Ülemiste City Competition for Innovation Award Scholarship

The scholarship(s) of the Ülemiste City Competition for Innovation Award are intended for a team, who will tackle the challenge(s) or problem(s) defined by the cooperation partner.

The amount of the scholarship fund is **6,000 euros**. The scholarship is funded by Ülo Pärnits Scholarship Fund. The objective of the Ülo Pärnits Scholarship Fund is to support entrepreneurial education and which will highlight competition to drive and help Ülemiste City smarter. Ülo Pärnits was the long-standing head of AS Mainor and the founder of Ülemiste City. Ülo Pärnits was the long-standing head of AS Mainor and the founder of Ülemiste City.

The competition will take place in three stages: submission of the preliminary project outline, approval of the terms of reference of the competition work by the representative of Ülemiste City and submission of the competition work.

All students and supervisors from among the academic staff of the university can apply for the scholarship.

A team can consist of:

- one student;
- a student and a supervisor from among the academic staff;
- up to four students:
- up to four students and a supervisor from among the academic staff.

It is the student's or students' responsibility to find a supervisor to himself/themselves from among the academic staff.

To participate in the competition, the team shall submit a project outline for solving a challenge or problem. The project outline must include: members of the team, the person responsible (project manager), the team's competencies, the roles in the team, the description of the idea/solution (the maximum of 1 A4 page) and the consent of the academic supervisor. The project outline shall be signed digitally by all the members of the team and sent to Katrin Sulg from Mainor AS katrin.sulg@mainor.ee who will register the project outlines and submit them to Ülemiste City for assessment.

Unitl **14th of December**, it is **possible to hold meetings with the representatives of Ülemiste City** to discuss the expectations for the topic. To do that, you should write katrin.sulg@mainor.ee.

Ülemiste City will assess the preliminary project outlines in the light of the defined challenge. **Three best teams will pass to the next round**. Ülemiste City will provide feedback and recommendations for project outlines.

The teams that have passed to the next round will continue their work on tackling the challenge or problem, obtain approval to the terms of reference from the representative of Ülemiste City. In the final round the applicants are expected to write a competition work. **A competition work should focus on the description of the idea/solution in 3000 – 8000 words**. A competition work may include drawings, sketches, charts, tables, etc. When writing a competition work you can consult Ülemiste City, who can provide feedback on the work done. A competition work shall be submitted to the Mainor AS Katrin Sulg katrin.sulg@mainor.ee she will forwarded then to Ülemiste City for assessment.

The first prize is **4000 euros** and others who submit competition works will receive **1000 euros**. Ülemiste City may make a decision to divide the prize between the participants on a different basis. The Supervisory Board of the Mainor AS will approve the results of the competition and notify the teams of the results of the competition.

The scholarship shall be paid to the team members in accordance with the proposal of the team leader. The scholarship to an academic supervisor shall be paid in the form of salary. The scholarship/salary shall be transferred to the bank account notified to the Management Board of the Development Fund.

All potential problems related to awarding of the scholarship shall be solved by the Supervisory Board of the Mainor AS.

Ülemiste City will own the intellectual property created. The team members shall be pointed out as the authors of the intellectual property. The authors shall have the right to use the created intellectual property as a reference project.

Schedule of the Ülemiste City Competition for Innovation Award:

25 September 2019 opening and announcement of the competition

25 September – 14 December meetings held with the representatives of Ülemiste City (up to 1h) to discuss the expectations for the topic of the challenge

15 ecember deadline for the teams for submitting the preliminary project outline
15 anuary 2020 Ülemiste City selects up to three best project outlines

15 January – 15 February the teams confirm the terms of reference with the representatives of Ülemiste City and work on solving the challenge and writing the competition work

15 May deadline for submitting the competition works

16 June 2020 defence of the competition work, assessment of the results (by topic outline), approval by the Supervisory Board of AS Mainor and publication

Topics and problems of the challenge:

1. **"The Challenges and Solutions of Mobility as a Service in Ülemiste City"**

Ülemiste City aims to contribute to improving the mobility of people in Ülemiste, other areas of Tallinn and nearby rural municipalities, make door-to-door mobility more convenient and faster, and reduce traffic jams.

The aim of the study: We ask to bring out the factors which hinder the deployment of mobility as a service (MaaS) the most, such as national regulations, technological obstacles, psychological preferences, habits, etc. and offer ideas for the step-by-step introduction of mobility as a service together with possible technological or other solutions.

2. **"Construction Innovation – the New Opportunities of the City of the Future in Construction"**

Studies related to various construction innovation, which could be important in the development of a City of the Future, are welcome under this topic. For example, the introduction of new technologies, construction materials, soundproofing the buildings, smart elevators, road construction, wind tunnels, mini wind turbines, etc. Below is an example of a possible competition topic, but other topics related to construction innovation are also welcome.

2.1. **"The Tool of Creating a Financial Forecast of the Building's Life Expectancy for Ülemiste City"**

Ülemiste City is the living, working and studying place for an estimated 20,000 people by 2025 and the volume of office spaces exceeds 130,000 m2. New buildings are constantly arising and they need continuous maintenance and upkeep together with the management of incurring costs during their usage period. The assessment and management of the building's life expectancy costs is important for finding places to save money.

The aim of the study: Contribute to the innovation of the building and offer a tool which could be helpful for the developer of Ülemiste City in planning cost estimation, starting from the operation of the buildings until the end of their life expectancy. When and which repair, maintenance and energy costs need to be forecast, which is the lifespan of the building's structures, regular reviews, planned repairs according to the materials and equipment used in the building up until demolition and utilisation.

3. **"Big Data – New Knowledge Arising from the Ülemiste City Campus' Big Data"**

Ülemiste City campus produces data after every millisecond, second, hour and day. Big data which has potential to extend and be used for new smart services and products of the campus. By analysing and studying the large amounts of data, it is possible to discover new patterns and thus gain new knowledge for the future campus.

The aim of the study: The developers of Ülemiste City expecting research papers about data economy to enter the competition, which help to bring either new knowledge in the management of the modern strategic campus, new products or services to the campus. Researches that focus on which data important for Ülemiste City could be collected and why are the most welcome (by using ideas, visions for the future, but also specific examples so far used in the campuses/different fields of activity). The particular work could be focused on a narrower topic within this topic.

Criteria for assessing competition entries:

- Innovativeness
- Potential for implementation
- Efficiency/profitability of the solution (compliance with the set objective)
- Relevance of the competition submission
- Visually and substantially compelling presentation