

#### Institute for Lightweight Structures and Conceptual Design

#### **Directors** Prof. Dr.-Ing. M.Arch. Lucio Blandini Prof. Dr.-Ing. Balthasar Novák

**Collaborative Research Centre SFB1244** Jun. Prof. Dr.-Ing. Maria Matheou

www.uni-stuttgart.de/ilek

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# **Bachelor/Master Thesis**

In this BSc. or MSc. project, the candidate will join a small and interdisciplinary team of architects, cybernetic/control and mechanical engineers working on an adaptive kinetic façade project funded by the DFG, German Research Foundation. As a Bachelor/Master student you will support <u>A07</u> research project part of the <u>CRC1244</u>, where the task is to research, design and develop transformable joints and soft actuators.

## **Supervisors**

Jun. Prof. Dr.-Ing. <u>Maria Matheou</u>, <u>Institute for</u> <u>Lightweight Structures and Conceptual Design</u> (ILEK)

Dr.-Ing. <u>Michael Böhm</u>, <u>Institute for System Dynamics</u> (ISYS)

## Your tasks:

- Literature research on state-of-the-art transformable joints and soft actuators
- Design and development of a transformable joint
- Implement simple automation concept
- 3D modelling and Prototyping
- Documentation

# Application

We are looking forward to your application with resume, portfolio and transcript of records under the keyword "SFB 1244 - A07 Thesis".

## **Contact information**

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ILEK in collaboration with ISYS

