What is RET?

The study course Renewable Energy Technology at the TU Ilmenau is aimed at performance-oriented young people who are interested in energy supply from renewable energies. The course, which leads to a Master of Science (M.Sc.) degree, imparts knowledge and methods for the production and further development of regenerative energy technology. The focus is on the following subject areas:

- Photovoltaics
- Thermal energy systems
- Electrical systems engineering

Students are introduced to current research and learn to apply regenerative energy technology as a field of future technologies on a large scale. The core competence of graduates of this research-oriented degree course is to gain new knowledge, generate new technical solutions and implement them in industrial production. Through close contact with commercial enterprises, students can gain a good insight into future practice at an early stage.

Key data of the study course

Graduation: Master of Science (M. Sc.)

Study Duration: 4 Semester

Start: Summer & Winter Semester

Requirement: Completed bachelor's degree in the

field of natural or engineering sciences

or an equivalent degree

Application: www.tu-ilmenau.de/apply

Contact Person:

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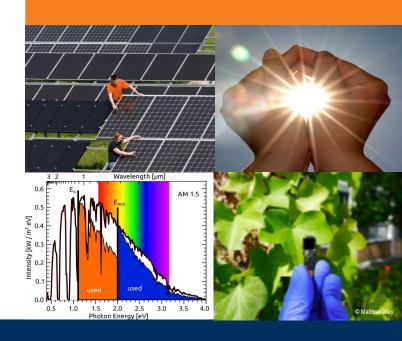
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Renewable Energy Technology

Master of Science



Save the world?





Renewable Energy Technology - Master of Science at the Technical University of Ilmenau

Career perspectives

The job opportunities for graduates of the Renewable Energy Technology course are diverse and reach far beyond the actual core content of the course.

Career perspectives are available in the following areas:

- · Research and development
- Plant project planning
- Operation and maintenance
- · Manufacture and production
- Monitoring and verification
- Consulting and teaching

Due to the energy turnaround in Germany, the demand for specialists in the field of regenerative energy technology is continuously increasing. With the study program Renewable Energy Technology, the TU Ilmenau offers young motivated people the opportunity to participate in this great task.

Study contents

1st semester

- Basics of solar technology energy conversion
- Laboratory Practical Course Energy Technology
- Renewable energies and storage technology
- Introduction into quantum mechanics
- Basics power electronics
- Elective module Renewable energy technology

2nd semester

- Photovoltaics
- Applied heat transfer
- Batteries & Fuel Cells
- Introduction into solid state physics
- Basics electrical machines

- Energy Systems Technology
- Basics Energy systems -System operation

3rd semester

- Innovative concepts of solar energy conversion
- Technical thermodynamics
- Basics of business administration
- Elective module Renewable Energy Technology
- Electives from the entire range of courses offered by the TU Ilmenau
- Project work renewable energy technology

4th semester

Master thesis

TU Ilmenau

Why study in Ilmenau?

With around 6,600 students, nearly 100 professors and about 1,000 other employees, the TU Ilmenau is one of the smaller universities in Germany. The university members represent a considerable proportion of the inhabitants of Ilmenau. This makes Ilmenau a student city, which offers advantages to students, such as an annual student allowance when moving the main residence to Ilmenau. The compact setup increases the learning success, because the seminar groups are small and the professors are very easy to reach in case of questions.

And in your free time?

Despite its small-town charm, Ilmenau is by no means boring. Many student initiatives and clubs offer the opportunity to be active and engaged on the side. Whether engineers without borders, theater, university radio or student club, there is something for everyone. For all sports enthusiasts, there is a wide range of activities, including many game sports, martial arts, nature sports, dance and fitness.

