

Rules and Regulations of the Hackathon 'AI for Green Energy: Smart Energy Challenge'

§ 1. General Provisions

1. The organiser of the '**AI for Green Energy: Smart Energy Challenge' Hackathon** (hereinafter referred to as the '**Competition**') is the **University of Silesia in Katowice**, with the **Faculty of Science and Technology** serving as the coordinating unit.
2. The substantive partner of the event is **Vattenfall**, which is responsible for defining the detailed challenge topic, providing the relevant datasets, and offering expert support to the participants.
3. The project is co-financed by **Metropolis GZM** under the '**Metropolitan Science Support Fund**' programme.
4. The Competition is conducted in a hybrid format, combining on-site participation with the possibility of remote participation for international teams.
5. The official language of communication and project presentations may be English, particularly where international students are involved..

§ 2. Objectives of the Competition

The objectives of the Competition are:

1. To develop students' competencies in the fields of artificial intelligence (AI), programming, and data analysis.
2. To design innovative applications supporting the sustainable management of electricity consumption in households equipped with photovoltaic (PV) systems.
3. To promote interdisciplinary collaboration by integrating knowledge from the fields of energy engineering, computer science, and environmental protection.
4. To foster the international integration of the student community and promote Metropolis GZM as a hub for modern technologies and innovation.

§ 3. Participation Rules

1. The Competition is open to adults who hold student status at a higher education institution located within Metropolis GZM, elsewhere in Poland, or at a foreign higher education institution.
2. Participants shall compete in teams consisting of a minimum of **2** and a maximum of **5** members.
3. Teams are encouraged to include members with diverse competencies, such as software developers, data analysts, and individuals responsible for presenting the project results.
4. Participation in the Competition requires the team to register via the official application form and to accept the GDPR information clause (Appendix No. 1 to these Rules and Regulations).
5. Information regarding the opening of the application period will be published on the following website: <https://us.edu.pl/wydzial/wnst/event/hackowatt/>.

§ 4. Competition Task

1. The teams are tasked with developing a **decision-making model and a user interface** for an application that optimises energy consumption based on the provided scenarios and datasets, including weather forecasts, local electricity grid load data, dynamic tariffs and

energy feed-in prices, user behaviour and habit profiles collected through data acquisition mechanisms proposed by the participants, as well as buffers and grid constraints (e.g., maximum instantaneous energy export limits).

2. The application should utilise **predictive methods** to generate operating schedules for electrical devices in a way that delivers energy savings and contributes to the stabilisation of the energy grid.

§ 5. Hackathon Schedule

The project will be carried out in **four stages**.

Stage 1: Registration

As referred to in § 3, point 4.

Stage 2: Pre-hackathon (one week before the event)

An online kick-off meeting including:

- presentation of the Rules and Regulations, data sources, and challenge objectives by Vattenfall experts and representatives of the Faculty of Science and Technology at the University of Silesia;
- publication of starter packages for participants, including datasets, sample descriptions, and scenarios;
- a Q&A session (consultation session) during which participants may ask questions to organisers, mentors, or experts, who will provide clarifications regarding:
 - the assumptions of the task,
 - technical and substantive requirements,
 - project evaluation criteria,
 - any uncertainties related to the schedule or the course of the hackathon.

Stage 3: Main Hackathon (3 days)

Day 1 – Hackathon Launch

- Official opening of the event and presentation of all scenarios/problems to be solved.
- Consultations with mentors and experts (available during the first part of the day).
- Start of teamwork on application development (24-hour hackathon).

Day 2

- Continuation of teamwork and submission of projects.
- The jury selects the best projects for the final presentations (if there are a large number of teams).

Day 3

- Presentations of the projects shortlisted for the final to the jury.
- Jury deliberations.
- Announcement of results and award ceremony.

Stage 4: Post-hackathon activities (within 3 weeks after the event)

- Preparation of a summary report.
- Consultations with teams interested in further developing their applications.
- Dissemination of the event results through media channels and among Metropolis GZM universities.

§ 6. Jury and Evaluation Criteria

1. The course of the Competition will be supervised by an international jury consisting of:
 - three representatives of the **University of Silesia in Katowice**,
 - two experts from **Vattenfall**,
 - two representatives of foreign higher education institutions.
2. Projects will be evaluated according to the following criteria:

Innovation and creativity of the energy optimisation approach – 30 points

- Originality of the solution.
- Creative approach to energy optimisation.
- Potential for further project development.

Functionality and practical usability of the application (user benefits, intuitiveness) – 30 points

- Intuitiveness and ease of use.
- Actual effectiveness of the application.
- Alignment of functionalities with user needs.

Technical implementation (code quality, model performance, interface) – 20 points

- Quality of the code and solution architecture.
- Effectiveness of the application and user interface.

Presentation and justification of the proposed solutions (clarity and justification of the solutions adopted) – 20 points

- Clarity of the project presentation.
 - Justification and defence of the proposed solutions.
3. A project may receive a maximum score of **100 points**.

§ 7. Awards

1. The Organiser provides financial awards for the three best teams, with a total maximum amount of **PLN 15,000 gross**.
2. The award distribution is as follows:
 - **1st place:** PLN 7,500 gross (approx. EUR 1,764) per 5-person team (including a maximum of PLN 1,500 per person in the case of teams consisting of fewer than 5 members).
 - **2nd place:** PLN 4,500 gross (approx. EUR 1,058) per 5-person team (including a maximum of PLN 900 per person in the case of teams consisting of fewer than 5 members).
 - **3rd place:** PLN 3,000 gross (approx. EUR 705) per 5-person team (including a maximum of PLN 600 per person in the case of teams consisting of fewer than 5 members).

3. The awards will be paid in **Polish zloty (PLN)**.
4. The award amount shall be divided equally among all registered members of the winning team.
5. The award payment will be made by bank transfer to the bank account number provided in the individual declarations submitted by the registered members of the winning teams.
6. Awards granted in the Competition are exempt from personal income tax pursuant to Article 21(1)(68) of the Act of 26 July 1991 on Personal Income Tax.
7. The exemption referred to in paragraph 6 applies to all Competition winners, including participants who are Polish tax residents and participants who are non-residents for tax purposes in Poland (foreign nationals).
8. In the case of winners who are non-residents for tax purposes in Poland, the Organiser, in accordance with applicable legal regulations, shall prepare and submit to the relevant tax authority and the winner an **IFT-1/IFT-1R information form** regarding the amount of income, indicating the award as exempt from taxation.
9. In order to properly fulfil the Organiser's reporting obligations, a winner who is a non-resident for tax purposes is required to provide the Organiser with the personal data necessary for issuing the **IFT-1/IFT-1R information form** within the deadline specified by the Organiser.
10. The condition for payment of the award is that the winner provides, within **7 days from the announcement of the results**, all data necessary for tax settlement, including:
 - **PESEL/NIP number** for Polish tax residents, or
 - foreign tax identification number/TIN, date of birth, and residential address for non-residents, as well as, where required, a tax residence certificate in the form required under the Polish law.
11. The Organiser reserves the right not to select any winners of the '**AI for Green Energy: Smart Energy Challenge**' Hackathon.

§ 8. Liability

1. Participation in the Competition is undertaken at the sole responsibility of the Participant.
2. By signing the team declaration confirming acceptance of these Rules and Regulations (Appendix No. 2 to the Rules and Regulations), the Participant declares that the submitted competition works do not infringe any copyrights or other rights of third parties.
3. The Competition Participant shall bear full and exclusive liability for any third-party claims that may arise in connection with any infringement of third-party rights relating to the submitted works, including, in particular, economic and moral copyrights, industrial property rights (patents, trademark protection rights, rights arising from the registration of industrial designs and utility models), and rights arising from trade secrets.
4. The Participant declares that all activities undertaken to create the competition entry, including, in particular, the use of generative artificial intelligence tools, do not infringe any third-party rights and are carried out in compliance with applicable law.

§ 9. Intellectual property rights

1. All economic copyrights, industrial property rights, and proprietary and moral rights to the applications created and submitted as part of the Competition remain the property of their authors (Participants). The Organiser shall not acquire any economic copyrights or industrial property rights to the competition entries.
2. Upon submitting an application to the Competition, the Participant grants the Organiser a free-of-charge, non-exclusive, territorially unlimited license to use materials presenting the application (e.g., descriptions, screenshots, video presentations, logos), as well as the

application itself, for informational, marketing, and promotional purposes related to the Competition and the Organiser's activities.

3. The license referred to in point 2 is granted for an indefinite period and covers the following fields of exploitation:
 - recording and reproduction of materials using any technique, including digital and printing technologies;
 - public display, playback, and making available in such a way that anyone may access them at a place and time of their choice (in particular, on the Organiser's websites and social media channels);
 - publication in the Organiser's press, informational, and promotional materials.
4. The Participant warrants that the submitted application is the result of their own independent creative work, does not infringe any third-party rights, including copyrights and other intellectual property rights, and that they hold all rights necessary to dispose of the project.

§ 10. Final Provisions

1. The Organiser reserves the right to amend these Rules and Regulations. Any changes will be announced on the Competition website.
2. The Organiser reserves the right to cancel the event. Information regarding the cancellation will be made publicly available via the event website:
<https://us.edu.pl/wydzial/wnst/event/hackowatt/>
3. In matters not regulated by these Rules and Regulations, decisions shall be made by the Main Jury or the provisions of the **Civil Code** shall apply.

Appendices:

- GDPR Information Clause
- Team Declaration of Acceptance of the Rules and Regulations

Appendix No. 1 to the Rules and Regulations

GDPR Information Clause for Participants in the Project 'AI for Green Energy: Smart Energy Challenge', co-funded by Metropolis GZM under the 'Metropolitan Science Support Fund' programme. **Pursuant to Article 13(1) and (2) or Article 14(1) and (2) of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (the General Data Protection Regulation, hereinafter referred to as the 'GDPR'), we hereby inform you about the manner and purpose of processing your personal data, as well as your rights related to data protection, stating that:**

1. Data Controller

The controller of your personal data is the University of Silesia in Katowice.

You may contact the Controller in the following ways:

1. by post at:
ul. Bankowa 12, 40-007 Katowice, Poland;
2. by e-mail:
administrator.danych@us.edu.pl

2. Data Protection Officer

You may contact the Data Protection Officer regarding all matters related to the processing of personal data and exercising your rights connected with such processing in the following ways:

1. by post at:
ul. Bankowa 12, 40-007 Katowice, Poland;
2. by e-mail:
iod@us.edu.pl

3. Purposes and Legal Basis for Processing

Participants' personal data are processed for the purposes of conducting the project recruitment procedure, including undertaking organisational activities related to the project, as well as activities connected with its completion.

The legal basis for processing your personal data is Article 6(1)(c) of the GDPR, i.e.:

- compliance with legal obligations imposed on the Controller related to project implementation, including obligations concerning monitoring, control, evaluation, preparation of statistical analyses, and archival purposes.

Providing personal data is a necessary requirement for participation in the project, including its coordination and financial settlement. Failure to provide the required data will make it impossible to achieve the above-mentioned purposes.

4. Data Retention Period

The Controller will store personal data for the duration of the project, its sustainability period, and the required archival period.

5. Data Recipients

Your personal data may be transferred to public authorities or entities authorised to obtain such data under applicable legal provisions, as well as to other entities cooperating with us, to the extent necessary and for purposes consistent with project implementation.

Your personal data will be disclosed to Metropolis GZM, based in Katowice, for the purposes of monitoring, reporting, communication, publication, evaluation, financial management, verification and audits, as well as for determining participants' eligibility.

6. Rights Related to the Processing of Personal Data

You have the following rights related to the processing of your personal data:

1. the right to access your personal data;
2. the right to request rectification of inaccurate personal data and completion of incomplete personal data;
3. the right to request restriction of the processing of your personal data;
4. the right to object to the processing of your personal data due to your particular situation, in cases where your data are processed on the basis of the Controller's legitimate interest, including for direct marketing purposes, or for the performance of a public task.
Note: in the case of processing for direct marketing purposes, you may object at any time, regardless of your particular situation;
5. the right to lodge a complaint with the supervisory authority responsible for personal data protection, i.e. the President of the Personal Data Protection Office (UODO);
6. the right to withdraw consent to the processing of personal data at any time, without affecting the lawfulness of processing carried out on the basis of consent before its withdrawal. Withdrawal of consent to the processing of personal data is equivalent to withdrawal from the registration procedure and participation in the Project. Consent may be withdrawn by sending a statement of withdrawal of consent to the correspondence address of the Project Coordinator:
paulina.trybek@us.edu.pl
7. your personal data will not be subject to automated decision-making, including profiling.

TEAM DECLARATION OF ACCEPTANCE OF THE RULES AND REGULATIONS

We, the undersigned Members of the Competition Team (hereinafter referred to as the '**Team**'), in connection with our registration to participate in the '**AI for Green Energy: Smart Energy Challenge**' **Hackathon**, hereby submit a joint and unanimous declaration as follows:

1. We have read the Rules and Regulations, fully understand their provisions, and accept all terms and conditions without reservation. We undertake to comply with the rules set forth therein.
2. The competition project/application entitled:

.....
.....
.....

(hereinafter referred to as the '**Competition Work**') has been created independently by the Team and constitutes our original joint creative work.

3. The Team consists of a maximum of 5 members. Each of us holds a share in the economic and moral copyrights to the Competition Work. These rights are in no way restricted or encumbered in favour of third parties outside the Team..
4. The Competition Work does not infringe any rights of third parties, in particular copyrights, industrial property rights, trade secrets, or personal rights.
5. We assume full joint and several legal and financial liability should any of the above statements prove to be untrue. In the event that third parties submit claims against the Organiser due to an infringement of their rights, we undertake to indemnify the Organiser against any liability and to cover all costs associated with defending against such claims.

Data and signatures of Team Members:

Full name:

Signature:

Full name:

Signature:

Full name:

Signature:

Full name:

Signature:

Full name:

Signature:

Place and date: **Katowice**,