



TECHNISCHE
UNIVERSITÄT
DARMSTADT

INTERNATIONAL SUMMER UNIVERSITY

German Engineering and Language



www.tu-darmstadt.de/isu



[@isu_tudarmstadt](https://www.instagram.com/isu_tudarmstadt)



summer@zv.tu-darmstadt.de

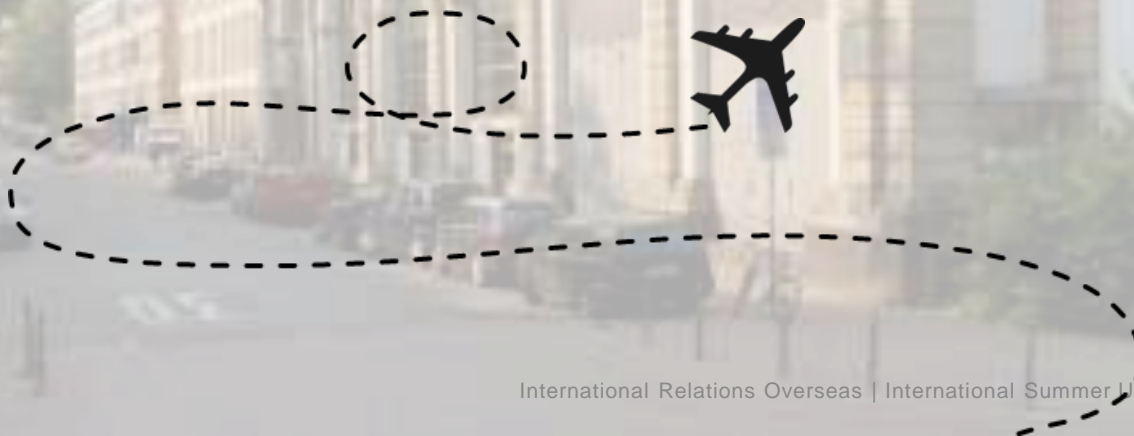


TU DARMSTADT AT A GLANCE



TECHNISCHE
UNIVERSITÄT
DARMSTADT

- Near Frankfurt
- Frankfurt International Airport (FRA)
- One of Germany's leading universities of technology
- 24,000 students
- 22% international students (from more than 120 countries)
- More than 300 partner universities all over the world
- Many industrial partners



INTERNATIONAL SUMMER UNIVERSITY

German Engineering and Language



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June 3 – July 13, 2024

12
ECTS
(6 US CP)

Undergraduate Students

Total Fee:
2.500,00 €

Virtual Period: June 3 – June 15
On-Site Period: June 16 – July 13

Arrival Day: Sunday, June 16
Departure Day: Saturday, July 13

The total fee covers:

- Language courses, course materials, workshops, engineering courses, intercultural practice, company visits, social activities and excursions.
- Public transportation ticket, health insurance and student services.
- Accommodation: shared twin room and kitchenette

Partial Scholarships available for nominated students of partner institutions from TU Darmstadt

MODULES



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The International Summer University at TU Darmstadt combines engineering courses, company visits, intensive German language courses, cross-cultural competencies training for engineers and social and cultural activities in and around Darmstadt

German Engineering		German Language & Culture	
6 ECTS		6 ECTS	
Mechanical Engineering	OR	Electrical Engineering	German Language Course - STEM
			Cross-Cultural Competences Training for Engineers
Total of 12 ECTS (6 US CP)			

150 Hours Engineering Classes + 100 Hours German Language + 50 Hours Culture
+ Excursions and Social Activities


Σ 300
Hours

ENGINEERING COURSES (6 ECTS)



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The various engineering courses introduce students to German engineering in the fields of Mechanical or Electrical Engineering through workshops and group projects. In the field of Mechanical Engineering, students can choose between Automotive Engineering, Aeronautical Engineering, Mechatronics and Production Engineering. In Electrical Engineering, two courses are offered: Electromagnetic Field Simulation and Microfluidics + BioMEMS. Students will also gain insight into German engineering by visiting various companies.

Mechanical Engineering (6 ECTS)	Electrical Engineering (6 ECTS)
Aeronautical Engineering (3 ECTS)	Microfluidics + bioMEMS (3 ECTS)
The course deals with the design, function and operation of wind tunnels and the use of laser-based measurement techniques in fluid mechanics, aerodynamics and flight mechanics.	This course gives an introduction to the field of microfluidic and microelectromechanical systems (MEMS) for a variety of applications in the biomedical sciences.
Automotive Engineering (3 ECTS)	Electromagnetic Field Simulation (3 ECTS)
The course gives an introduction into automotive engineering by typical problems in this field.	The course gives an introduction into electromagnetic field simulation. The main course aspect is the finite integration technique (FIT) which is applied on Maxwell's equations to compute numerically electromagnetic phenomena.
Production Engineering (3 ECTS)	
The aim of the course is to provide a deeper insight into the potentials and challenges of Industry 4.0 in the field of sheet metal forming.	
Mechatronics Engineering (3 ECTS)	
The course deals with the basics of mechatronic systems and the involved components. Main aspects are the functional description and modelling of mechanical elements, actuators, sensors.	

GERMAN LANGUAGE COURSES



German for Academic Purposes (Beginner)	German for Academic Purposes (Beginner with previous knowledge)	German for Academic Purposes (Pre-Intermediate)
<p>👉 This online language course is designed especially for STEM-students who want to improve their prospective careers with a German language course.</p> <p>👍 Here you will learn and practice:</p> <ul style="list-style-type: none"> • basic German communication skills • essential German communication situations in STEM-relevant contexts. <p>🕒 By the end of this course, you should be able to engage in basic communication situations. For students considering a semester abroad in Germany, this course may be interesting as well.</p> <div data-bbox="96 1082 420 1302"> </div>	<p>👉 You already have a basic knowledge of German, are interested in STEM and are considering a semester abroad at a German university? Then this course is exactly for you!</p> <p>👍 You will increase</p> <ul style="list-style-type: none"> • your knowledge of German academic life and be able to communicate with German students on a basic level and learn • to write basic formal emails to professors • to practice important strategies for understanding academic texts. <p>🕒 If you are considering a semester abroad, this course would be an excellent way for you to begin preparation.</p>	<p>👉 This pre-intermediate language course is designed to strengthen students' German speaking, writing and listening skills in an academic setting (STEM).</p> <p>👍 You will be able</p> <ul style="list-style-type: none"> • to convey information and ideas on abstract as well as concrete topics • to check information and ask about or explain problems with reasonable precision • to reasonably fluently sustain a straightforward description of one of a variety of subjects of personal interest <p>🕒 By the end of the course, you should be able to communicate more effectively in an academic setting, with professors as well as with fellow students.</p>

CROSS-CULTURAL COMPETENCIES TRAINING FOR ENGINEERS & SOCIAL AND CULTURAL PROGRAMME



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Cross-Cultural Competences Training for Engineers

This seminar will train non-German students in intercultural skills to help them successfully navigate in an intercultural working and learning environment in Germany. It will also introduce students to practical techniques, skills and knowledge surrounding themes of living, studying and working in Germany.

The International Summer University will introduce students to practical techniques, skills and knowledge to help successfully arrange themselves within an intercultural working and learning environment throughout Germany.

Social and Cultural Programme

Expand your study abroad experience by attending our social and cultural activities in and around the Rhein-Main Hessen region. We are having a Welcome Dinner on the Welcome Day (June 17) and taking a city Trip to Munich on the very first weekend of the programme. We will also see some Fireworks and have a traditional festivity in Darmstadt called Heinerfest during your stay.

... and many more!

All engineering courses as well as the Cross-Cultural Competencies Training for Engineers will be held in English.

All course grades are based on continuous assessments throughout the course.



Scan here for the weekly program

Scan here for the detailed syllabus





WEEKLY PROGRAMME

Let us have a look at our weekly programme.

ACCOMMODATION AT THE ACHAT HOTEL



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- Shared room (two students)
- Bathroom (shower)
- Kitchenette
- Desk
- Cupboard
- WiFi
- TV

YOUR
ROOM



Conference
room to
study



Laundry
Room



IMPRESSIONS OF OUR ISU 2023



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Wind Tunnel



MERCK Visit



Quiz Night



European Space Agency



DARMSTADT IMPRESSIONS



Market square and residential palace Darmstadt



Luisenplatz

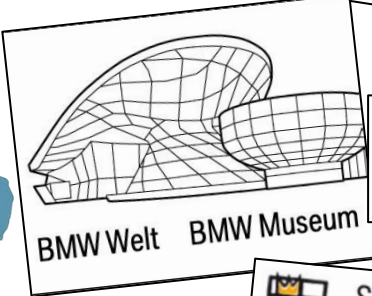


UNESCO World Heritage Mathildenhöhe Darmstadt

IMPRESSIONS OF OUR MUNICH TRIP



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TESTIMONIALS

“There were a plethora of memorable moments for me on this summer program. Firstly, being able to exchange my culture with people from all around the world gave me a great insight into how different people live and work. Americans, Mexicans, Turkish and even my fellow Singaporeans! Secondly, the trips to Munich, Heidelberg and Stuttgart were extremely fun as I was able to visit landmarks and automotive museums [...] which was really breathtaking for me.”

-Ernesto, National University of Singapore



"Participating in this program was an incredible experience that exceeded my expectations in many ways. Having the opportunity to interact with other cultures and gain knowledge on the field that I like (engineering) was incredibly enriching and fulfilling. Everyone who has the opportunity to form part of the International summer Program should definitely do. Make sure to be open-minded, respectful, adaptable, and ready to learn."

-Valeria, Clovis Community College



TESTIMONIALS

“I would recommend this program to any Engineering students who want to broaden their technical knowledge whilst also immersing themselves in German culture. The course is intensive, but also rewarding, and whilst learning you get to go on many once-in-a-lifetime experiences in Munich, Darmstadt, Stuttgart and more. I also appreciated that the program gives you the option to explore where you wish, with some students travelling to Paris, whilst others went to the Black Forest or Vienna. Through it all, you will have great company, with the program being a great way to meet other students from all over the world. I have thoroughly enjoyed my time at the ISU in Darmstadt and will cherish my memories of the program.”

-Samuel, University of Western Australia




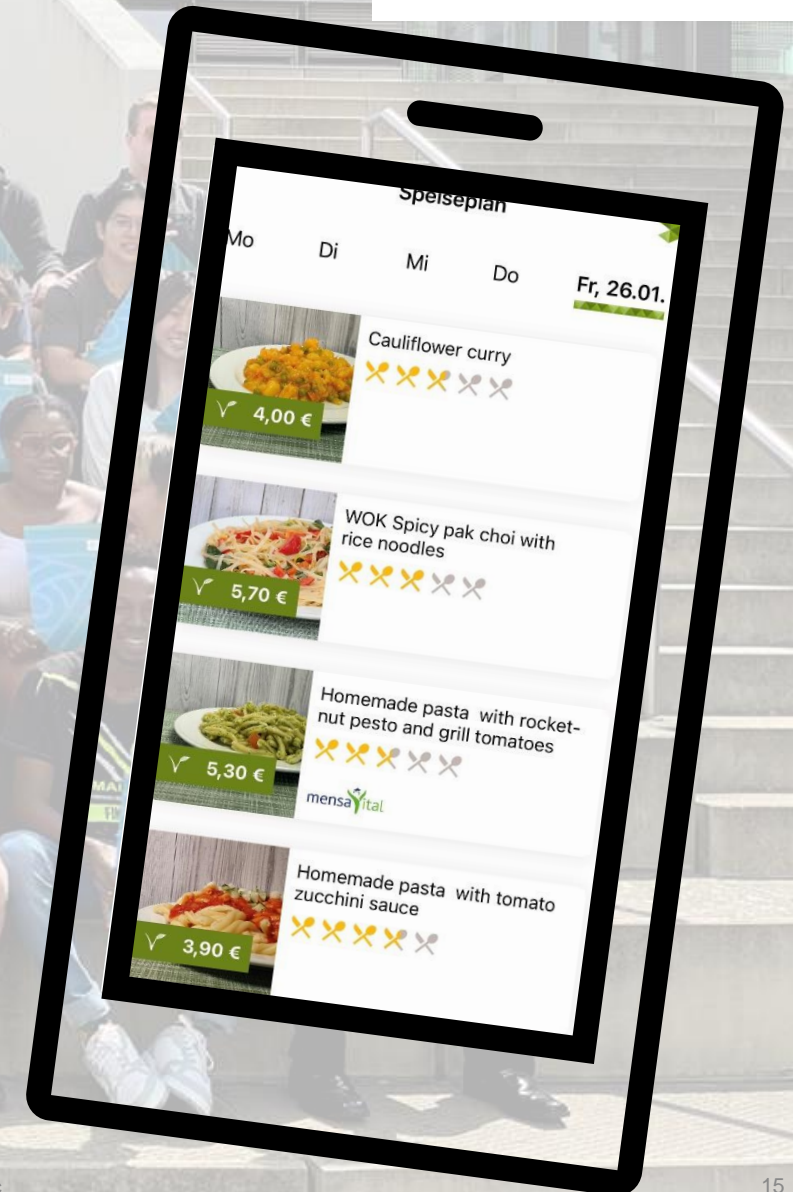
„I really liked how this was an international program. I got to make friends and meet really cool people from all over the world. This provided me with the opportunity to learn not only about German culture, but other cultures around the world.“

-Claire, Virginia Tech



SUPPORT & QUESTIONS

- Pick-Up Service on Arrival Day (June 16)
- Emergency Number (provided to participants during the ISU time only)
- Student Assistant and Social Buddies (peer-to-peer help)
- Expenses/Costs:
 - Meals: 392 – 759 € in total for 4 weeks
 - 15 – 50 € for cell phone rental
 - 100 – 300 € personal spending money
- Mensa/Cafeteria:
 - <https://studierendenwerkdarmstadt.de/en/> 
- Bank/Money:
 - Bring Euros to your trip
 - Contact your bank before travelling to get more info.
- Traveling and baggage:
 - Visa (if needed), Travel Allowance
 - European plug adapter
 - Adequate clothing, umbrella and sunscreen





APPLICATION PROCESS

Students of Partner Universities of TU Darmstadt:

1. Please apply at/consult your universities' international office for ISU 2024 at TU Darmstadt. Your international office will need to send an informal nomination to summer@zv.tu-darmstadt.de
2. We will confirm a successful nomination via email. Make sure to check your emails regularly.

Your next steps will then be:

1. Register with TU Darmstadt
2. Pay the Programme Fee
3. Receive a Letter of Acceptance

Students of Non-Partner Universities:

1. Please contact summer@zv.tu-darmstadt.de to state your interest in our programme.
 - Please make sure to inform us about your home university
 - Tell us your course of study and your level of study (undergraduate/graduate)

Students at University of Massachusetts System, Universities of Wisconsin, Queensland Universities:

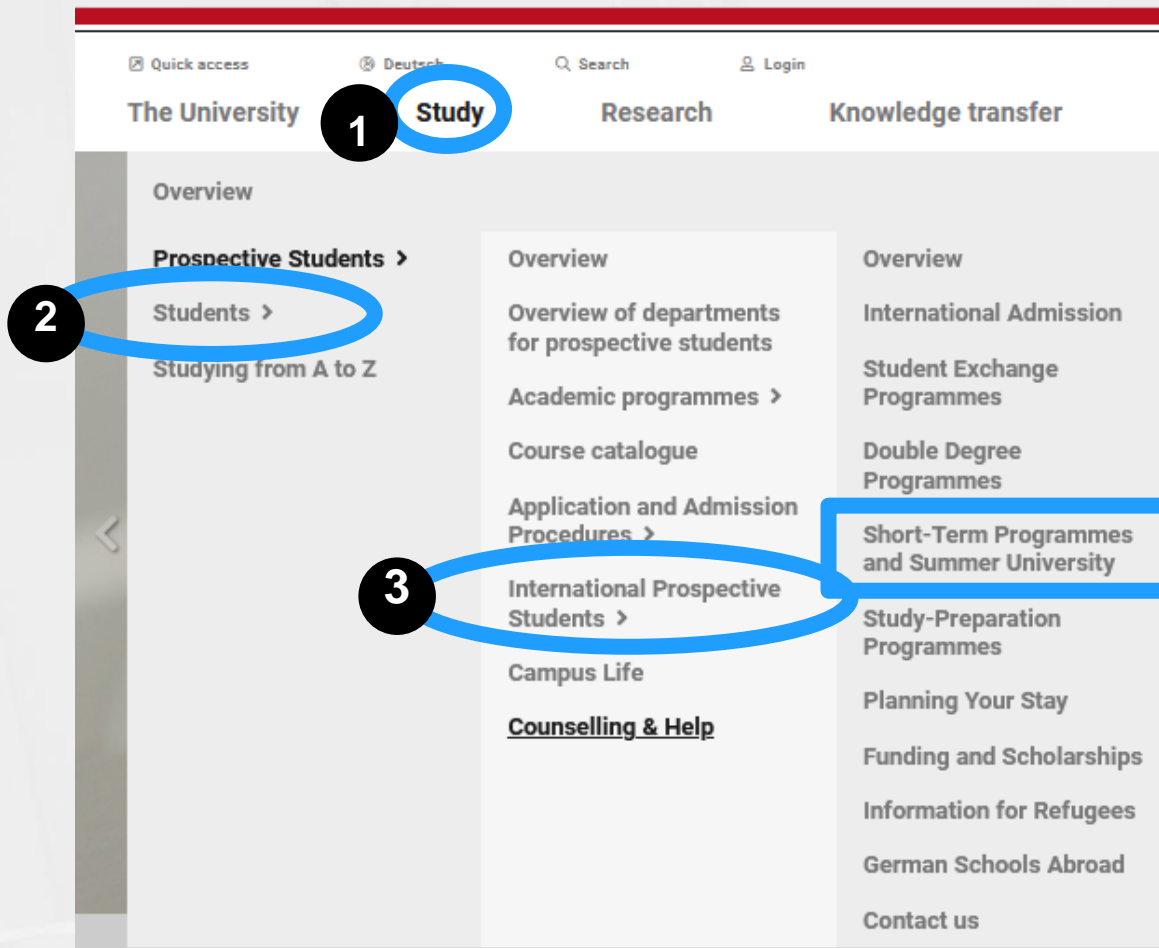
If you are a student at the University of **Massachusetts** System, the Universities of **Wisconsin** and participating **Queensland** universities, you will participate as an exchange student and will not pay fees directly to TU Darmstadt. Please contact your study abroad advisor for more information on how and when to apply.



THANK YOU FOR YOUR ATTENTION!



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CONTACT INFORMATION



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