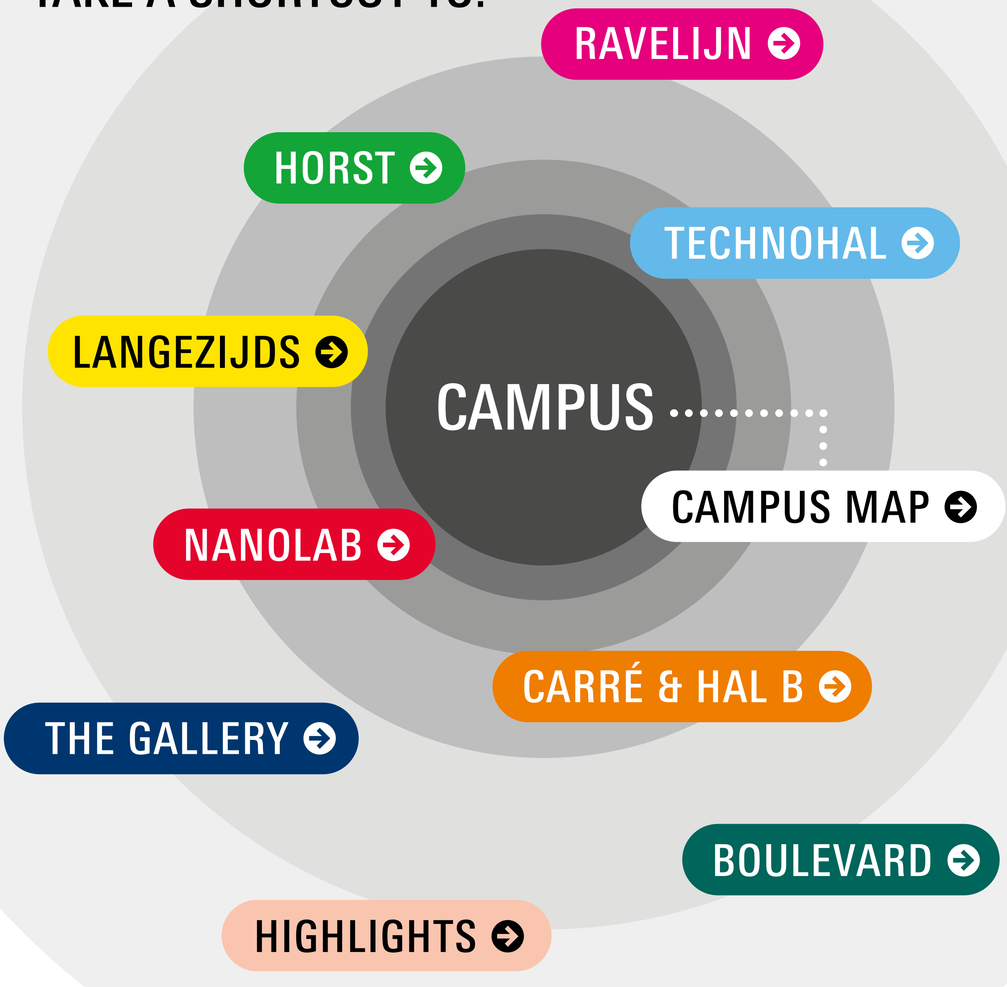
WELCOME TO THE UNIVERSITY OF TWENTE

The University of Twente was founded in 1961 on the former estate of Drienerlo and proudly holds the title of the **ONLY CAMPUS UNIVERSITY IN THE NETHERLANDS**. Our campus has various features: from a park-like estate and open-air museum of architecture to a breeding ground for golden ideas and a living lab. It's a place where **education**, **research**, **housing**, **sports**, **culture**, and **student life** come together.

Today, during our Open House, we would like to show you what's happening in the world of science. Employees, students and partners proudly showcase what they work on every day.

TAKE A SHORTCUT TO:



SWIPE

UNIVERSITY OF TWENTE.

WHAT'S HAPPENING TODAY?

BE AMAZED BY OVER 100 DIFFERENT ACTIVITIES!

Activities/route

We have put together a diverse range of activities for you. You can **start at RAVELIJN BUILDING**, **HORST BUILDING**, or **TECHNOHAL BUILDING**. When you enter the building, follow the arrows to guide you along the route. The colours show you in which building you can find the activities in the programme guide. For sports and culture, visit the area around the **BOULEVARD**.

☺ Children's activities; collect your stamps

Are you the scientist of the future? Do you want to get to know the University of Twente? Collect stamps on your stamp card at the activities for children. With a full stamp card, you can receive your own **University of Twente diploma** and you can put on a real toga! (Hall B).

Food & drinks

Feeling hungry after all the demonstrations, workshops, and tours? At the **O&O square** and **Waaier** building, you'll find a healthy and tasty selection of food for people of all ages. At the **Boulevard**, you can grab something to eat or drink at Frosty's (from 12.00 hrs) and Subway. Coffee points have been set up at various spots along the route. Starbucks on the O&O Square is also open.

START YOUR ROUTE AT ONE OF THE THREE STARTING POINTS

Then follow the route signs on campus!

UNIVERSITY OF TWENTE.

RAVELIJN
ARE YOU READY FOR VR?

TRAIN YOUR PRESENTATION SKILLS WITH VR

Do you want to captivate your audience with an unforgettable presentation? Then our VR training might be something for you. Want to try it yourself? Come to our demo.

PUSH YOUR INTERACTIVE BOUNDARIES IN THE BMS LAB

Immerse yourself in our Virtual Reality environments, get to know our social robot Furhat, or measure your heart rate and oxygen saturation level.

SWIPE AWAY YOUR ADDICTION

How can an app help you truly overcome an addiction?

CARRÉ & HAL B
ASSEMBLE YOUR OWN ROBOT

CARRE EN HAL B

Superconductivity: a cool trick
We can make electrical resistance disappear. How?
We'd love to show and let you experience it!

WALK THROUGH OUR COLLECTIVE MEMORY

Looking back on the history of UT, what were the highlights? We'd love to show you in this exhibition.

THIS IS ALSO THE FINISH LINE OF THE CHILDREN'S ROUTE, WHERE THEY RECEIVE A FUN SOUVENIR OF THIS DAY! ☺

VISIT A LAB FULL OF ROBOTS

At the RaM department (Robotics and Mechatronics), we develop all kinds of robots. In our labs, you'll see things moving, driving, and flying! In the robot playground, children can play with small robots or help build a robot themselves.

METALWORKING: HOW DO YOU DO THAT?

In this demonstration, you will see how to make and engrave a spinning top using a CNC machine. Take your own personalised spinning top home!

CONTROL AND AUTOMATION ☺

Discover PLC controllers. You can use these to make all kinds of fun things move.

CAN A 'CHOCOLADEZOEN' EXPLODE? ☺

Yes. We have the filling of a chocolate kiss forcefully squirted out through a vacuum technique.

SOCIOCORNER

Continuous PowerPoint presentation on which you can see all the products TCO has already created.

TIP: YOU CAN ALSO SCORE AN ICE CREAM HERE

CARRÉ & HAL B

HOW TO CREATE SOFTWARE THAT ALWAYS WORKS?

Continuous PowerPoint presentation on which you can see all the products TCO has already created.

WHAT DOES A DISEASED LIVER LOOK LIKE?

See the difference between a healthy and diseased liver under a microscope

CAN YOU CATCH IT? ☺

Will you get the right balls in the right place? Test your skills during this game. The magnets help you hold the right balls to form letters.

FLOWCYTOMETER

Recognising, counting, and isolating blood cells using a flowcytometer.

THE MYSTERY OF STYROFOAM AND ACETONE

Marvel at how Styrofoam dissolves and loses its structure, as the acetone splits the molecules and makes the air disappear.

INVISIBLE INK

Do you want to write a secret message? Come and experiment with invisible ink.

NYLON ROPE TRICK

A spectacular chemical process. Come and witness how we create a rope out of nothing that seems to endlessly extend.

RECOGNISE THE BLOOD CELL

Can you distinguish real red blood cells from fake ones in microscopy images?

THE PHYSICS OF NOTHING

How do materials behave when exposed to vacuum? See how bacon and a drop of water react when air pressure is reduced.

CARRÉ & HAL B

PROGRAMMING WITH AIR

Could a 3D-printed computer run on compressed air? That may sound complicated. Come see if it can. And don't be pressured, the computer will do that!

PROGRAM YOUR OWN ROBOTS

Programming is something you can learn. We help you write for robots.

GET TO KNOW DEMCON

Opposite the campus is the company Demcon, and they would love to show you what they do. At this stand, you can build, try out, and, of course, ask questions.

GET TO KNOW MICRONIT

Micronit plunges into the unseen world of microtechnologies. It develops unique microfluidic solutions for life changing companies.

HORST
TAKE A LOOK INSIDE YOURSELF

DEMO: THE IMPORTANCE OF LIGHT DURING SURGERY
How and why is light used during surgery? Here, you will also find microscopes that show you things you never imagined to be possible!

DEMO: WIND TUNNEL
Can you stay upright in the wind tunnel? A demonstration of aerodynamics and sound.

CONTROL MEDICAL ROBOTS
A robot performing surgery? Yes, it's possible with the assistance of a human, particularly for minimally invasive procedures! Come by and try to control a robot arm yourself.

TO BREATHE OR NOT TO BREATHE?
How do artificial lungs and heart pumps work?

VISIT THE NONEXISTENT LAB ☺
How? With the help of Virtual Reality and Augmented Reality. These technologies are increasingly being used to make better decisions.

THE POWER OF INJECTION MOLDING
With liquid plastic and precision tools, we create various shapes, bringing products to life.

DEMO: EXOSKELETON
Ever heard of an exoskeleton? With this suit, people with certain paralyses can move again. Experience for yourself how it works.

HEY, BIOMEDICAL DESIGNER!
Step into the shoes of a biomedical designer. Together with you, we will search for new ideas to assist patients in their daily activities. We will also demonstrate how we go from idea to prototype.

HORST

CONTROLLING HUMAN ROBOTS

Take control of a robot with the help of virtual reality.

DO YOU DARE TO TAKE THAT STEP?

Are you in balance? Discover how we maintain balance while walking and standing. Train your balance with our game designed for people who have had a stroke.

DEMO OF SMALL, WIRELESS ROBOTS

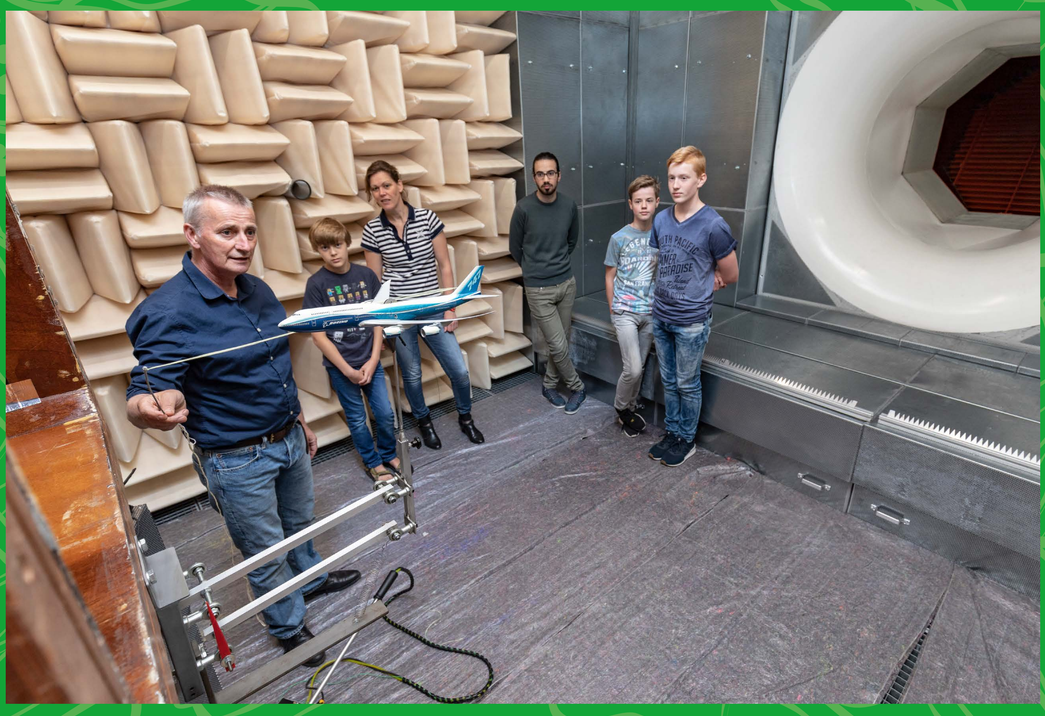
A demonstration showcasing wireless magnetic propulsion of completely untethered small-scale robots.

THE HIGH-SPEED CAMERA

Popping a water balloon, a droplet splashing... How can we see something that happens so quickly? Find out here!

AIR EFFECTS FROM WIND TURBINES

Discover the atmospheric effects of a wind turbine park.



HORST

CREATE POWERFUL BEADS AND BUBBLES ☺

Discover the fascinating world of tiny soft alginate particles! They are also beautiful to admire under the microscope. Stop by, make them yourself and take them home.

SEEING SOUND

With an acoustic camera, you can visualise sound. The demo shows where a sound originates from, even if you can't perceive it yourself.

HOW TO DETECT PLASTIC IN OUR DRINKING WATER?

Take a look through the microscopes and see brightly coloured cells that can detect plastic in our drinking water.

WHAT'S THE DIFFERENCE? METAL VS. PLASTIC

Get to know the replacement for metal: polymer plastic. We'll tell you all about it through a quiz, demonstrations, and examples of recycled products.

CAN WE MAKE ROBOTS FROM COFFEE, TEXTILES, OR PAPER?

Learn more about Soft Robotics: robots that are safe to use and made of human-friendly materials.

FLUID ROLLS THROUGH TAYLOR-COUETTE FLOW!

By turning the inner cylinder of two cylinders, the fluid flow between them changes from calm to turbulent. Resulting in beautiful moving patterns!

DEMO: VORTEX CANNON

Come see how we shoot large swirls of air with a cannon, beautifully captured with the help of a smoke machine.

SEPARATION OF GRANULAR PARTICLES

Granular particles are small granular materials. Will you help separate them from each other? There are several methods for this.

HORST

SCHLIEREN OPTICS

Be amazed by the real-time visualization of air currents created by the warm air rising from your hand or a candle flame.

DEMO: WAVEFRONTSHAPING

This technique allows us to control light. We use a piece of Scotch tape to beam light. This allows us to microscopy the skin.

HANDHELD LSCI

This system allows you to see blood flow in the skin using a laser and a camera!

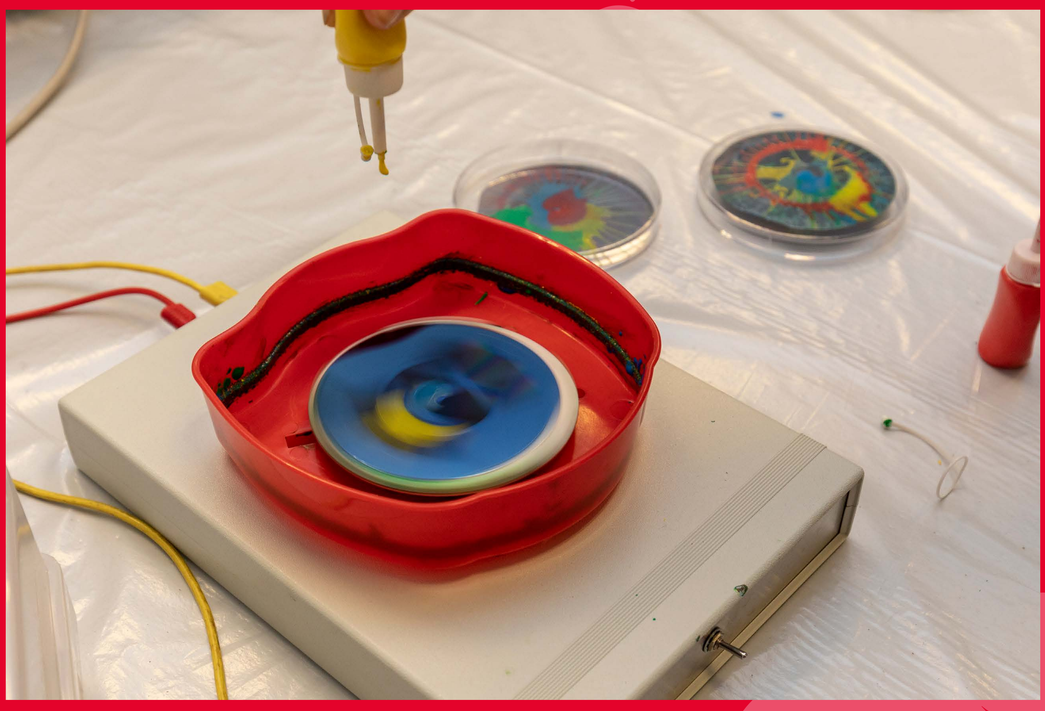
THE PHOTOPHONE

The photophone creates a unique connection between image and sound, bringing sound to life like never before.

DEMO: RESEARCH METHODS FOR CHRONIC DISEASES AND FERTILITY ISSUES

At the Developmental BioEngineering and Applied Microfluidics for BioEngineering Research booth, you will find examples of cells, mini-organs, and models. These innovative techniques contribute to new knowledge, improved treatment methods, and a reduction in animal testing.

NANOLAB
MAKE YOUR OWN BATTERY



NANOHOFJE (OUTDOOR)

- Quiz: Why does a mirror reflect left-right but not up-down?
- Guided tour: Explore the tiniest world in the Nanolab.
- Demo: Can we see air?
- Demo: How does light bounce?
- Make your own ice with liquid nitrogen.
- What is wafer sputtering? Come and experience it!
- Science on Tour experiments: Maglev train, flotation experiment, flame organ, and magnetic tube
- From 1:00 PM to 4:00 PM: Get your face painted! ☺
- From 1:00 PM to 4:00 PM: Enjoy delicious nano-ice creams
- The sun as a source: Demos on solar energy conversion.
- How does a lemon battery work? We'll show you.
- Get to know the future CO2-neutral hydrogen economy. See an electrolyzer and a toy hydrogen car!

NANOLAB

MINI-LECTURES (INDOORS)

11:30-11:45
Why are superconducting materials attractive?

12:00-12:15
Making chips with ASML's lithography machines.

12:30-12:45
How to turn a polymer into a nanoparticle?

13:00-13:15
What makes quantum mechanics so interesting?

13:30-13:45
Energy storage in a spin battery.

14:00-14:15
Chemistry inspired by nature: Functional viruses and mussel-inspired adhesives.

14:30-14:45
Making chips with ASML's lithography machines.

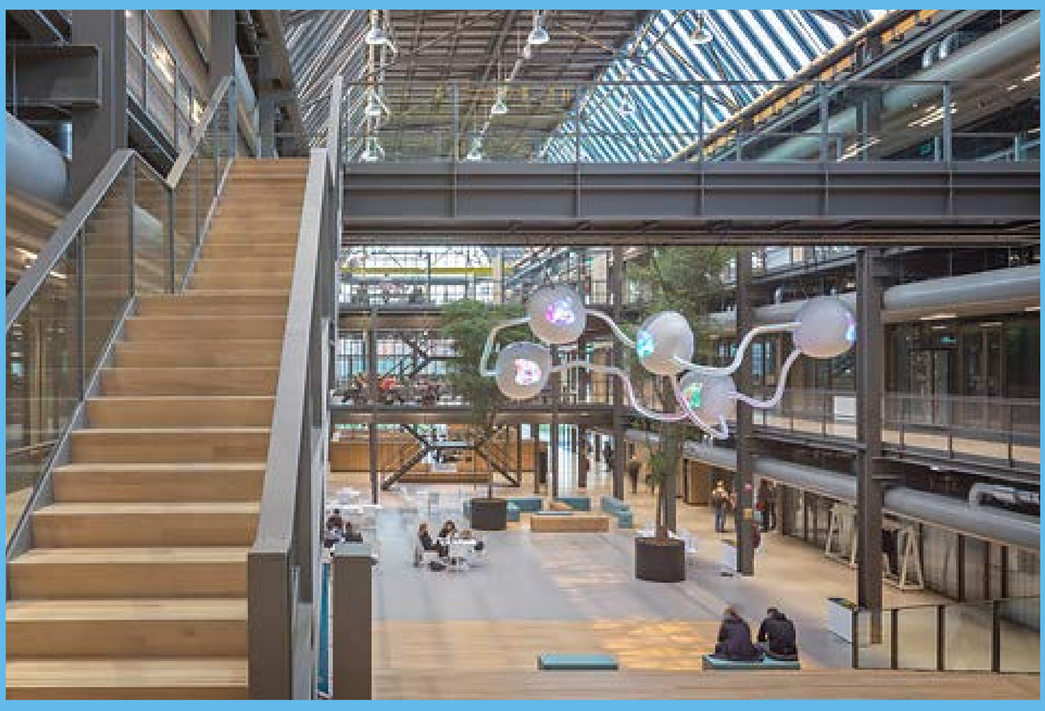
15:00-15:15
Personalized organ-on-chip for enhanced immunotherapies.

15:30-15:45
How does a quantum computer work and what can we do with it?

FOX HUNT

You can go fox hunting in the Nanolab, Carre, and ZuidHorst. There, you can collect letters. Can you track down 12 letters to form a sentence? Then collect your treat at the Nanolab!

TECHNOHAL
MEET METIMAN



CHILDREN'S PLAYGROUND ☺

For children up to approximately 8 years old, there is a playground full of fun activities in the middle of the building.

- In a large **MRI air cushion**, where children can lie down (not climb), a simple task is performed.
- In the **Photo Booth**, children can take an action photo wearing a doctor's coat.
- There will be a **huge colouring page** (2.5m x 2.5m) that will be fully coloured by the end of the day.
- A **UV mirror** shows the (harmful) effects of UV light on your skin and the protection provided by sunscreen.
- Vasculuminator - Navigation system for **vascular punctures.**
- **Citizen Science**: Research is for everyone! Today you can see which researchers need your help. Sign up for future research or share your research idea!

TECHNOHAL

SCIENCE SQUARE

- Demos from the Interaction Lab. This is a place that connects different research areas involving **interactive technologies**.
- How can a **biopsy robot** remove a piece of tissue from humans?
- Meet '**Metiman**'. This dummy patient can simulate various diseases.
- Phantom exhibition: What do **human organs** look like?
- A simulation of hemodialysis therapy performed by an **artificial kidney innovation**.
- Imaging the **human circulatory system**.
- How can the mobile alcohol avoidance training '**Master Your Brain**' help problem drinkers reduce their drinking problems?
- How is **motion** captured with Xsens MVN? This IMU suit consists of 17 sensors that can be placed on different body segments.
- How can we help patients at high risk of developing **chronic pain** to identify detection thresholds, enabling earlier treatment?

TECHNOHAL

TECHMED TOUR

- **Operating Room**: Everyone is familiar with the operating room (OR) from the hospital. But what kind of technical innovations can be found here nowadays? And why do we have an operating room at UT? One of our students will tell you all about it in our hybrid OR!
- **Intensive Care**: Step inside our simulated Intensive Care unit with dummy patients where trainee doctors practice.
- **Ultrasound**: Are ultrasounds only for looking at babies? No, they're not. We'll show you in our simulation room what else they can be used for.
- **Laparoscopy**: If you're curious about how good your hand-eye coordination really is, come and have a look here.
- **E-Health House**: It's important for someone to return home from the hospital as soon as possible. Even more important is that it's done safely. In our E-Health House, you'll see how it can be achieved with various sensors and other tools, such as the interactive LED table.

PARTICIPATE IN RESEARCH, HELP THE SCIENTIST

Would you like to conduct your own research or know what it's like to lie in a scanner? This is your chance! Here you'll learn why we need you.

DEMO: THE FUTURE UNDER YOUR SKIN ☺

Learn more about needle-free injections.

LANGEZIJDS
EXPERIENCE EARTH FROM SPACE

WANDER THROUGH WORLD CITIES ☺
World cities are like real-life mazes. This game is based on actual maps of real cities. Can you find the right way?

VOLCANOES AND HAZARDS ☺
Why do some volcanoes erupt while others don't? Make a volcano erupt yourself and learn more about rocks and hazards.

RENOVATION OF LANGEZIJDS
Our most recently renovated building on campus is Langezijds. It's a sustainable and inspiring work and study environment for the ITC faculty. Curious to see how it looks? ITC is happy to show you.

CAUSE AN EARTHQUAKE(CHILDREN'S ROUTE) ☺
No, not a real one, of course... Get to work with a seismometer and see what happens on a screen. Can you cause the strongest earthquake?

LANGEZIJDS

INSPIRING PLACE: THE DESIGN AND INTERACTIVE SPACE FOR CO-CREATING

DISC is the place on campus where we sketch the future and bring visions together. Here, we show you how.

CAN YOU SEE HEAT?

Yes! With the help of infrared cameras. We use them to monitor the Earth. Are you the new “Thermal Hero” who can help us solve a mystery?

JOIN THE FIGHT FOR THE CLIMATE ☺

An educational board game that teaches children about the consequences and challenges of climate change, such as floods.

DISCOVER YOUR TV TALENT! ☺

Become a presenter, or take place behind the recording buttons in a studio and discover your talent. Or will you go for the treasure hunt?

EXHIBITION ON SUSTAINABLE CAMPUS

How do we make our campus sustainable? We’d love to show you.

PRACTICAL RESEARCH: DIGITAL TWIN APPLICATIONS

What happens when the water level rises? And what is the effect of urban heat in Enschede? Discover it through the 3D visualisation of “Digital Twin” during the Open House.

BOULEVARD
DISCOVER ALL LOCATIONS

PRE-U – DE HEMS 10
Get ready for university! Pre-University organises workshops and masterclasses to introduce science and technical education in an accessible way.

VRIJHOF CULTUUR - VRIJHOF 47
Take a look at our theatres, the Agora and the Amphitheatre, or attend the opening of the WAK (Week of Amateur Art) exhibition. Also, you can explore the permanent collection of Paul Citroen. During the Open House, we will also announce our theatre programme for the 2023-2024 season.

CULTURAL ASSOCIATIONS
In the Vrijhof and Bastille, the 16 different cultural associations showcase their creativity. Theatre Association NEST and various dance associations will demonstrate what they have to offer, and you can even join in the dancing.

SPORTS CENTRE/SPORTS ASSOCIATIONS - BUILDING 49
Come and cheer on our students at the Dutch Student Swimming Championships. Or participate in a short archery workshop. Prefer to try the bouldering wall? It's all possible!

STUDENT UNION - BASTILLE 48
On campus, students themselves can determine, organise, and manage many activities. Visit the E-sports Lounge or Incubase to learn about the entrepreneurial mindset of start-ups, what they do, and how they came about. There is also a small market where you can talk to boards and committees about their activities as board members.

LIBRARY - VRIJHOF 47 (OPEN 13:00-16:00)
Visit the usually closed book warehouse and use the ingenious book slide. Or explore inspiring examples of how students have turned the library into their ideal study space.

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THE GALLERY
DETERMINE THE PATH YOU TAKE

DISCOVER YOUR FUTURE IN THE DESIGNLAB ☺

Here, you determine the path you walk. Along the way, you learn more about sustainable cooking, create the garden of the future, discuss friendship with robots, collect objects made in workshops, and make your own time capsule!

BATTLEBOTS ☺

Join a masterclass in building robots and engage in battles with other robots.

HIGHLIGHTS
OTHER ACTIVITIES ON CAMPUS

ACTIVITIES O&O SQUARE

CONSTRUCTION PROJECTS EXHIBITION

An exhibition showcasing renovation projects of buildings on the campus.

MERCHANDISE SALE

Get your own UT hoodie or something else beautiful here.

WHAT ARE YOU CURIOUS ABOUT?

Science in society, also known as Citizen Science. What challenges do you see? Discuss it with us while enjoying an ice cream.

ON THE ROAD RESEARCH: THE EXPERIVAN ☺

A mobile lab where you can see how easily we conduct field research. Play games like “Where’s Waldo” with the help of eye-tracking technology!

CAMPUS TOUR

Want to see the campus with your own eyes? Take the campus tour! Our campus offers a fascinating learning, living, and working environment with as many facilities and activities as a small city would have to offer.

HIGHLIGHTS
MIS OOK DIT NIET OP DE CAMPUS!

WATER LAB

WHAT DO MEMBRANES DO?

Discover it in our new Water Lab and create them yourself!

HIGH-PRESSURE LAB

HIGH-PRESSURE LAB TOUR ☺

With fun experiments and games for children!

HANGAR

DIY PRODUCTION TECHNIQUE

Roll up your sleeves! Here, you can weld, laser, sheet metal, or cut foam yourself.

GOODBYE!

Hopefully, you had a great time today and we hope to see you again at the University of Twente! We are always open to your questions, comments, or suggestions.

You can reach us through the following channels

www.utwente.nl

info@utwente.nl

www.instagram/utwente

www.linkedin.com/school/university-of-twente

www.facebook.com/utwente

CHECK OUT THE PHOTOS

As soon as possible after the Open House, the photos will be uploaded online. Keep an eye on the channels below. Who knows, you might be in them too!
If you are photographed but do not want to be, feel free to ask our photographer to remove the photo. This is not a problem at all.

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