

International Ventspils Combat Robotics Hackathon "Combat Robotics"

and

Latvian Robotics Championship 2025 (Ventspils stage)

As part of the European University Alliance "COLOURS", the students of the Alliance universities are offered a great opportunity to participate in a rapid and collaborative engineering hackathon- **the International Ventspils Combat Robotics Hackathon "Combat Robotics", March 21- 23, 2025**. If any international hackathon participants wish, there is a unique opportunity to participate in an additional activity - the **Latvian Robotics Championship 2025**, which will also take place in Ventspils, **on March 22.**, welcoming robotics enthusiasts and curious spectators. Students can participate in this championship with existing robots that they bring with them (read about this below).

Dream it! Make it! Test it! Share it!

Problem/ challenge to be solved in the hackathon: Make a robot for the relevant section that proves to be the best combo of performance, innovation, design and technical solutions during the hackathon.

Background to the Hackathon problem/ challenge: The CoLab event "Higher education and workforce in the Region" a very topical trend emerged from the business community and stakeholders who participated in the event - that regions need not just engineers, but engineers with creativity and initiative. Research and Development departments need innovative ideas and technological solutions to make the production process more efficient and innovative through the use of robotic technologies.

Hackathon Objective: to allow students to apply the theoretical knowledge acquired in their studies in practical projects, to promote engineering and robotics technology development, and to encourage student collaboration within the COLOURS Alliance.

Skills which will be improved: design and critical thinking, prototyping, testing, problem-solving, engineering skills, team management and communication skills.

The theme of the hackathon matches the area of regional specialisation: Advanced industries, manufacturing and smart technologies, electro-mechanical industry, mechatronics and automotive, and Industry 4.0.

Over three exciting days, teams will:

- Develop their combat robots;
- Present their robots to a jury;
- Compete in a specially designed arena with eligible robots.

Based on the “COLOURS” agreement, the prize fund for the Hackathon is up to 2500 EUR. It's possible to receive valuable prizes from event sponsors (rules on the prize fund to be clarified).

Registration for the hackathon: Open until March 10, 2025, by filling out the application form: <https://forms.gle/kDraaQ157YyMdA619>

The construction will take place on-site with the given materials. To successfully implement the project, you must definitely have some basic technical skills, i.e., electrical connections will be given, you must know simple soldering, the design and implementation of the case requires the ability to draw 2D or 3D simple objects for printing, laser cutting. We will try to help within our abilities, but that is why there are 3-4 people in the team (preferably with different skills) in order to successfully implement the intended project, design.

During the hackathon, It will be possible to sleep in the Ventspils University dormitory. (The price for a double room twin-bed per night is 27 EUR). We can also assist with booking accommodations in the city if needed. For more information about accommodation see below in the section *Helpful Information*.

P.S. Contact your WP4 colleagues to enquire about options for student/staff travel expenses.

Chance to participate in Latvian Robotics Championship 2025 (Ventspils stage)

Ventspils Robotics Championship on March 22 is one of the stages of the Latvian Robotics Championship. **To participate in the Latvian Robotics Championship 2025 Ventspils stage, you need a pre-built robot that meets the requirements of one of the disciplines listed below.**

Championship disciplines:

- Mini Sumo Students
- Mini Sumo PRO
- iRobot Sumo
- Antweight 454g (Standard Kit)
- Antweight 454g PRO
- Line Following Students
- Line Following PRO
- Folkrace Students
- Folkrace PRO

Registration for participants and robots: Open until March 11 at 23:59, by filling out the application form: <https://forms.gle/TEejrnq8kGNMw3KA>

Participation is free of charge.

More information about the Latvian Robotics Championship is available at: robotuskola.lv/en

Rules for the disciplines are available here: [Latvian Robotics Championship Rules](#).

Participants will also have access to a preparation area for getting their robots ready for the competition.

Helpful information

How to get from Riga Airport to Ventspils

You can get from Riga Airport to Ventspils University of Applied Sciences in 3 easy steps:

1. Riga Airport → Riga City Center by taxi or by bus
2. Riga City Center → Ventspils by bus
3. Ventspils Bus Station → VUAS walking distance or by bus

To get more information about costs and bus time schedules, check:

https://irp.cdn-website.com/9945ff8b/files/uploaded/How_to_get_from_Riga_to_Ventspils_2024.pdf



Ventspils University of Applied Sciences

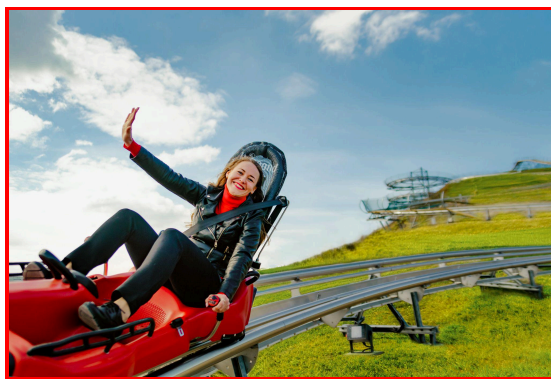


Student Lounge Room



Dormitories





Ventspils

**If you need help with accommodation or you have questions, contact
Eva Fībiga - Zikova eva.fibiga@gmail.com**