CLAUSTHAL-ZELLERFELD IN FIGURES

Citizens:	15,500
Elevation:	600 m above sea level
Number of ponds:	60
Mountainbike courses in the Upper Harz:	1,800 km
Cross-country ski trails in the Upper Harz:	200 km
Climbing routes in the western Harz:	1,100 on 199 rocks
Hiking trails in the Harz:	10,000 km
Geocaches in the Harz:	over 2,500

FIVE GOOD REASONS TO STUDY IN CLAUSTHAL

1. Excellent student counseling and support
2. Outstanding professional perspectives
3. International Flair
4. Sports and nature at their best
5. Favorable rents

CONTACT

Program Advisor

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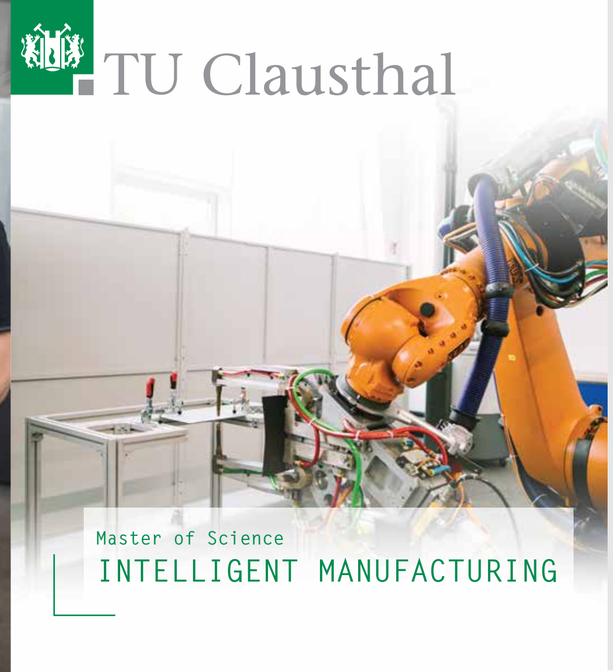
TU Clausthal



Master of Science

INTELLIGENT MANUFACTURING

INTELLIGENT MANUFACTURING

Processes and systems of modern product creation are highly integrated and supported by digital tools described by terms like Industry 4.0 and Intelligent Manufacturing. To provide customized solutions, flexible production, and realize a resource-saving circular economy, sound knowledge about product design, production technologies and data acquisition is required. The master program Intelligent Manufacturing educates future engineers with distinctive problem solving capabilities and core professional competencies in the fields of product, production, and automation engineering as well as data management and informatics.

The master program is organized in four semesters and includes two fields of study. Within the first three semesters the students complete advanced courses in production engineering and basics of information technologies.

In addition interdisciplinary and methodical skills to deal with problem solving and research questions in the field of Intelligent Manufacturing will be conveyed within project-based courses.

In the second semester one of two fields of study has to be selected providing a number of elective courses for advanced studies in product and process design as well as manufacturing analytics and optimization. The master thesis is part of the fourth semester and can be written in cooperation with a company.

OCCUPATIONAL IMAGE AND CAREER PERSPECTIVES

Engineers in the field of Intelligent Manufacturing shape future products and processes to produce products with high value and low impact on environment. Facing the current transformation of industry and the existing strength of manufacturing companies in Germany and internationally, opens up challenging and future-proof fields of work. Graduates of the master's program are prepared to take on specialist and managerial tasks in different industry branches. Therefore, the master program aims at an interdisciplinary and research-oriented education to provide insights into current research. The project-based teaching concept will prepare students for hands-on problem solving and fosters self and methodical skills required to cope with challenges in the field of Intelligent Manufacturing in industrial practice and research.

Two fields of study allow for specialization on flexible and intelligent product and processes as well as manufacturing analytics and optimization.

Fields to work in as a graduate are for example:

- automotive industry and engineering industry
- consulting
- research and development

STUDY ENTRY: NEW TOWN, NEW FRIENDS, NEW TASKS

Commencing studies equals entering an exciting stage in life. Starting it off right is vital. Thus, TU Clausthal places high emphasis on the start of studies. The Welcome Weeks take place before the start of lectures.

Benefiting from the familiar atmosphere, new students get to know the university and its surroundings in small groups. In this, they are guided by advanced students. The pre-courses in mathematics and electrical engineering ease the study start.

The Steiger College provides new students with an innovative preparation program. It offers new Bachelor students orientation and the chance to learn how to enjoy studying as part of a group and to develop learning techniques and time management skills.

For further information, please see:
www.steiger-college.tu-clausthal.de

TU Clausthal
Steiger College
Glück auf!

AGILE, DIGITAL, SUSTAINABLE

TU Clausthal is surrounded by the nature of the beautiful Harz, an UNESCO world-heritage site. Around 3,500 TUC students and 1,100 employees enjoy short distances, clean air and the personal interaction. Due to its strong research position, our university is proud of its numerous national and international networking partners. Digitalization is the common theme of all study programs. It is our goal that students not only experience digitalization passively, but actively contribute to it.

Sustainability is another key topic of TU Clausthal. Studying in the Upper Harz, you are in the center of the future topics related to climate change. The circular economy - in the sense of sustainable, resource-efficient technology and processes, renewable energies and digital transformation - is the guiding theme of our university. The technical sciences, the natural sciences and economics are equally committed to this. They all contribute to tomorrow's environmentally friendly industrial society.