

# REGULATIONS

## Vocational Skills Competition

### **ELECTRONICS (PROTOTYPING)**

#### I. ORGANISER

The Vocational Skills Competition **ELECTRONICS (PROTOTYPING)** is organised as part of the project "SkillsComp: Skills competitions as an opportunity for the development of vocational education and training", funded by the European Erasmus+ programme.

The SkillsComp project is implemented in an international partnership and aims to increase the quantity and quality of school-business partnerships by organising vocational skills competitions. The project focuses on vocational schools and technical schools as individual entities that have the potential to plan and implement skills competitions. The project also promotes the international WorldSkills initiative, which demonstrates the importance of vocational skills and, most importantly, motivates young people to learn a trade and excel in their craft.

The electronics industry is very diverse and has evolved into several specialisations. Some engineering technicians/technologists will work on many aspects of electronics, but increasing specialisation and technical development means that specialist engineering technicians/technologists are widely employed.

Key areas of specialisation, which can be seen as a career in itself, include assembling and wiring electronic products; designing prototype circuits to specification and/or to solve specific technical problems; installing and commissioning equipment, including providing customer support; service and maintenance, including on-site/repair/service points and remote service; and monitoring and testing to specifications: circuits, components

and systems. Approval of: circuits, components, systems as fit for purpose or meeting government regulations.

Electronic specialists work in many industries, supported by highly technical specialist equipment. Almost every aspect of today's world relies on or directly benefits from electronic technology. It could be said that all of today's technologies use electronics in one form or another.

An electronics technician/technologist must work with a high degree of accuracy and precision, adhering to detailed specifications and international quality standards and demonstrating extensive technical skills. Due to the continuous development of technology, the Electronics Technician/Technologist must actively ensure that their skills and knowledge are up to date and meet industry standards and expectations. The Engineer/Technologist may work directly with customers and will therefore need to demonstrate excellent customer service and communication skills and work effectively to schedule. When working with customers, the engineer/technologist may need to explain elements of complex electronic principles to help the customer use the equipment correctly. Often, the nature of the establishment in which the electronics engineer/technologist works will require the engineer/technologist to respect confidentiality with regard to commercially sensitive information and to demonstrate integrity and a strong ethical sense.

The electronics specialist will work with a wide range of tools. These tools are often specialised and include measurement equipment. Computers and specialised software tools are used to develop programmes for embedded systems, programmable devices and desktop systems. In addition, tasks will also require the use of specialised hand tools for assembly and circuit maintenance and rework. The dominant technology is surface mount technology (SMT).

The industry also relies on engineers/technologists to implement software solutions used to meet manufacturing requirements.

Engineers/Technologists may also configure and tune automated assemblies, circuits, systems and processes.

The organiser of the Professional Skills Competition **ELECTRONICS (PROTOTYPING)**, hereinafter referred to as the Organiser, is:

Łukasiewicz Research Network – Institute of Exploitation Technology  
ul. Kazimierza Pułaskiego 6/10, 26–600 Radom

Representative of the Organiser:

Małgorzata Kowalska

tel. 48 364 92 06

e-mail: [malgorzata.kowalska@itee.lukasiewicz.gov.pl](mailto:malgorzata.kowalska@itee.lukasiewicz.gov.pl)

## II. PARTNER

The Partner of the **ELECTRONICS (PROTOTYPING)** Vocational Skills Competition responsible for the organisation and content level of the Competition, hereinafter referred to as the Partner, is:

- a) Bohaterów Westerplatte Electronic School Complex  
19 Sadkowska Street, 26–600 Radom.

Representatives of the Partner:

Dr. Artur Nowocień, Eng.

tel. 669-438-845

e-mail: [arturnowocien@elektronik.edu.pl](mailto:arturnowocien@elektronik.edu.pl)

Wojciech Wojciechowski, M.Sc.

tel. 603-041-062

e-mail: [wojciechwojciechowski@elektronik.edu.pl](mailto:wojciechwojciechowski@elektronik.edu.pl)

## III. GENERAL PROVISIONS

The **ELECTRONICS (PROTOTYPING)** Vocational Skills Competition is a competition between young automation technicians, electronics technicians, mechatronics technicians, and robotics technicians, from all over Poland. The competition follows the format of the international EuroSkills and Worldskills competitions, which promote practical vocational learning and cooperation with entrepreneurs. The competition is a one-

person competition for Polish students and gives them the opportunity to qualify for the WorldSkills Poland team and participate in the EuroSkills Herning 2025 competition in the Electronics (Prototyping) competition.

Competition Regulations **ELECTRONICS (PROTOTYPING)** regulates the rules, conditions of participation and is binding for the Organiser and participants.

The right to participate in the Competition is only granted to persons who fulfil the conditions specified in the Regulations. The Competition covers the territory of Poland.

The Organiser appoints the Competition Jury consisting of Experts acting as Judges. The Chapter is an advisory body to the Organiser.

The Regulations are in force from the date of announcement until recalled.

The Organiser and other entities cooperating with him in the organisation of the Competition shall not be liable for any errors or omissions of third parties or any delays or irregularities in the course of the Competition resulting therefrom.

Participation in the Competition is voluntary.

All descriptions of the Competition used in advertising and promotional materials are of a general and informative nature only. Only these Terms and Conditions in their entirety are binding.

The Organiser reserves the right to make changes to these Rules without violating the basic principles of the Competition.

All issues not regulated by these Regulations shall be governed by the provisions of universally binding Polish law.

Additional information on the Regulations can be obtained from representative of the Organiser: Małgorzata Kowalska, tel. 48 364 92 06 and Partner's representative: Artur Nowocień, tel. 669-438-845,

Wojciech Wojciechowski, tel. 603-041-062

#### IV. OBJECTIVES AND THEMATIC SCOPE OF THE COMPETITION

The aim of the Competition is:

- deepening professional knowledge related to the assembly, commissioning and operation of electronic components and systems; operation and programming of electronic systems,
- improve practical skills in the selected profession of electronics technician,
- shaping the ability to acquire knowledge independently,
- acquainting students with current material and technological solutions in the field of electronics,
- giving the students the opportunity to develop their interests and talents,
- preparing for professional employment,
- improving the forms and methods of creative work of teachers with young people.

The topics of the Competition include practical and intellectual skills in the field of

- core curricula for occupations assigned to the electronics and mechatronics (ELM) industry in the classification of occupations for vocational education: automation technician, electronics technician, mechatronics technician, robotics technician;
- specialised topics related to the assembly, commissioning and operation of electronics systems, operation and programming of electronics systems;
- general education subjects: mathematics, physics.

#### V. PARTICIPANTS

The competition is aimed at students of secondary schools assigned to the electronic and mechatronic (ELM) industry in the fields of education of automation technician, electronics technician, mechatronics technician,

technician robotics, not older than 20 on the day of the competition final.

The participant of the professional skills competition **ELECTRONICS (PROTOTYPING)**, takes part in the competition individually.

## VI. STAGES OF THE COMPETITION

The **ELECTRONICS (PROTOTYPING) Vocational Skills Competition** consists of three stages:

### Stage I Online Application for Participation

Application for participation in the COMPETITION can be made on the website <https://skillscomp.itee.radom.pl/>.

Each school/school can enter a maximum of 1 candidate. Schools conduct the preliminaries on their own.

**Applications must be sent by 22 December 2023.**

With the sending of the application for participation, the applicant accepts these Regulations and declares his/her arrival at the Final, as well as at the integration meeting on the date set by the Organiser. Participants of the Competition and their guardians are obliged to provide the Organiser with their data via the application form:

- name and address of the school
- participant data (name and surname, date of birth, telephone number, e-mail)
- guardian's data (name and surname, telephone number, e-mail).

The application form must be completed in its entirety, including all data, information and attachments required by the Organiser.

### Stage II Semi-final

At this stage, the participant is required to complete and document a semi-final task indicated by the Organiser.

The task will consist of designing and making an electronic circuit. It consists of three parts, which at the same time signal the area of knowledge and skills necessary for the final competition.

The assessment will be based on the completed documentation – a report on the completion of the semi-final task, which should include a list of the tools used, the materials needed and a detailed description, confirmed by photographs taken during the work, of all the activities leading to the solution of the problem set in the task.

The semi-final tasks will be assessed by a panel of Experts appointed by the Competition Organiser according to the assessment sheet (Appendix 5). The decisions of the panel of judges are final and binding on the participants. Details can be found in the content of the task made available after registering for the Competition.

Please send the completed semi-final task to: [skills@elektronik.edu.pl](mailto:skills@elektronik.edu.pl).

The **5** finalists will be selected by the Competition chapter from the submitted works.

Non-self-contained work will be disqualified.

### **Stage III Final**

The duration of the Final is 2 days of the main competition and one day dedicated to preparatory activities and the integration meeting.

**The Final will take place on 11-13 March 2024.**

A maximum of 5 participants, selected in Stage II, can compete in the Final. A preliminary version of the schedule for the Final is included in Appendix 4.

The competition tasks will be assessed by a 4-member panel of Experts appointed by the Competition Organiser according to the evaluation sheet made available on the day of the Final. The decisions of the panel of judges are final and binding on the participants.

The winner is determined by the sum of points (maximum is 100 points) for the completion of the competition task. The judging panel assesses the number and correctness of the tasks performed and the time taken to complete them.

All necessary information can be found at: <https://skillscomp.itee.radom.pl/>

## VII. AWARDS

Winner of the Professional Skills Competition **ELECTRONICS (PROTOTYPING)** will be announced after the Competition.

The prizes in the Competition are:

1. **main prize: obtaining the title of "Best of Best",** which is connected with the possibility of qualification to the WorldSkills Poland team and participation in the EuroSkills Herning 2025 competition in Denmark . The winner will also receive a medal, certificate of participation and gifts;
2. **prize for the second place:** medal, certificate of participation, gifts and the title of first reserve for the EuroSkills Herning 2025 competition in Denmark;
3. **Third place prize:** medal, certificate of participation, gifts and the title of second reserve for EuroSkills Herning 2025 in Denmark;

The Organiser and Partners may fund other additional prizes for the winners.

The prizes will be issued in accordance with the applicable provisions of the Personal Income Tax Act of 26 July 1991 (Journal of Laws 2018, item 1509, as amended). Pursuant to Article 21(1)(68) of the Personal Income Tax Act of 26 July 1991 (i.e. Journal of Laws 2021, item 1243) , the value of winnings in competitions in the field of science, culture, art, journalism and sport is free from income tax if the one-off value of such winnings or prizes does not exceed the amount of PLN 2,000.

In the event that the one-time value of the winnings in the Contest exceeds the gross amount of PLN 2,000, the prizes issued in the Contest will be

subject to a flat-rate 10% income tax pursuant to Article 30(1)(2) of the PIT Act, and an additional cash prize of 11.11% of the gross value of the prize in kind (rounded to the nearest whole PLN) will be awarded to each prize. The additional cash prize, will not be disbursed to the participant, but will be used in its entirety to pay the lump-sum income tax, in accordance with the applicable provisions of the Personal Income Tax Act of 26 July 1991 (i.e. Journal of Laws of 2021, item 1243).

The Organiser informs that the acceptance of the nomination and prizes by the participant within the framework of the **ELECTRONICS (PROTOTYPING) Vocational Skills Competition** signifies his/her consent to the publication, recording and multiplication and public use of his/her image (indicating his/her name, town of residence, school) without time and territorial limitations in advertising materials of the Organiser and entities cooperating with it or administering websites, social networks Facebook, Twitter, etc., without additional remuneration. The participant has the right to withdraw the consent, but this does not affect the legality of the processing performed on the basis of the consent before its withdrawal.

## VIII. FINAL PROVISIONS

The Terms and Conditions are valid from the date of announcement until revoked.

The Organiser reserves the right to cancel the Competition without giving any reasons, as well as to cancel the Competition or modify its course and these Regulations at any time in the case of threats resulting from epidemics, health situation, difficulties in access to car, air or pedestrian communication, restrictions resulting from decisions of state, local government bodies or decisions of other entities and institutions (including in particular sponsors).

The Organiser, the partner and other entities cooperating with him/her in the organisation of the **ELECTRONIC PROFESSIONAL SKILLS COMPETITION (PROTOTYPE)**, are not liable for errors and omissions of third persons or entities and any delays or irregularities resulting therefrom.

The decision of the Chapter is final and indisputable.

Participation in the **ELECTRONICS Professional Skills Competition (PROTOTYPING)** is voluntary.

All descriptions of the **ELECTRONICS (PROTOTYPING) VETTING COMPETITION** used in advertising and promotional materials are of a general and informative nature only. Only these Rules and Regulations in their entirety have binding force.

The organiser

- provides (two nights) accommodation for participants and chaperones in a facility selected by the Organiser;
- covers the cost of food for participants and tutors during the 2 competition days (2 breakfasts and 2 dinners)
- covers the cost of the participation of participants and tutors in the integration meeting
- does not cover the cost of travel and local transport

## IX. COPYRIGHTS

Participants in the Competition, guarantee that they hold the relevant copyright and image rights to the submitted documentation of the semi-final task, allowing for its reproduction, dissemination and publication.

By virtue of their declaration, participants accept full legal responsibility. In the event of any claims by third parties, the participants, having been notified by the Organiser, will proceed to clarify the matter without delay and will act against such claims at their own cost and risk, and will settle all legitimate claims and, in the event that they are awarded against the Organiser, will regressively reimburse all covered claims and all related expenses and fees, including litigation and legal fees, and will make good any other damages resulting from the aforementioned third party claims.

Participants, upon receiving qualification for the final of the **ELECTRONICS (PROTOTYPE)** Vocational Skills Competition, transfer to the Organiser the author's economic rights to the submitted materials and the rights to

disseminate the elaborations, materials covering, without territorial and temporal limitations, the following fields of exploitation: recording, multiplication by any technique, introduction into circulation, introduction into computer memory, public performance and public reproduction, exhibition, display, rental, lease, broadcasting by means of wire or wireless vision or sound by a terrestrial station, broadcasting via satellite, simultaneous and integral broadcasting of the work broadcast by another radio or television organisation, publication and distribution via the Internet.

The participants authorise the Organiser, with the right to grant further authorisations, to use any material submitted by the participants for the purposes of the competition, in particular to enter it into the memory of a computer or other device, to process the material and to publish and distribute it in connection with the competition, during the period from the receipt of the nomination for the final of the competition, until the last day of the month in which the competition takes place.

## **X. PROCESSING OF PERSONAL DATA**

The administrator of the personal data processed in connection with the competition is the Organiser, i.e. the Łukasiewicz Research Network – Institute of Exploitation Technology, 6/10 Pułaskiego St., 26-600 Radom, tel.: (48) 364-42-41, fax: (48) 364-47-60, e-mail address: [instytut@itee.lukasiewicz.gov.pl](mailto:instytut@itee.lukasiewicz.gov.pl). The data will be processed by the Organiser for the purpose and to the extent related to the organisation, conduct and settlement in accordance with these Rules. Provision of personal data is voluntary, but failure to do so prevents participation or judging of the Competition.

The Organiser has appointed a Data Protection Officer who can be contacted at e-mail: [iodo@itee.lukasiewicz.gov.pl](mailto:iodo@itee.lukasiewicz.gov.pl), tel: (48) 364-42-41, ext. 294.

Participants' and judges' personal data will be processed in accordance with the conditions set out in 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 (OJ L 119, 4.5.2016,

p. 1-88, RODO), Polish regulations adopted to enable the application of RODO, other applicable laws and these Regulations.

Detailed information is contained in Appendix 7 to the Regulations (Information clause on data processing and use of image) and Appendix 8 (Consent to use image).

## **XI. ATTACHMENTS**

ANNEX 1 APPLICATION FOR PARTICIPATION

ANNEX 2 SEMIFINAL TASK made available upon registration

ATTACHMENT NO. 3 FINAL TASK (description, guidelines for participants, list of infrastructures provided by the Organiser and the Partners, list of permitted tools a participant may bring with him/her) made available on the day of the final.

ATTACHMENT NO. 4 FINALS SCHEDULE preliminary version

ATTACHMENT NO. 5 ASSESSMENT SHEET for the semi-final task

ANNEX 6 THE JUDGE'S CODE OF ETHICS

ANNEX NO. 7 INFORMATION CLAUSE ON DATA PROCESSING

ANNEX NO. 8 CONSENT TO THE USE OF IMAGE