Deutscher Akademischer Austauschdienst
German Academic Exchange Service

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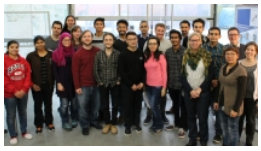
Master's degree

Renewable Energy Systems (RES)

Technische Hochschule Ingolstadt • Ingolstadt



Overview

Degree	Master of Science (MSc)
Teaching language	• English
Languages	All courses are in English. It is recommended that students learn German for internships.
Programme duration	3 semesters
Beginning	Winter semester
Application deadline	1. Applicants with a Bachelor's degree from outside of Germany must first apply viauni-assist from as soon as possible until 15 June for the following winter semester the latest. If you acquired your Bachelor's degree outside of Germany, uni-assist has to verify your eligibility to study in Germany and to convert your grades to the German grade system. You will have to submit all required documents to uni-assist online. The process takes four to six weeks. 2. PRIMUSS – THI application portal from 2 May until 15 July for the following winter semester You will have to apply online at the PRIMUSS university application portal. In case of admission, you will have to send all required documents by post later on. Please check the THI website to get up-to-date information regarding the application periods.
Tuition fees per semester in EUR	500 EUR
Additional information on tuition fees	This is a service fee payable by all students from third countries (with a citizenship outside the EU and the European Economic Area). With this fee, we want to significantly expand our services for international students. No service fees are charged for citizens of an EU member state and/or the European Economic Area or for students who have obtained their university entrance qualification in the German education system.
Combined Master's degree / PhD programme	No

Joint degree / double degree programme	No
Description/content	The Master's programme in Renewable Energy Systems (RES) aims at providing graduates with the skills required to successfully plan, develop, and control energy systems. Graduates will be familiar with renewable energy technologies and able to expand their professional knowledge. The main focus is not on single technologies. Rather, it is on the interrelation between these technologies and the structure of the demand side. In particular, graduates should be able to work in an international working environment, dealing successfully with intercultural challenges. The following modules are part of the curriculum: 1. Introductory Laboratory Course 2. Production Oriented Energy Systems 3. Off-Grid Energy Systems 4. Urban Area Energy Systems 5. Numerical Methods and Simulation Techniques 6. Energy Efficiency and Energy Management 7. System Analysis and Control 8. Energy Policies and Markets 9. Scientific Seminar 10. Thesis 11. Optional Internship It is also possible (but not compulsory) to study the RES programme as a dual course of study. Students of the dual Master's degree programme will complete two internships over semesters one and two.
Current information	Technische Hochschule Ingolstadt does not cooperate with recruitment agencies. Applicants will have to apply on their own. Apart from the uni-assist fee, there is no application fee.

Course Details

Course organisation	The standard period of study for the RES Master's programme amounts to three theoretical semesters. The third semester is used primarily for the completion of the Master's thesis. The programme is offered as a full-time course. Within the range of subjects, students are conveyed an in-depth and detailed theoretical, technical, and practical understanding of energy systems. In the first semester, knowledge, skills and competencies in the fields of energy are conveyed. An urban area energy system is designed. Furthermore, students learn to work independently by engaging in individual projects. Additionally, numerical mathematics and simulation techniques will be taught. The second semester focuses on off-grid energy systems and industrial energy systems. The System Courses are enhanced by a module on energy policy and energy markets. The Master's programme concludes with the Master's thesis in the third and last semester. The thesis is complemented by seminars. There are practical elements in all modules, e.g., by providing project and thesis topics set by partner companies (especially for the dual programme). Courses also offer practical elements in university labs, company and trade fair visits, etc. Language and culture courses are offered throughout the programme while the university is in session. Students from abroad have the opportunity to participate in German language courses and German students have the opportunity to learn another foreign language, but language courses are not part of the curriculum. The programme is a full-time study programme. If you are in contact with a company with which you wish to write your Master's thesis and if the company is interested in a dual programme, please ask the company to contact us.

A Diploma supplement will be issued	Yes
Integrated internships	It is possible to integrate an internship into the study programme. The Master's degree programme will then offer the opportunity to do an optional internship semester after the two theoretical semesters and before the Master's thesis semester. The students have to find an appropriate internship by themselves. The International Office offers courses for application training and will assist the students. It is common and recommended to write the Master's thesis within a company as an alternative to writing it within the university. Students of the dual Master's degree programme will complete two internships over semesters one, two, and three, adding up to three months. Their Master's thesis is to be written within the company. Positions for taking part in the dual Master's degree programme are provided independently from the university only by companies – students have to arrange such contracts with a company on their own before the start of the Master's course. Suitable companies can be located in Germany or the students' home countries – students should search the companies' websites for dual programmes. It is advisable to apply at the students' home location to companies that have their headquarters or other sites in Germany.
Course-specific, integrated German language courses	Yes
Course-specific, integrated English language courses	Yes

Costs / Funding

Tuition fees per semester in EUR	500 EUR
Additional information on tuition fees	This is a service fee payable by all students from third countries (with a citizenship outside the EU and the European Economic Area). With this fee, we want to significantly expand our services for international students. No service fees are charged for citizens of an EU member state and/or the European Economic Area or for students who have obtained their university entrance qualification in the German education system.
Semester contribution	All students will have to pay a student services fee of 67 EUR per semester.
Costs of living	Student organisations estimate that costs of living are approx. 950 EUR or more per month, depending on individual needs and expectations. Mandatory health insurance in Germany will cost a student around 110 EUR per month.
Funding opportunities within the university	Yes
Description of the above-mentioned funding opportunities within the university	There are different scholarships available to enrolled students, such as the Deutschlandstipendium. All students will have to look and apply for specific scholarships themselves! Most scholarship programmes are based on performance (grades, voluntary work, etc.). The economic situation of applicants is usually not taken into consideration. A certain level of

German language skills (at least B2) is required for many scholarships.

The International Office also offers scholarships. Enrolled international students will be notified of the call once a year via the communication channels of the university.

Requirements / Registration

Academic admission requirements

Requirements include a Bachelor's degree in energy engineering, mechanical engineering, industrial engineering, electrical engineering, civil engineering, or equivalent with at least 210 ECTS credits or equivalent degree requirements (a minimum of seven semester at a German university with a workload of 25-30 hours per ECTS).

Specific experience in energy related topics is also required and checked in an aptitude test on the basis of documents provided by the applicant. There is NO interview and no written test. Energy experience can be gained by way of professional jobs, suitable internships, a Bachelor's thesis, and other project work. You have to prove your experience by uploading valid documents at the THI application server. Your grades and your experience will be used to form a new grade.

Admission for applicants with Bachelor's degrees comprising 180 ECTS
For applicants who have a Bachelor's degree with less than 210 credits (but with a minimum of 180 ECTS), an approval of 30 ECTS on the basis of the qualified working experience is possible if the examination board agrees. The extent and nature of the working experience must comply with the rules for a second practical semester at Bavarian applied universities (§ 13 RaPO) and must be documented with a certificate of employment.

Applicants with a Bachelor's degree from a country other than Germany will have to send their documents to uni-assist for preliminary inspection prior to their application at THI. Please allow several weeks for this process, i.e., apply as soon as possible via uni-assist. Following this, you can apply via the THI application server with your VPD (preliminary review documentation, or "Vorpüfungsdokumentation" in German) from uni-assist.

Language requirements

Applicants must provide proof of their English skills before registration: TOEFL 530 (paper-based), 197 (computer-based), or 71 (Internet-based), or IELTS 6.0 or equivalent.
A proof of English as a native language or a Bachelor's degree obtained with courses completely held in English is also considered as equivalent proof.

Application deadline

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2. PRIMUSS – THI application portal from 2 May until 15 July for the following winter semester
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Please check the THI website to get up-to-date information regarding the application periods.

Submit application to

1. uni-assist: to get a VPD document
2. PRIMUSS: THI application portal for online application submission

More information on the application can be found here.

Services

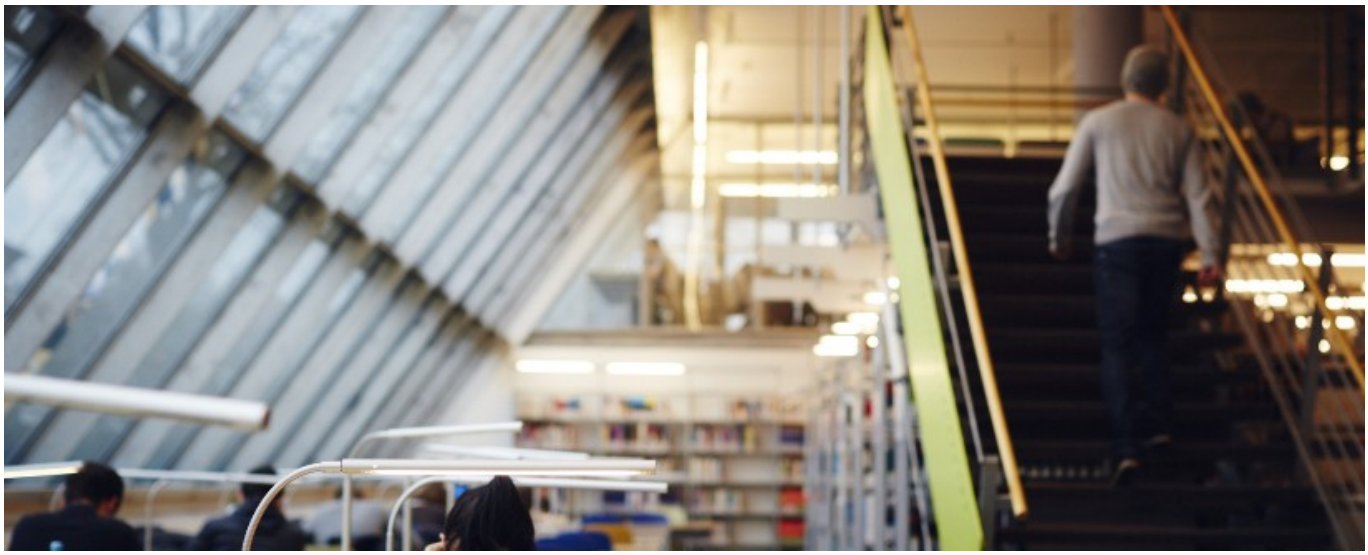
Possibility of finding part-time employment	In addition to open internship positions on the university platform, students should consider research and teaching assistant positions at THI. Furthermore, the International Office offers workshops in English to prepare international students who seek internship opportunities.
Accommodation	Technische Hochschule Ingolstadt does not run any student residence halls / dorms. You will have to start looking for accommodation on your own as soon as possible. Between 500 and 700 EUR per month should be budgeted for accommodation. The FAQs will help you in finding accommodation in Ingolstadt or Neuburg.
Career advisory service	Workshops to prepare for the German job market For most jobs German is still a necessary key qualification and prerequisite. Even the best degree will hardly help you later if you do not speak German well. We will not only provide you with the best possible support in your studies, but we will also offer a variety of German courses to help you learn German quickly and well.
Support for international students and doctoral candidates	• Buddy programme • Accompanying programme
General services and support for international students and doctoral candidates	• Online info session for admitted degree-seekers • Support with residence permit • German courses at the N.I.C.E. language centre (Network & International Culture Exchange) • Service point and individual appointments
Supervisor-student ratio	There are usually groups of about 25 students in each class.

Renewable Energy Systems

Programme introduction video

» more:
https://youtu.be/SLncepdFRZ4

Technische Hochschule Ingolstadt



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Technische Hochschule Ingolstadt is an institution that specialises in business and technology and is characterised by innovative study concepts and modern facilities. We are currently training close to 7,000 students in more than 70 study programmes in engineering, computer science, business, life sciences and sustainability.
Our students will graduate as sought-after specialists and managers. An extremely dynamic and successful region with a distinctly strong economic structure provides for excellent framework conditions. The relatively small student body guarantees individual guidance, a familial atmosphere, and close cooperation between students and professors.
One of the core features of studying at our university is its orientation towards practical application. Internships and projects as well as a continuous cooperation with regional companies are basic components of every study programme.
The Ingolstadt campus was completed in 1999, and a new tract of buildings opened in 2014. In 2021, the Neuburg campus opened its doors with its Faculty of Sustainable Infrastructure.

Modern equipment and facilities create an atmosphere that adds to students' success and enjoyment. Technische Hochschule Ingolstadt is proud of its commitment to offer the highest possible level of quality in research and education. It is possible to explore Technische Hochschule Ingolstadt by visiting the interactive 360° THI campus tour.

University location

The campus is only a short walk from Ingolstadt's appealing old city. The view from the lecture halls is of a castle and other medieval buildings. Ingolstadt lies in the centre of Bavaria, one of the most prosperous German federal states, and it is only an hour by car from the metropolitan areas of Munich and Nuremberg. The opportunities to take part in leisure activities in the area – which is close to the Alps as well as to the beautiful Altmühl valley – are unlimited. With the headquarters of Audi (the international automotive company) and a large number of innovative corporations in the city, Ingolstadt is proud to be one of the strongest economic regions in Germany. Opportunities to participate in sports activities are provided by the university as well as by various amateur and competitive sports clubs. Bavarian charm and the Bavarian way of life – including summer evenings in beer gardens and the diverse cultural events on offer – make daily life in Ingolstadt particularly attractive for students.

Contact

Technische Hochschule Ingolstadt
Faculty of Mechanical Engineering

Prof Dr-Ing Matthias Huber

PO box: 21 04 54
Esplanade 10
85019 Ingolstadt

Tel. +49 84193482402
matthias.huber@thi.de
Course website: https://www.thi.de/maschinenbau/studiengaenge/renewable-energy-systems-msc/

https://twitter.com/th_ingolstadt

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