



VGTU

September 27th VGTU „Linkmenų fabrikas“, Linkmenų g. 28, Vilnius LT-08217

Playing hide and seek with electromagnetic radiation. Odour puzzle "Guess the odour"

Workshop held by the researchers of VGTU Mobile laboratory of environmental research. There will be an odours competition "Guess the odour". Participants will have a chance to measure their mobile phone electromagnetic radiation power density.

Event time: 18:00–20:30 p.m.

Renewable energy sources

Researchers will present the principles of operation of renewable technologies, energy transformation and temperature measurement. Participants of the event will have the opportunity to construct working models from simple materials by themselves.

Event time: 18:00–20:30 p.m.

What is happening in the road structure under vehicle loads?

Scientists will tell you about the bearing capacity of the road structure and what happens when effect not only traffic loads, but also other external factors. Also, researchers will tell you what is doing mobile lab on roads. During the event it will be carried out measurements of road structure bearing capacity using different devices. Participants of the event will be invited to participate in an interactive game about Lithuanian roads and city streets.

Event time: 18:00–20:30 p.m.

Brush bot robots workshop and race

Bring your old mobile phone (with working vibration) and a tooth brush to make your very own brush bot robot and participate in brush bot robot race! You can take your robot home with you.

Event time: 18:00–20:30 p.m.

Make your own electric train and accept the racing challenge!

Make your own metro tunnel prototype out of a copper wire and construct an electric train powered by magnetic field out of batteries and magnets. Of course we are having the fastest train race!

Event time: 18:00–20:30 p.m.

3D model development and its animation

We'll show you how to develop a 3D model and then animate it. Participants get acquainted with virtual environment design methods and animation primers.

Event time: 18:00–20:30 p.m.

TV News: reporting from Robotics World Championship

During the event, participants will be acquainted with the main principles of making TV Daily News, furthermore, they will be able to join the TV news production crew. Robotics World Championship as well as its filming and montage of filmed material for reportage in TV Daily News will be imitated during the event. The participants will be welcome to participate in all above mentioned activities, e.g., to try audio-visual classroom taking video reportages and using green screen technique. The event is organized together with our social partners PI "Robotics Academy".

Event time: 18:00–20:30 p.m.

Entertaining biomechanics of human body: how and why are we moving?

VGTU researchers will prove how entertaining can be biomechanics of human body. For the biomechanical analysis of human motion, we have to have a lot of various data that represent changes of kinematics and kinetics of human body or its parts during its motion. By using inertial measurement units, it is possible to capture motion of a body or its part and based on these measurements to get information about its functioning. During the event, researchers will give an insight into the measurement of various motion parameters of human body and their latest applications in medicine and rehabilitation, interactive motion games, insight into bionics.

Event time: 18:00–20:30 p.m.

Interactive activities, workshops: "Drawing with a laser beam"

The researchers will introduce participants to the principle of laser operation, work peculiarities, letter engraving and help make a small gift.

Event time: 18:00–20:30 p.m.

Mobile, remote-controlled robots

Participants will have a closer look at the remote-controlled robots, will have a chance to control and programme robots themselves. During the event VGTU students will present their own created robots.

Event time: 18:00–20:30 p.m.

Get to know concrete better

Participants will be able to see an actual testing of hardened concrete to see determination of the compressive strength of test specimens. They will also try to identify basic properties that describe strength of materials from visual observations. Researchers will give a short and detailed introduction to concrete, what it is and what kind of factors affect its strengths.

Event time: 18:00–20:30 p.m.

Speed bridge building

Participants will build a bridge model in 5 minutes and test its mechanical properties. Throughout the process, they will receive any help necessary from our scientist. For those, who will show best results - prize and eternal glory awaits!

Event time: 18:00–20:30 p.m.

Creation of happy and healthy public build environment

During the event, the latest work of the Faculty of Civil Engineering - Video neuroanalytics system will be demonstrated. The Video neuroanalytics system developed by Civil Engineering Faculty is capable of recognising the main seven human emotions, emotional state and physiological parameters. It has been designed for collecting and analysing data on people's emotions in public spaces, some additional data was included and combinations of information layers were created; later they will be used for developing emotional and

physiological public spaces maps as well as maps of pollution in public spaces, and personalised recommendations will be produced.

Event time: 18:00–20:30 p.m.

Modern electric drives in transport

Will be presented electric drive usage in transport means. Participants will have opportunity to connect and to test simple electric circuits and to test its functionality.

Event time: 18:00–20:30 p.m.

Go-karts racing

How it looks like? What is the difference between winter and summer racing championships? Student team will present possibilities to join the student activities in the Faculty of Transport Engineering.

Event time: 18:00–20:30 p.m.

Become a real airplane pilot in an aircraft simulator!

During the event, the newest creation of the Antanas Gustaitis Aviation Institute will be showcased - an unmanned or an aircraft simulator. Come and feel like a real airplane pilot!

Event time: 18:00–20:30 p.m.

Virtual ride on Mars

Explore the Martian landscape in virtual reality with Curiosity - the Mars rover by NASA.

Event time: 18:00–20:30 p.m.

Superhero movie BTS

Go behind the scenes of a superhero movie and experience your super powers!

Event time: 18:00–20:30 p.m.

Best Advertising: watch and discuss with professionals!

Watching the best advertisements with VGTU Faculty of Business Management professors and a marketing professional, discussing what was their x factor for success.

Event time: 21:00–22:30 p.m.