**Project/ Bachelor Thesis**
Development of an IoT temperature control system for large components

**Initial Situation**
Lots of modern technologies require the machining of large components - gas turbines, structural components in the aerospace industry or wind power plants, etc.
During production, these components are heated or cooled by process heat, ambient conditions in the machine, or coolants/lubricants. This temperature condition causes a deformation of the component due to the thermal expansion of the material. In order to advance various methods for predicting component temperature and deformation, it is necessary to be able to validate these methods.

**Task description**
As a demonstrator component, a turbine housing and a machine tool are available. These are already partially equipped with heating elements. The aim of this thesis is the refinement of the temperature control and the development of a network-based interface for the component temperature control.

**Requirements**
- Student of Mechanical Engineering, Electrical Engineering, Automation Engineering or a similar Engineering Degree
- High motivation and dedication
- Interest in machines and metrology

**We offer**
- Extensive supervision and support in the preparation
- Advanced training in handling machines, metrology systems and sensors
Active participation in current industrial and research projects with a high degree of practical relevance

**Interested?**
We are looking forward to receiving your application! Please send your CV, a current grading sheet as well as relevant certificates to the listed contact person. If you have any further inquiries, we will be happy to address them.