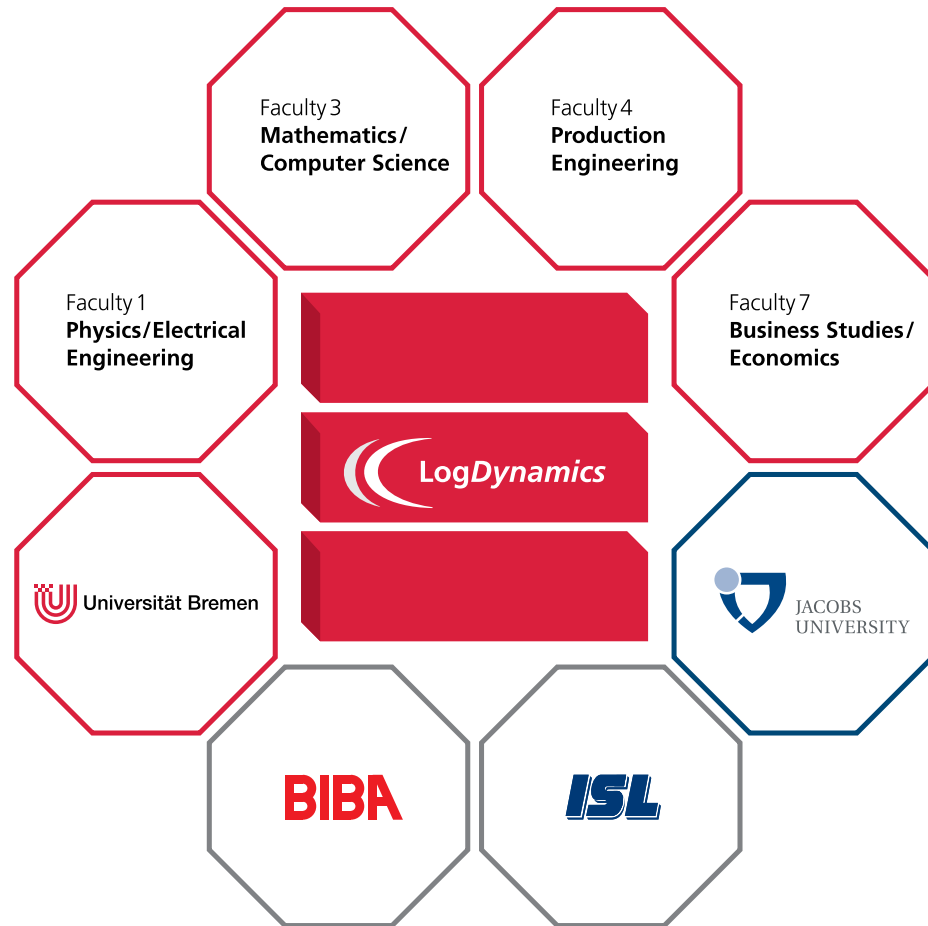


## Bremen Research Cluster for Dynamics in Logistics



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## Bremen Research Cluster for Dynamics in Logistics

Interdisciplinary competence in

- Research
- Education
- Application
- Dissemination

## Research

### Bremen Research Cluster for Dynamics in Logistics

LogDynamics conducts research investigating dynamic processes in logistic systems. The strategic objectives pursued by the cluster are:

- Sustainability of fundamental research
- Transfer of research results into the industry
- Education and training on highest level
- International visibility of Bremen's research in logistics

LogDynamics is a cooperating network of research groups from four faculties of the University of Bremen: Production Engineering, Business Studies / Economics, Mathematics / Computer Science, Physics / Electrical Engineering. Associated partners are: BIBA – Bremer Institut für Produktion und Logistik GmbH and the Institute of Shipping Economics and Logistics (ISL) as well as the Jacobs University Bremen gGmbH.



## Education

### International Graduate School for Dynamics in Logistics (IGS)

The IGS offers outstanding researchers from all over the world a structured doctoral training program. The research is centered on four topic areas:

- Business models, decision processes and economic analyses
- Holistic interdisciplinary methods for modeling, analysis and simulation
- Adaptive and dynamic control methods
- Synchronization of material, information, decision and financial flows

The objective of the IGS is to foster excellence in education and research by pursuing an interdisciplinary and cross-cultural approach to higher education. The curriculum includes individual doctorate projects, disciplinary supervision and scientific mentoring. The IGS developed specific measures for human resource development and offers training and coaching accordingly.



## Application

### Demonstration and Application Centre for Dynamics in Logistics

The LogDynamics Lab is a platform for researchers and industry to develop and explore advanced technologies for real-world problems in logistics.

On 1,000 square meters of hall space, as well as opportunities and infrastructure for mechanical, electrical and information engineering, the lab is dedicated to – among others – the following topics:

- Mobile technologies, smart products and their use in dynamic and complex logistic networks
- More efficient and safer control methods for logistic processes and systems
- Low-risk and low-cost development and test possibilities of new technologies around logistics
- Internet of Things technologies for product lifecycle management and extended use of products



## Dissemination

### International Conference on Dynamics in Logistics (LDIC)

The bi-annual LDIC is an exchange platform for logistic excellence. It provides new approaches to dynamic aspects of logistics and brings together top-class researchers from all over the world. The spectrum of LDIC reaches from modeling, planning and control of processes over supply chain management and maritime logistics to innovative technologies and robotic applications for cyber-physical production and logistic systems.

### LogDynamics Summer School

The idea of LogDynamics Summer School (LOGISS) is to forge a seed of young researchers on Master and PhD level from different disciplines to solve the upcoming issues in coordinating logistics decisions and developing distributed control algorithms and interfaces.

