REPORT
The Romanian Agency for Quality Assurance in Higher Education

the type of assessment
PERIODIC EVALUATION and EUR-ACE® label awarding

Bachelor study programme

Electromechanical Automation Systems, Electrical Drive and Electromobility

Faculty of Electrical Power Engineering and Automatics

National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute“

Bachelor's field – 141 Electrical Energetics, Electrical Engineering and Electromechanics / G3 Electrical Engineering
Form of education – full time

06.02.2025

▸ GENERAL CONSIDERATIONS

Through the application registered with the Romanian Agency for Quality Assurance in Higher Education, with no. 2543, from the date of 13.05.2024, the **National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute“** requests the periodic evaluation and granting of the EUR-ACE certification for the bachelor study programme **ELECTROMECHANICAL AUTOMATION SYSTEMS, ELECTRICAL DRIVE AND ELECTROMOBILITY** from the Faculty of **Electrical Power Engineering and Automatics**.

The file was registered at ARACIS with the number 4890 dated 24.09.2024.

The verification of the fulfillment of the mandatory normative requirements, of the criteria, standards, and performance indicators, and of the specific standards was carried out by the Permanent Commission of Specialty – Engineering Sciences II of the ARACIS Council.

The evaluation report was prepared in accordance with the provisions of the External Evaluation Methodology, the standards, the reference standards, and the list of performance indicators of the Romanian Agency for Quality Assurance in Higher Education approved by Government Decision no. 915 of 14/12/2017 regarding the amendment of the annex to Government Decision no. 1.418/2006 and the Guide to the activities of evaluating the quality of university study programmes and higher education institutions, as well as standards and guidelines for EUR-ACE certification®of study programmes in the fundamental field engineering sciences, respectively ofThe external evaluation methodology of study programmes in the field of engineering sciences with a view to the periodic evaluation and granting of the EUR-ACE certification®.

▸ RESULTS OF THE ASSESSMENT CARRIED OUT BY THE PERMANENT COMMISSION OF SPECIALTY

The following criteria, standards, and performance indicators for the periodic evaluation of the undergraduate university study programme are met/partially met/not met.

	Domains, criteria, standards, performance indicators Findings and recommendations	Degree of compliance[1]
	DOMAIN A. INSTITUTIONAL CAPACITY	
	CRITERIUM A.1 Institutional, administrative, and managerial structures	
	Standard A.1.1 Legal organisational and operating framework	
1.	The study programme is established and operating according to the law (including with regard to the compliance with the schooling capacity). **Findings from the Self-Evaluation Report/ Visit:** According to Self-Assessment Report: "The educational-professional program (EPP) "Electromechanical automation systems, electrical drive and electromobility" at the first (bachelor's) level of higher education in the speciality 141 "Electrical energetics, electrical engineering and electromechanics" was developed in 2018 and put into effect by order of the rector of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"." The previous name of the study programme was "Electromechanical Automation Systems and Electric Drives". Starting with 2018, the term "electromobility" was added and today's name of the study program is Electromechanical Automation Systems, Electrical Drive and Electromobility (EASEDEM). The study programme of the first bachelor's level EASEDEM is managed by the Department of Electromechanical Systems Automation and Electrical Drives, Faculty of Electrical Power Engineering and Automatics of "Igor Sikorsky Kyiv Polytechnic Institute" (https://epa.kpi.ua/en/bachelor-student-learning/educational-program/#opp_description). The NAQA conducts accreditation (the ability of a higher education institution to issue documents on education), and the Ministry of Education and Science (MES) issues a licence to conduct educational activities. Currently, according to the information from https://epa.kpi.ua/wp-content/uploads/2023/06/cert_2023_bach.png, the educational programme EASEDEM operates within the framework of the licence issued by the National Agency for Quality	compliance

[1] **Degree of compliance with the standard**: *compliance/ partial compliance/ noncompliance*

	Assurance of Education - NAQA (Certificate № 5475, date of issue – 07/07/2023, validity period - 5 years, until 01/07/2028, https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). The enrolment capacity in the first year of study is 58, according to the information from Annex S01 – Enrollment capacity. The total number of students enrolled to the EASEDEM programme, in the academic year 2024-2025, is 90: 23+31+23+13. **Recommendations:** - none.	
2.	*Other requirements provided in the standards specific to the Bachelor's field/ study programme*.[2] **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
A.1.2 Mission and aims of the evaluated study programme		
1.	The mission and aims of the study programme are in accordance with the mission of the higher education institution and the requirements identified on the labour market. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "According to the Development Strategy of Igor Sikorsky Kyiv Polytechnic Institute for 2021-2025 (https://cutt.ly/vJRfsoR), the most important areas of activity of higher education institutions are the provision of fundamental education of applicants using a physical and technical model, which involves the synthesis of deep general scientific and natural knowledge and engineering art and provides opportunities for formulation and solving complex problems of process management, comprehensive and systematic assessment of the consequences of management decisions, which creates conditions for the sustainable development of society in fundamental natural and engineering directions." According to SAR: "The purpose of the educational program is to train specialists who are able to solve complex specialized tasks and practical problems in the electrotechnical, electromechanical and electromobile industries, which involves the application of theories, principles of operation of electromechanical automation systems and electrical drives, and who are able to work in conditions of sustainable innovative scientific and technical development of society, also, in the conditions of transformation of the labor market through interaction with employers and other stakeholders." According to SAR: "The interests of employers are taken into account in the desire of the department to train specialists with specific professional competences who, immediately after graduation, would be ready to implement their knowledge, skills and abilities at the workplace to carry out professional activities in the field of electromechanics. … Employers also take an active	compliance

[2] *The degree of compliance with other requirements provided by the specific standards of the ARACIS permanent speciality commission shall be indicated in this item, if applicable*

	part in providing various proposals for improving the EPP, in particular, during the last update of the EPP, the proposals of the "Technoserviceprivod" company, the Kyiv Plant of Lifting and Transport Equipment and the Institute of Electrodynamics were taken into account (https://cutt.ly/b9oO3ow)." The documentation about Igor Sikorsky Kyiv Polytechnic Institute Strategy for 2020-2025 is accessible on the website: https://kpi.ua/files/2020-2025-strategy.pdf. The mission and aims of the EASEDEM programme, approved by the Academic Council of KPI (minutes of meeting No. 5 of 13.05.2024) correspond to the mission of the higher educational institution (https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). **Recommendations:** - none.	
2.	The declared programme aims and outcomes are rigorously defined and clearly expressed. They are presented to the candidates and other direct and indirect beneficiaries. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The educational program is structured in such a way that students acquire knowledge, skills and abilities both from the fundamental educational components of the specialty 141 "Electrical energetics, electrical engineering and electromechanics", and from the specialized ones that relate to the educational program itself. The uniqueness of this educational program is that it has a significant multidisciplinary structure, which includes such classic areas as "electric drive" and "electromechanical systems", "control theory" and "automated electric drive", as well as "industrial automation" and "electromobility". The structure of the educational programme is presented in such a way that all these directions have clear logical connections and, in combination, give graduates the opportunity to find a promising job in various fields of specialization." Educational programme profile is clear descripted on the website: https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf. Description of the educational and professional programme is publicly available and can be viewed on the department's website (https://epa.kpi.ua/en/bachelor-student-learning/educational-program/#opp_description). **Recommendations:** - none.	compliance
3.	The name of the study programme is in accordance with its aims, content and outcomes. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The educational-professional program (EPP) "Electromechanical automation systems, electrical drive and electromobility" at the first (bachelor's) level of higher education in the speciality 141 "Electrical energetics, electrical engineering	compliance

	and electromechanics" was developed in 2018 and put into effect by order of the rector of the National Technical University of Ukraine " Igor Sikorsky Kyiv Polytechnic Institute ". Until 2018, the name of the study program was "Electromechanical Automation Systems and Electric Drives". The current name of the study programme is "Electromechanical automation systems, electrical drive and electromobility", and corresponds to its goals, content, results and reflects its main purpose: „...to train specialists who are able to solve complex specialized tasks and practical problems in the electrotechnical, electromechanical and electromobile industries, which involves the application of theories, principles of operation of electromechanical automation systems and electrical drives...”. Recommendations: - none.	
4.	There is consistency between: (i) the programme mission and aims, (ii) the professional profile of the graduates and the activities carried out by students during the study programme (iii) expected outcomes obtained by students during the learning process. Findings from the Self-Evaluation Report/ Visit: According to SAR: “The interests of stakeholders from the academic community are taken into account at the following stages of the process of forming goals and projected learning outcomes: discussion of EPP with the academic community during participation in round tables, seminars, at meetings of the faculty and department council (https://cutt.ly/f9oAvzu); holding meetings of the department, scientific and methodical seminars for the purpose of reviewing the content and filling in the syllabuses of educational components (https://cutt.ly/P9oAEXu); analysis of the wishes of all participants in the educational process, including students' determination of optional educational components (EC) (https://cutt.ly/gJROdri) and improvement of mandatory ones.” According to SAR: “There is a complete correlation between the mission, the professional profile of the graduates and the expected results. Learning outcomes (competencies, knowledge, etc.) are a detailed representation of the program's mission and goals. The professional profile of graduates and their activities form the methodological and professional basis for the acquisition of specified results during the educational process. The subject matter, content and professionalism of the diploma projects are a confirmation of the coherence between the mission, profile and learning outcomes.” This consistency is ensured by the fact that programme learning outcomes and general and professional competencies of graduates are provided in with the necessary components of the study programme. Recommendations: - none.	compliance

5.	The higher education institution does regular consultations with the representatives of the academic sector, including students, of the industry sector of the labour market about the programme aims and outcomes. Such consultations take place in an organised arrangement and they are documented. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “In the city of Kyiv and the Kyiv region, there are a number of enterprises whose activities are related both to the specialty 141 "Electrical energetics, electrical engineering and electromechanics" in general, and to electromechanical systems, automation and electric drive (https://cutt.ly/neWZLo5b), in particular, "NEC Ukrenergo", KP "Kyivteploenergo", PJSC "DTEK Kyiv Electric Networks ", PJSC "DTEK Kyiv Regional Electric Networks", LLC "Polytechnoservice", LLC "Schneider Electric", LLC "SV ALTERA", SE Siemens Ukraine, LLC "Technoservice privod" and other.” According to SAR: “Every year, the Educational and Scientific Center of Applied Sociology "Socioplus" conducts a survey of graduates and employers regarding satisfaction with acquired competencies. Consultations with representatives of the scientific and industrial sector are held annually during the employment period of graduates, at the profession fair, during internships by students. The results of consultations are documented in the form of meeting protocols and letters from institutions (https://cutt.ly/49oRgwJ). Chair holds consultations with partner institutions twice a year according to an agreed schedule during a student's internship. (https://cutt.ly/b9oO3ow).” SAR highlights some examples: - senior researcher, deputy director for scientific work of the Institute of Electrodynamics of the National Academy of Sciences of Ukraine I.A. Shapoval was included in the project group., (https://cutt.ly/49oRgwJ), who is also involved in teaching the EC "Power converters of electric drives"; - the proposals of the "Technoserviceprivod" company, the Kyiv Plant of Lifting and Transport Equipment and the Institute of Electrodynamics were taken into account (https://cutt.ly/b9oO3ow); - in 2021, Prof. V.M. Myhalskyi (Institute of Electrodynamics of the National Academy of Sciences of Ukraine), and other employers are involved in one-off lectures, seminars, etc. (https://cutt.ly/Y9oP0ap). Also, some activities involving department and employers are presented on website: https://epa.kpi.ua/bachelor-student-learning/cooperation-with-employers/. In accordance with the Regulations on the internal quality assurance system in higher education (https://osvita.kpi.ua/sites/default/files/downloads/REGULATIONS%20_Eng.pdf), a survey of students is conducted and their proposals are taken into account. The website of the Department of Electromechanical Systems Automation and Electrical (https://epa.kpi.ua/en/bachelor-student-learning/questioning/) present the Questionnaire and the results (Surveys of higher education applicants and their results) valid for 2021/2022 to 2023/2024. During the discussion to the visit, it has been confirmed that:	partial compliance

	- exists a work group for the study programme; this team consist of 3 teachers, 1 stake holder and 1 student; - at the end of each semester, students take a survey about the quality of the educational process, the quality of assessment; - companies and faculty have meetings to discuss the curriculum content. The protocols from the mentioned links (https://cutt.ly/49oRgwJ, https://cutt.ly/b9oO3ow) are from 2021. The Report (SAR) does not contain documents (minutes/reports presenting regular consultations, framework/plan of meetings with employers). **Recommendations:** - consider documenting meetings with stakeholders (records, minutes, etc.), including the topics of discussion, dated and signed.	
6.	The methodology and timeline of the consultations are adequate to identify the educational needs established by the employers (with their predictable transformations as a result of foresight studies, and development strategies at regional, national and European level). **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Consultations with representatives of the scientific and industrial sector are held annually during the employment period of graduates, at the profession fair, during internships by students. The results of consultations are documented in the form of meeting protocols and letters from institutions (https://cutt.ly/49oRgwJ). Chair holds consultations with partner institutions twice a year according to an agreed schedule during a student's internship. (https://cutt.ly/b9oO3ow). … The interests of employers are taken into account in the desire of the department to train specialists with specific professional competences who, immediately after graduation, would be ready to implement their knowledge, skills and abilities at the workplace to carry out professional activities in the field of electromechanics.” According to the discussion at the evaluation, at the level of the study programme exists a work group, consisting of 3 teachers, 1 stake holder and 1 student. Their recommendations are analysed and – if case – after approval, are implemented in curricula, starting with new academic year.	compliance
7.	The educational needs established by the employers have contributed to the definition of the programme mission, aims and outcomes. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The educational program takes into account the suggestions of stakeholders. The interests of employers are taken into account in the desire of the department to train specialists with specific professional competences who, immediately after graduation, would be ready to implement their knowledge, skills and abilities at the workplace to carry out professional activities in the field of electromechanics.” Examples:	compliance

	- during the last update of the EPP, a senior researcher, deputy director for scientific work of the Institute of Electrodynamics of the National Academy of Sciences of Ukraine I.A. Shapoval was included in the project group., (https://cutt.ly/49oRgwJ), who is also involved in teaching the EC "Power converters of electric drives"; - the proposals of the "Technoserviceprivod" company, the Kyiv Plant of Lifting and Transport Equipment and the Institute of Electrodynamics were taken into account (https://cutt.ly/b9oO3ow); - in 2021, Prof. V.M. Myhalskyi (Institute of Electrodynamics of the National Academy of Sciences of Ukraine), and other employers are involved in one-off lectures, seminars, etc. (https://cutt.ly/Y9oP0ap); - as a result of cooperation with representatives of the academic community (https://cutt.ly/b9oO3ow), it was proposed to deepen the study of power converter devices of electric drives, as ai result of which the EC "Power converters of electric drives" was transferred to the mandatory ECs, and the catalog of selective ECs was also updated on 2024-2025 academic year, in particular, the EC "Semiconductor converters of electrical energy parameters in electromechanical systems", "Automation of analysis of dynamic systems" (https://cutt.ly/5eWLZx9H) have been added. According to discussion at the evaluation visit: - when reviewing the study programme based on the proposals received from employers, the mission, aims and outcomes were clarified; - companies send proposal for projects, invite teaching staff to visit their companies and receive feedback from faculty; employers consider that the impact of the university on their companies is crucial; - the topic of the diploma project is formed taking into account the wishes and needs of employers and industrial partners	
8.	The programme outcomes have been established in terms of what students are expected to know (the correspondence between the content of the educational process and the learning outcomes mentioned in the diploma supplement), understand and/or be able to demonstrate after completing the learning process. They are in full agreement with the criteria of EUR-ACE®/ EAFSG, falling into the 8 learning areas: 1- Knowledge and Understanding; 2- Engineering Analysis; 3- Engineering Design; 4- Investigations; 5- Engineering Practice; 6- Making Judgements; 7- Communication and Teamwork; 8- Lifelong Learning. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The standard of higher education in specialty 141 for the first (bachelor) level was approved and put into effect by Order of the Ministry of Education and Science of Ukraine No. 867 dated 06/20/2019 (https://cutt.ly/i9oHfjE). The standard provides for graduates to acquire integral, general and special professional competencies (К01-К21) with corresponding program learning outcomes (ПР01-ПР19), which are ensured by the teaching of mandatory components of the EPP, which are fully reflected in it.” According to SAR: “According to the current legislation of Ukraine, the EPP itself is the main document of educational and methodical support of the EC, which is regulated by the "Regulations on the organization of the educational process in Igor	compliance

	Sikorsky KPI" (https://cutt.ly/m9oHWGA). … The provision of programmatic learning outcomes by relevant ECs is represented by the matrix of programmatic learning outcomes, which are reflected in the EC curriculum and the structural and logical scheme of the EP (https://cutt.ly/2eWZNieP)." Examples of Programme learning outcomes: - PRN 01: To know and understand the principles of operation of electrical systems and networks, power equipment of electrical stations and substations, protective grounding and lightning protection devices and be able to use them to solve practical problems in professional activities. - PRN 06: Apply software, microcontrollers and microprocessor technology to solve practical problems in professional activities. - PRN 20: To know and understand the principles of control of linear automatic control systems. Correspondence between the subjects included in the curriculum and the EAFSG learning areas (academic year 2024-2025) are presented in Annex 8 - VS. Examples from Annex 8 - VS: - subject Electric Machines cover the following EAFSG learning areas: Engineering Analysis; Engineering Design; Investigations; - subject Automatic Control Theory cover the following EAFSG learning areas: Knowledge and Understanding; Engineering Design; Making Judgements. - subject Modeling of Electromechanical Systems cover the following EAFSG learning areas: Engineering Design; Investigations; Lifelong Learning. During the discussion with students, it has been mentioned that: - they learn about all the requirements for awarding points from the syllabi and curricula of the disciplines; also, according to students, all teachers inform them about the relevant assessment criteria at the first lesson of the relevant discipline. **Recommendations:** - none.	
9.	The programme outcomes allow graduates to get a job on the labour market in positions which correspond to the obtained qualification. The graduates of the study programme have a clearly defined perspective of the occupation on the labour market. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The structure of the educational program is presented in such a way that all these directions have clear logical connections and, in combination, give graduates the opportunity to find a promising job in various fields of specialization. EPP is focused on acquiring knowledge and skills that take into account the regional context in terms of the diversity of scientific institutions and employer enterprises."	compliance

	"Specialists are able to hold positions, the qualification requirements of which require a bachelor's degree in electrical enginetics, electrical engineering, and electromechanics. Graduates can be employed in positions (according to the current Classifier of Professions of Ukraine DK 003:2010): 3113 Supervisor of electromechanical service; 3113 Escalator service manager; 3113 Electromechanic; 3113 Electromechanic of group handling machines; 3113 Electromechanic of the station; 3113 Electromechanic of lifting installations; 3113 Electromechanic mentor; 3113 Electrician technician; 3113 Design-technician (electrical engineering); 3113 Technologist- technician (electrical engineering). During the discussion with graduates, it has been mentioned that: - skills acquired during the bachelor's degree are very useful on the labor market in Ukraine and abroad, and the diploma was helpful to get a job. **Recommendations:** - none.	
10.	The study programme is designed in accordance with: National Qualification Framework (CNC), National Register of Higher Education Qualifications (RNCIS) or the European Qualification Framework (https://ec.europa.eu/esco/portal/home), and also with the ARACIS specific standards in the Bachelor's field. **Findings from the Self-Evaluation Report/ Visit:** The programme learning outcomes meet the requirements defined in the National Framework of Qualifications of Ukraine (NQF of Ukraine - 6 level, QF-EHEA – 1 cycle, EQF-LLL – 6 level), which corresponds to the first bachelor level of training for higher education applicants (https://mon.gov.ua/ua/tag/natsionalna-ramka-kvalifikatsiy). There are many similarity as compared to the requirements of Romanian CNC / RNCIS / ARACIS specific standards. **Recommendations:** - none.	compliance
11.	The particular aspects of the evaluated study programme are rendered evident as compared to other study programmes provided by the institution from the same Bachelor's field. **Findings from the Self-Evaluation Report/ Visit:** Not applicable. **Recommendations:** - none.	Not the case
12.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case

	A.1.3 Academic integrity	
1.	The higher education institution has a code of university ethics and deontology / academic integrity by which it defends the values of the academic freedom, university autonomy and ethical integrity, possesses practices and applies clear mechanisms to permanently ensure vigilance regarding possible frauds or deviations from its academic (didactic and scientific research) activities, including active measures to prevent and eliminate any form of plagiarism.[3] **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The policies, standards and procedures for compliance with academic integrity are defined in the following documents: • Code of Honor of Igor Sikorsky Kyiv Polytechnic Institute, developed on the basis of the experience of the best universities in the world; • Regulations of the academic plagiarism prevention system at Igor Sikorsky Kyiv Polytechnic Institute (approved by Order No. 1/76, February 25, 2020); • Regulations of the commission he ethics and academic integrity of Igor Sikorsky Kyiv Polytechnic Institute; • Order of holding events for the formation and development of a culture of academic integrity in Igor Sikorsky Kyiv Polytechnic Institute (HOH/22/2021, 02/04/2021); • Regulations of the examination commission and certification of applicants for higher education in Igor Sikorsky Kyiv Polytechnic Institute. Observance of academic integrity is facilitated by checking all academic texts for signs of plagiarism using the Unicheck/StrikePlagiarism program and placing them in the Electronic Archive of s scientific and educational materials of Igor Sikorsky Kyiv Polytechnic Institute - ELAKPI (https://ela.kpi.ua). The university has: the Committee he Ethics and Academic Integrity of the Scientific Council of Igor Sikorsky Kyiv Polytechnic Institute, working group he academic integrity. Documents are systematized on the official website of the university.” All information are available on the website: The Code of Honor of National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» (https://kpi.ua/code); Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPI (https://osvita.kpi.ua/node/47); Regulations on the commission on ethics and academic integrity of Igor Sikorsky KPI (https://kpi.ua/files/etic_comission.pdf); Order “On holding events for the formation and development of a culture of academic integrity at Igor Sikorsky KPI” (https://document.kpi.ua/2021_HOH-22); Academic integrity. Legal documents (https://kpi.ua/academic-integrity); Plagiarism check service “Unicheck” (https://unicheck.com/uk-ua). During the discussion with graduates, it has been mentioned that:	compliance

[3] *To be evaluated and filled-in only in the following cases: a) – if, on the date of evaluating the study programme, higher education institution was not yet subjected to the institutional evaluation; b) – if, as a result of the previous institutional evaluation, the institution was rated other than with “high degree of confidence”.*

	- they were informed about aspects of ethics, work with different sources (example: preparing of diploma); they know that KPI has procedures for antiplagiarism. Recommendations: - none.	
2.	The higher education institution promotes and applies at the level of the evaluated study programme clear policies and documents regarding the academic integrity, protection of the copyright and against plagiarism, fraud and any form of discrimination, according to the valid legislation and code of university ethics and deontology approved by the University Senate. Findings from the Self-Evaluation Report/ Visit: According to SAR: “The promotion of academic integrity at the university is carried out through a number of measures: 1) participation of institution of higher education in the Academic Integrity and Quality of Education Initiative Academic IQ project (2020-2022); 2) informing applicants about the Code of Honor (at the stage of signing the contract), compliance with the principles of academic ethics, increased responsibility for compliance with the rules of citation and references, including regular explanatory work of the curator, teachers; 3) the work of the Center for Information Support of Education and Research scientific and technical library of the university named after GI Denisenko, including conducting webinars, in particular, from SAIUP. The latest: "Academic integrity and preparation of educational and methodological materials" (September 15, 2021), "Integrity: values in daily actions. Works to order" (October 20, 2021). Recordings of a number of webinars are available online; 4) the work of the Commission of the Scientific Council he Ethics and Academic Integrity (popularization is encouraged), the working group he issues of academic integrity; 5) educational and scientific center of applied sociology "Socioplus" regularly conducts surveys of applicants, scientific and pedagogical staff Applicants are informed about the policy of academic integrity and 77.8% of them noted its compliance. Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" is pproved by the Decision of the Scientific Council of April 5, 2021 (Protocol No. 4).” Also, according to SAR: “A technological tool for combating violations of academic integrity is the use of specialized software for checking academic texts for coincidence/similarity using the Unicheck/StrikePlagiarism system. Manuscripts of monographs, textbooks, manuals, articles, theses submitted that editorial offices, term papers/projects, qualification papers at the stage of admission that defense are checked for plagiarism.” The system for preventing violations of academic integrity at the university is motivated by: - the Code of Honor of Igor Sikorsky Kyiv Polytechnic Institute (http://kpi.ua/code); - Regulations on the system of prevention of academic plagiarism at Igor Sikorsky Kyiv Polytechnic Institute	compliance

	(https://osvita.kpi.ua/node/47); - the Order No. HOH. 22.2021 dated 02.04.2021, "On holding events for the formation and development of a culture of academic integrity at Igor Sikorsky Kyiv Polytechnic Institute" (https://document.kpi.ua/2021_HOH-22). During the discussion with graduates, it has been mentioned that: - they were inform about aspects of ethics, work with different sources (example: preparing of diploma); they know that KPI has procedures for antiplagiarism. **Recommendations:** - none.	
A.1.4 Public liability and responsibility [3]		
1.	The institution possesses practices for internal audit regarding the main fields of the university activity. An academic audit report reviewed by the Senate and a plan of measures to improve activity are prepared on annual basis. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “According to the order No.HOH/253/2022 dated 15.09.2022 "Conducting self-analysis of the activities of chairs (internal accreditation)" and similar orders every next year a self-analysis of Igor Sikorsky KPI chairs activities is conducted. The purpose of annual self-analysis is internal higher education quality assurance and determination of the compliance of university chairs with the requirements of licensing conditions for teaching activities as well as to criteria for external accreditation.” Order No. HOH/253/2022 dated September 15, 2022 "On conducting a self-analysis of the activities of departments (internal accreditation)" is available on website: https://document.kpi.ua/2022_HOH-253. On the SAR or KPI website, the evaluation team could not find an internal audit report of the institution. During the discussion with Quality group, it has been mentioned that: - Sociology Center analyse the categories of questionnaires (students, employers, graduates) every academic year; also, Sociology Center elaborate reports valid at different levels (university, faculties, departments, study programmes) and on request, reports valid for other sectors from KPI. Key Points of the Audit: ● Conducting Authority: State Service of Education Quality of Ukraine. ● Legal Basis: The audit was conducted in accordance with Resolution No. 982 of the Cabinet of Ministers of Ukraine, dated November 21, 2018, which establishes criteria for assessing the degree of risk from activities in the field of higher education and determines the periodicity of inspections. ● Information Source: Data was taken from the Unified State Electronic Database on Education. ● Reference to Legislative Framework: Resolution No. 982.	compliance

Audit Findings:
The audit results are positive, confirming that KPI meets the quality criteria for higher education institutions established by national regulations. The evaluation assessed various aspects of educational activities, governance, academic processes, and compliance with national standards.
The results indicate that KPI successfully maintains high standards in education and operational processes. Additionally, the assessment may include recommendations for further improvements to enhance the efficiency and effectiveness of educational and administrative practices.
On the implementation of the Rector’s Order No. HOH/253/2022 dated September 15, 2022, "On conducting a self-analysis of the activities of departments (internal accreditation)," an internal audit was conducted.
Key Aspects of the Audit:

1. Educational Programs Overview
   - The department offers Bachelor’s, Master’s, and PhD programs.
   - Presence of certified educational programs and courses.
   - Dual education system is available, enhancing practical training for students.
   - The percentage of certified online courses on the "Sikorsky" platform is 7%.
2. Student Enrollment
   - The number of students in Bachelor's and Master's programs exceeds the minimum requirements, indicating the popularity of these specializations.
   - The number of PhD students meets the established norms, but the efficiency of PhD training remains a challenge (low dissertation defense rate).
   - Limited student mobility – only one PhD student participated in international internships in the last three years.
3. Staffing
   - The staff structure meets the standards: 86% of faculty members hold academic degrees.
   - 75% of PhD program lecturers are doctors of science or professors, indicating high qualifications.
   - Participation of faculty members in international training programs: 6 people in the last five years.
   - Limited English-language teaching (low number of certified faculty members).
4. Research Activity
   - High scientific productivity:
     - 8.67 articles in specialized Ukrainian journals per faculty member.
     - 6 publications in Scopus/Web of Science per faculty member (three times the required minimum).
     - Average citation count in Scopus – 139, reflecting the impact of research activities.
   - Textbook and monograph publication is below the desired level.

5. Funding
    - Government funding from the Ministry of Education and Science (MES) – 119,250 UAH per faculty member.
    - Revenue from research projects for enterprises – 22,667 UAH per faculty member.
    - Grants from international research programs – 104,911 UAH per faculty member.

Audit Conclusions:
Overall positive results: the department meets key educational and research standards.
Key challenges:

- Low dissertation defense rate among PhD students.
- Limited international mobility of students and faculty.
- Lack of English-speaking faculty members.
- Need to increase the number of published educational materials.

Recommendations:

- Enhance international cooperation, increasing internships and academic exchanges.
- Provide more support for PhD students to improve dissertation defense rates.
- Expand the number of certified online courses.
- Increase English-language teaching to attract international students.

The self-analysis identified structural challenges in certain departments. The Department of Electrical Power Stations and the Department of High Voltage Engineering and Electrophysics were found to not meet the required criteria, leading to their restructuring. The former was merged with the Department of Renewable Energy Sources, while the latter was integrated into the Department of Theoretical Electrical Engineering, with corresponding adjustments to educational programs.
Despite these structural changes, other faculty departments were confirmed to meet accreditation requirements. Educational programs are maintained at the bachelor’s, master’s, and PhD levels, although there is a noted decline in enrollment for postgraduate programs. Faculty staffing meets regulatory standards, yet there is a low rate of dissertation defenses among PhD students. Scientific activity remains high, particularly in terms of publications in Scopus and Web of Science.
The accreditation commission approved the current structure and educational programs, confirming compliance with academic standards. Bachelor’s programs successfully passed accreditation, while the master's programs remain under review. The measures taken in response to the internal audit aim to enhance educational efficiency and strengthen research performance across the faculty.

Recommendations:

- draw up a plan of measures following the recommendations resulting from the audit.

	A.1.5 Managerial activity of the institution [3]	
1.	The higher education institution has Internal Rules of Procedure and a Regulation for the Academic Activity of Students. The regulations are in accordance with the legislation in force and they are approved by the University Senate. Findings from the Self-Evaluation Report/ Visit: The internal regulations of the National Technical University of Ukraine "Igor Sikorskyi Kyiv Polytechnic Institute" (https://kpi.ua/admin-rule, https://kpi.ua/en/admin-rule) are approved by the rector's order No. 7-34 dated 04/21/2017. The procedure for the complex monitoring of education quality by specializations is available on website (https://kpi.ua/monitoring-law, https://kpi.ua/en/monitoring-law). A number of provisions that highlight and detail various aspects and procedural issues of the educational process complement the Regulations (https://osvita.kpi.ua/docs). Recommendations: - none.	compliance
2.	The institution of higher education should prove that it has organised the record of the academic activity of the students in accordance with the legislation in force, by forms homologated in this respect (catalogues, summary documents, academic records, transcripts, diplomas etc.). Findings from the Self-Evaluation Report/ Visit: According to SAR: “Accounting of students educational activities at Igor Sikorsky KPI takes place in the automated electronic information and telecommunication system "Electronic Campus", as well as in the "Deanery" system integrated in the information and telecommunication system "Electronic campus". The website of the chair presents catalogs and descriptions of general, normative and selective educational disciplines. All diploma projects are stored in the electronic archive of diploma projects. General information about students and teaching staff of the university is also available in the Unified State Electronic Database of Education, which is an automated system for collecting, registering, processing, storing and protecting information and data of education. The owner of the Unified State Electronic Database of Education is the state, the administrator is the Ministry of Education of Ukraine, and the technical administrator is the state enterprise "Inforesurs".” All student learning results are registered in the "Electronic Campus”, that which any student has permanent access. The results obtained by the student during the years of study are registered in the academic certificate and certified he the basis of the Supplement that the diploma. The "Electronic Campus" system (https://ecampus.kpi.ua/), which is the only one for the entire University, was created and is functioning. The scholar documents of the students have been verified at the Deputy Dean’s office, during the on-site visit on January 16 of evaluator prof. Volodymyr Pavlenko.	compliance

	Recommendations: - none.	
3.	During the period of operation subsequent to the previous external evaluation, the institution of higher education has complied with the standards based on which the provisional operation / accreditation / accreditation maintenance – as the case may be – was granted. **Findings from the Self-Evaluation Report/ Visit:** The information about the educational process at Igor Sikorsky Kyiv Polytechnic Institute are detailed on the website: https://osvita.kpi.ua/. Study programme of the first bachelor's level Electromechanical automation systems, electrical drive and electromobility" operates accordingly to the Law of Ukraine "On Higher Education" (https://zakon.rada.gov.ua/laws/show/1556-18#Text) and the Standard of Higher Education in specialty 141 Electrical Energetics, Electrical Engineering and Electromechanics. Detailed information about the study programme, including the accreditation certificate and the educational program descriptions (2020, 2021, 2022, 2024) are available on website: https://osvita.kpi.ua/141_OPPB_EMSAEPEM. Currently, according to the information from https://epa.kpi.ua/wp-content/uploads/2023/06/cert_2023_bach.png, the educational program EASEDEM operates within the framework of the license issued by the National Agency for Quality Assurance of Education - NAQA (Certificate № 5475, date of issue – 07/07/2023, validity period - 5 years, until 01/07/2028, https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). **Recommendations:** - none.	compliance
A.1.6 Financial activity		
1.	The study fees of the students are calculated in accordance with the average tuition costs per university year in the public education sector financed by the state budget in similar fields, and they are presented to students through various means of communication.[3] **Findings from the Self-Evaluation Report/ Visit:** According to SAR, pg. 30: “The university is a state institution of higher education. The main contingent of students does not pay for tuition and enters the university on a budget form of education (according to the state order). Students under the contract form of education enter vacant places within the licensed volume. Cost of the contract form of education is presented on the website of the University Admissions Committee (https://cutt.ly/jeEgx5Na). The cost of education for students of higher education for the 2024/2025 academic year is calculated by the department of economics and finance of the university.” Tuition fees for higher education applicants for the 2022/2023 academic year are presented on website: https://def.kpi.ua/node/1715.	compliance

	Tuition fees for higher education applicants for the 2024/2025 academic year are presented on website: https://cutt.ly/jeEgx5Na. **Recommendations:** - none.	
2.	The students are informed about the possibilities of financial assistance provided by the institution and the modality of using the fees.[3] **Findings from the Self-Evaluation Report/ Visit:** According to the Procedure for preferential lending for higher education at Igor Sikorsky KPI, approved by Order No. 7- 155 dated 08/27/2020 (https://document.kpi.ua/files/2020_7-155.pdf) and Resolution of the Cabinet of Ministers of Ukraine No. 673 dated 29/08/2018 (https://zakon.rada.gov.ua/laws/show/673-2018-%D0%BF#Text, https://document.kpi.ua/files/2020_7-155.pdf), each student (citizen of Ukraine), who studies on the basis of an agreement on the provision of educational services at the expense of individuals or legal entities, can receive a preferential loan (http://eds.kpi.ua/?p=8215). During the evaluation: - the students assured us that they had the opportunity to attend a study tour before entering the university; afterwards, everyone received appropriate assistance and support in organizing all documents and other components. **Recommendations:** - none.	compliance
3.	The evaluated study programme disposes of sufficient financial resources for the proper performance of the activity. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Financial, material and technical resources and educational and methodological support are sufficient for the defined objectives of the EPP and for program learning outcomes.” Financial resources for the proper implementation of bachelor's training activities under the study programme come to the University from state budget expenditures, as well as from individuals and legal entities in accordance with the final training contracts. Such funding allows for the achievement of educational programme evaluation goals (discussions at the evaluation visit). Financial and budgetary report for 2021 is available on: https://kpi.ua/index.php/2021-def. Execution of the university budget for 2022 is available on: https://kpi.ua/en/budget. **Recommendations:** - update the financial and budgetary report on the KPI website.	compliance

A.2 Facilities		
A.2.1 Availability of educational establishments		
1.	The institution of higher education disposes of own premises – at least 70% - or rented premises which are adequate for carrying out didactic activities (course and applications – seminars, laboratories, projects) during all disciplines included in the programme curriculum. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The university has its own spaces, which are 100% suitable for conducting educational activities (course and applied - seminars, laboratory works, projects) in all disciplines included in the curriculum of the program. The chair is equipped with the necessary material, technical and laboratory facilities necessary for the implementation of the educational program. The area of the chair spaces corresponds to the norms established by the Legislation of Ukraine” The main educational spaces are presented in films (https://cutt.ly/M9GMLUS) and uploaded (English version, https://drive.google.com/file/d/1Ek6hs97GTwPsQwwIc_6zxf0W8V6IESGW/view?usp=sharing) on ARACIS cloud (Video_premises). Laboratories presented: Electric drive theory (006-20); Technological processes, installations and complexes automation (015-20); General industry electromechanical automation systems. Power supply (016-20); Autoregulation theory and control (017-20); Digital signal processors and microcontrollers (406-20); Mechatronics and high-dynamic electromechanical systems (408-20); Electric drive and automation equipment. ABB Training Center (413-20); Automation of electromechanical and mechatronics systems (414-20); Multimedia room (407-20). Also, the educational spaces have been visited during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and presented in an online video transmission (Video: 6_On_site_visit_KPI_premises), as follows: - Specialized laboratories for the evaluated study programme EASEDEM with dedicated equipments; - Multimedia room; - Library; - Deputy dean’s office. **Recommendations:** - none.	compliance
2.	The capacity of the educational facilities for the study programme subjected to evaluation should be of: minimum 1 m^2/seat, in the class rooms; minimum 1.4 m^2/seat in the seminar rooms; minimum 1.5 m^2/seat in the lecture rooms from the libraries; minimum 2.5 m^2/seat in the computer laboratories and specialty discipline laboratories which use the computer; minimum 4 m^2/seat in the laboratories of the technical, experimental, design disciplines etc. **Findings from the Self-Evaluation Report/ Visit:**	compliance

	According to SAR: “The area of the chair spaces corresponds to the norms established by the Legislation of Ukraine.” Applied activities take place in the department's laboratories and general institute laboratories, such as (Annex 7 - VS): - 006-20: Laboratory of electric drive theory, 90 sq. m.; - 015-20: Laboratory of technological processes, installations and complexes automation, 61 sq. m.; - 016-20: Laboratory of general industry electromechanical automation systems. Laboratory of power supply, 90 sq. m.; - 017-20: Laboratory of the autoregulation theory and control, 61 sq. m.; - 408-20: Laboratory of mechatronics and high-dynamic electromechanical systems, 49 sq. m.; - 412-20: EATON-Igor Sikorsky Kyiv Polytechnic Institute Training Center - "Modern technologies in automation", 48 sq. m.; - 413-20: Electric drive and automation equipment laboratory. ABB Training Center, 48 sq. m.; - 414-20: Laboratory of automation of electromechanical and mechatronic systems, 49 sq. m.; - 211-20: Laboratory of the department of theoretical electrical engineering named after academician I.M. Chyzhenko, 150 sq.m.; - 122-20: Laboratory of the general course of electrical machines, 97 sq. m.; - 313-20: Laboratory of electrical engineering materials, 73.7 sq. m.; - 003-20: Electrical equipment laboratory, 92 sq. m.; Laboratory of high-voltage and distribution equipment, 69 sq. m.; - 305-20: Laboratory of relay protection and automation, 96 sq. m.; - 329-20: Laboratory of electrical measurements, 67 sq. m.; - 304-20: Computer class, 100 sq. m.; - 110-20: Laboratory of electrical networks named after V. G. Kholmsky, 100 sq. m.; - 407-20: Multimedia room, 73.4 sq. m.; - 406-20: Laboratory of digital signal processors and microcontrollers, 48 sq. m. The main educational spaces are presented in films (https://cutt.ly/M9GMLUS) and uploaded (English version, https://drive.google.com/file/d/1Ek6hs97GTwPsQwwIc_6zxf0W8V6IESGW/view?usp=sharing) on cloud (Video_premises). Also, the educational spaces have been visited during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and presented in an online video transmission. The on-site visit confirms what is presented in SAR and films that describe the laboratories. Recommendations: - none.	
3.	The number of seats in the lecture rooms, seminar rooms, laboratories and project rooms should be correlated with the size of the study formations – series, groups, sub-groups etc., according to the norms in force. Findings from the Self-Evaluation Report/ Visit:	compliance

	The Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute are the main regulatory document regulating the organization and implementation of educational activities at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (https://kpi.ua/regulations). The standard number of students in lecture streams and when conducting group training sessions is determined by the mentioned regulation and consists of: - lectures: maximum 70 students (students from EASEDEM and other study programmes, having common courses; examples: Mathematics, Physics); - practical classes: maximum 25 students; - laboratory classes: maximum 15 students. Also, the educational spaces have been visited during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and presented in an online video transmission. **Recommendations:** - none.	
4.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
	A.2.2 Endowment of the educational establishments	
1.	The lecture / seminar rooms dispose of technical equipment that is adequate for teaching and communication; the didactic and research laboratories dispose of specific equipment which ensure the adequate performance of the applied and practical activities. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “EPP corresponds to modern trends in the development of the field of electromechanics, as well as the interests of Ukrainian industry, which ensures the implementation of the University's academic strategy aimed at the formation of general competencies with a priority of the professional component, social-humanistic and patriotic education, the formation of general culture and tolerance. EPP ensures interdisciplinary and comprehensive training of specialists, taking into account its harmonization with the labor market, which occurs through interaction with companies interested in the results of training. For the same purpose, employers created two training laboratories at the department: the laboratory-training center for modern automation systems and electric drives of the ABB company (https://cutt.ly/seWZRhfx) and the EATON-NTUU "KPI" Training Center "Modern Technologies in Automation" (https://cutt.ly/peWZR4HU). Other employers and graduates constantly analyze the current state of the educational process and, if possible, provide equipment for other laboratories, in particular, in the last year, 2 Siemens Logo logic controllers with expansion modules and other equipment were provided (https://cutt.ly/99oD9mL)	compliance

	(https://cutt.ly/w9oFmJy), 5 Intel FPGA DE10-Lite developer boards with Quartus II licensed software, three SANTERNO frequency converters with pumping units (https://cutt.ly/L9oFhVN).” The educational spaces with capacities and equipments highlights 13 Lecture rooms and 11 Seminar rooms. The main educational spaces are presented in films (https://cutt.ly/M9GMLUS) and uploaded (English version, https://drive.google.com/file/d/1Ek6hs97GTwPsQwwIc_6zxf0W8V6IESGW/view?usp=sharing) on cloud (Video_premises). Also, the educational spaces have been visited during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and presented in an online video transmission. **Recommendations:** - none.	
2.	The technical equipment of the laboratories in which applied activities are carried out in the disciplines included in the programme curriculum is adequate, so that, at the level of a study group, there is one computer at maximum two students. There is licensed software, adequate to the content of the disciplines from the programme curriculum. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Laboratory work for applicants under this EPP is carried out in modern laboratories, which are equipped with modern equipment from well-known companies such as Siemens, Eaton, ABB, Schneider Electric, Nord, Nuvoton (https://cutt.ly/M9GMLUS). Each laboratory has its own web page on the website of the department, for example: laboratory classes on the EC "Automation systems" are held in the laboratory "Automation of technological processes, installations and complexes" (https://cutt.ly/NeWXnu4k); from the EC "Fundamentals of microprocessor technology" in the laboratory "Digital signal processors and microcontrollers" (https://cutt.ly/mFMgMZg); from EC "Control of electric drives" in the laboratory of "Electric drive and means of automation" (ABB Scientific and Technical Center) (https://cutt.ly/sFMg8IN). The department also has its own multimedia auditorium, which is equipped with a projector and a screen, in which lectures, conferences, defense of diploma projects, etc. are held. All ECs are equipped with educational and methodical materials, which are placed in the Electronic Campus system (https://ecampus.kpi.ua). In addition, all ECs have distance courses on the Sikorsky platform (https://cutt.ly/bFMjdlH) in the Moodle (https://cutt.ly/DHCDtdL) or Google Workspace (https://cutt.ly/wHCDp9G) environments. The university has a Scientific and Technical Library (www.library.kpi.ua), which provides access to methodical, scientific, educational resources, databases of international publications and an electronic archive. The educational spaces with capacities and equipments highlights 19 laboratories. The main educational spaces are presented in films (https://cutt.ly/M9GMLUS) and uploaded (English version, https://drive.google.com/file/d/1Ek6hs97GTwPsQwwIc_6zxf0W8V6IESGW/view?usp=sharing) on cloud (Video_premises). Also, the educational spaces have been visited during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and presented in an online video transmission, as follows:	compliance

	- specialized laboratories for the evaluated study programme EASEDEM with dedicated equipments; examples: Electric drive (hydraulic systems, pomps, electrical car, syncronous generators, elevetar, frequency controllers, PID controllers); Automation systems (logical schemes, robot arms, PLC, FPGA devices, relays, sensors, RLC circuits elements); Elecgric drive (motors, speed sensors, ABB frequency controller, ABB software); Matlab room (Matlab/Simulink software, 15 licences); Siemens Lab (microcontrollers, power transfer converters, transsmision line, remote control, Siemens software, relays); Servodrives Lab (Bosch equipments, 3D printer, motors, drivers); ABB lab (frequency converters, ABB drivers, groups of two motors); Multifunctional Lab (microprocessors, multimedia, 15kW converter); Student Lab (space for students with Siemens equipments, devices, hybrid energy system). **Recommendations:** - update some of the laboratory equipment (especially physical equipment) to the newer technology (available on the market); - some of employers consider that the equipments from ABB and Siemens are very good and recommend to faculty to equip the laboratories and with apparatus from other producers.	
3.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
A.2.3 Availability and endowment of scientific research premises		
1.	The higher education institution disposes of own or rented research premises/research laboratories with equipment adequate to the exigencies of the themes approached in the field of the evaluated study programme. **Findings from the Self-Evaluation Report/ Visit:** The university has its own scientific premises laboratories with equipment that – generally – meets the requirements for the topics covered in the educational programme. In addition: - the laboratory-training center for modern automation systems and electric drives of the ABB company (https://cutt.ly/seWZRhfx); - the EATON-NTUU "KPI" Training Center "Modern Technologies in Automation" (https://cutt.ly/peWZR4HU). - other employers and graduates provide equipment for other laboratories; in particular, in the last year, 2 Siemens Logo logic controllers with expansion modules and other equipment were provided (https://cutt.ly/99oD9mL) (https://cutt.ly/w9oFmJy), 5 Intel FPGA DE10-Lite developer boards with Quartus II licensed software, three SANTERNO frequency converters with pumping units (https://cutt.ly/L9oFhVN).	compliance

	The list of educational spaces highlights 19 Laboratories including details of equipment (Annex 7 - VS). There is Occupational safety department at the university, which monitors the state of labour protection in units (https://kpi.ua/web_op). **Recommendations:** - update some of the laboratory equipment (especially physical equipment) to the newer technology (available on the market); - some of employers consider that the equipments from ABB and Siemens are very good and recommend to faculty to equip the laboratories and with apparatus from other producers.	
A.2.4 Availability and endowment of the library		
1.	The higher education institution disposes of library equipped with lecture room and own library stock corresponding to the disciplines from the programme curriculum. Students have free access in library. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „The university has a Scientific and Technical Library (www.library.kpi.ua), which provides access to methodical, scientific, educational resources, databases of international publications and an electronic archive.” All students and academic staff of the University have free access to use the KPI library's resources (https://www.library.kpi.ua/ua/about-library/zapys-do-biblioteky/). According to Annex 7 – VS, there are more than 11 library rooms, with 13869,0 sq.m. Also, on the Moodle platform, elements of distance learning have been implemented according to the educational components of the study programme. The facilities offered by the library have been verified during the on-site visit on January 16, 2025, of evaluator prof. Volodymir Pavlenko. Topics: - the biggest technical library in the country (over 2 mil. of books); - reading room (200 places); - relaxing zones for students; - dedicated rooms for students/teachers; - facilities for persons with disabilities; - ventilation systems for emergency; - reception point; - access to the educational materials (printed books, copies, scanned documents, free resources, electronic materials etc.); - the level of digitalization, considering the printed books, is estimated at 20%.	compliance

	Recommendations: - none.	
2.	Own library stock, consisting in Ukrainian and foreign literature, should completely cover the theme of the disciplines from the programme curriculum; at least 50% are book titles or academic courses published within the last ten years by well-known publishing houses. **Findings from the Self-Evaluation Report/ Visit:** The library electronic catalogue, available on the Internet, is a tool for fast search and access to resources (https://www.library.kpi.ua/). Strategy of the KPI Library, 2021-2025, considers the transition to a full digital book and educational materials (https://ela.kpi.ua/handle/123456789/43215). Syllabuses contains a section “Educational materials and resources”, where the Basic literature and Additional literature are recommended. SAR, elaborated by KPI, does not contain information about: general fund of books; books titles or academic courses; electronic manuals and textbooks written by the teacher of KPI. Library stock (added to visit) presents: Library stock; Periodics; Digital Bases. The document provides a list of information sources used for the accreditation of the educational program 141 – Electrical Power Engineering, Electrical Engineering, and Electromechanics. Main Content 1. List of Printed Sources ○ Educational textbooks and manuals on physics, electrical engineering, automation, electromechanics, and mathematical modeling. ○ The number of copies available in the library stock is specified for each edition. ○ Many textbooks are authored by faculty members of Igor Sikorsky Kyiv Polytechnic Institute (KPI). 2. Electronic Resources (Institutional Repository) ○ Digital educational materials on electromechanics, energy systems, and computer modeling are available. ○ Documents include direct links to the KPI institutional repository for student and faculty access. 3. Additional Materials ○ Statistical information on the number of books, textbooks, and methodological guides. ○ List of authors, which includes faculty members of Igor Sikorsky Kyiv Polytechnic Institute (KPI) and other Ukrainian universities. Data on KPI Faculty Members and Their Publications ● Authorship of KPI faculty members is confirmed in a significant number of educational materials.	compliance

	● The library stock includes 217 titles of books and monographs authored by KPI faculty members. ● The number of Scopus/Web of Science publications listed in the document is 68 entries. ● In addition to books, faculty members have developed over 306 methodological guides and educational courses. Conclusion: The document contains a comprehensive list of library materials that support the educational process in electrical power engineering and electromechanics. The presence of a large number of textbooks, methodological guides, and electronic resources, developed by KPI faculty members, confirms the high level of academic support for the educational program. **Recommendations:** - ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic.	
3.	The library stock should contain enough copies to cover the needs of all the students from the evaluated study programme. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “KPI provides free access to the information base of the KPI library (www.library.kpi.ua), to the ELAKPI electronic archive of scientific and educational materials (https://ela.kpi.ua). Open scientific and technical laboratories also operate at KPI: "Lampa" (https://lampa.kpi.ua/) and "FabLab KPI" (https://kpi.ua/fablab).” Also, students and teachers have access to electronic catalog https://discovery.kpi.ua/. This library is the biggest technical library in the country (over 2 mil. of books). The facilities offered by the library have been verified during the on-site visit on January 16, 2025, of evaluator prof. Volodymir Pavlenko. **Recommendations:** - none.	compliance
4.	There is a sufficient number of subscriptions to Ukrainian and foreign publications and periodicals, which corresponds to the mission and aims undertaken by the study programme. **Findings from the Self-Evaluation Report/ Visit:** According to SAR, pg. 27: “KPI provides free access to the information base of the KPI library (www.library.kpi.ua), to the ELAKPI electronic archive of scientific and educational materials (https://ela.kpi.ua). Open scientific and technical laboratories also operate at KPI: "Lampa" (https://lampa.kpi.ua/) and "FabLab KPI" (https://kpi.ua/fablab).” Also, students and teachers have access to electronic catalog https://discovery.kpi.ua/. The facilities offered by the library have been verified during the on-site visit on January 16, 2025, of evaluator prof. Volodymir Pavlenko. Library is the biggest technical library in the country (over 2 mil. of books); has a reception point; offers access to the educational materials (printed books, copies, scanned documents, free resources, electronic materials etc.).	compliance

	Recommendations: - none.	
5.	For the study programmes taught in foreign languages, there are study resources available in the teaching language that are of adequate quality and in a sufficient number of copies. **Findings from the Self-Evaluation Report/ Visit:** The Electromechanical automation systems, electrical drive and electromobility study programme is teached in Ukrainian. According to the discussions at the visit: - for the study programmes taught in foreign languages, there are study materials that cover the primarelly needs for English language. **Recommendations:** - none.	compliance
6.	The higher education institution ensures the multiplication of the courses and other didactic material necessary to the educational process, and it makes them available to students in an adequate number of copies. **Findings from the Self-Evaluation Report/ Visit:** KPI has his own publishing house Politechnika, which provides printing and reproduction of textbooks, manuals, and other methodological literature authored by the university academic staff (http://politechnika.kpi.ua/). While discussing this topic with library representative, it has been mentioned that: - the university has several printing centers, where students have the opportunity to make copies of printed educational materials; - they can receive direct or by e-mail a digital copy of an article or chapter of a book from the KPI library or other libraries or sources. **Recommendations:** - none.	compliance
7.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
	A.3 Human resource	
	A.3.1 Quality of the teachers	
1.	The academic staff from the study programme are hired according to the recruitment criteria established at institutional level, in accordance with the legal provisions. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "All teachers, both main and auxiliary, are competitively selected to fill vacant positions. Selection by	compliance

	competition is carried out in accordance with the "Procedure for conducting competitive selection or selection by competition when filling vacant positions" approved by the university (https://document.kpi.ua/2021_HY-201), developed on the basis of the collective agreement of the university (https://kpi.ua/agreement) and the Statute (https://kpi.ua/statute).” The procedure for conducting competitive selection or election by competition when filling vacant positions of scientific and pedagogical employees and concluding employment agreements (contracts) with them (Appendix 1) was approved by Order No. NU/201/2021 dated September 24, 2021 (https://osvita.kpi.ua/competition). Collective Agreement of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" is valid for the period from April 2021 to April 2024 (https://kpi.ua/agreement). **Recommendations:** - update the Collective agreement of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”.	
2.	The higher education institution ensures the adequate number of academic staff with adequate training for the activities provided in the disciplines from the programme curriculum, for the entire cycle of the study programme. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “In order to determine the necessary level of professionalism during consideration at meetings of departments and expert qualification (competition) commissions (ECC) of faculties/educational and scientific institutes in competitive cases of applicants for filling vacant positions of the stuff, the following is checked: compliance with Clause 38 of the Licensing Conditions for Conducting Educational Activities (https://cutt.ly/W9lwRZi); the results of the annual rating of the stuff (https://document.kpi.ua/2021_HOH-315); the results of the "Teacher through the eyes of students" surveys (https://cutt.ly/39lq6JE, https://cutt.ly/n97Blv7); availability and completion of distance courses of the distance learning platform "Sikorsky" (https://cutt.ly/29lwHg2); fulfillment of the terms of the previous contract. Qualification criteria for applicants are established by the terms of each separately announced competition, but in accordance with the basic criteria. Also, the professional selection procedure takes into account: compliance with the profession of teachers (availability of professional education in specialty 141, availability of a scientific degree and academic title in specialty 141); compliance of teachers' qualifications with the disciplines taught is discussed at the meetings of the ECC (Chapter 9 of the Procedure) and the department (Chapter 10 of the Procedure).” The situation of the employment of the teaching staff from the evaluated study programme in the academic year 2024/2025, highlights:	compliance

	Total no. of teaching staff.: 36 (100%) of which: **Prof.**: **4** (11,1%); **Assoc.**: **24** (66,7%); **Lect.**: **7** (19,4%); **Asist.**: **1** (2,8%). **No. of tenured teaching staff in the university: 35** (100 %) of which: **Prof.**: **4** (11,4%); **Assoc.**: **23** (65,7%); **Lect.**: **7** (20%); **Asist.**: **1** (2,9%). **No. of associated teaching staff: 1** (100%) of which: **Prof.**: **0** (100%); **Assoc.**: **1** (100%); **Lect.**: **0** (0%); **Asist.**: **0** (0%). **No. of pensioners (retired): 7** (19,44%). The analysis of the teaching staff data reveals that the majority of the academic personnel are associate professors, making up 66.7% of the total staff. This indicates a well-qualified faculty base, ensuring a strong educational foundation. However, the proportion of professors remains relatively low at 11.1%, suggesting the need for further development and preparation of new academic leaders to strengthen the university's academic reputation. Lecturers and assistants together constitute 22.2% of the teaching staff, contributing to the educational process. While this ensures operational continuity, it may require additional measures for professional growth and qualification enhancement to maintain high teaching standards. Among the total staff, 19.44% are retired personnel who continue contributing to the university's activities. Their presence brings valuable experience and institutional memory to the academic environment, yet it also underscores the necessity of gradually renewing the faculty with younger professionals to ensure long-term sustainability. Overall, the data reflects a well-structured teaching staff with a solid foundation of associate professors. Recommendations: - attention should be given to increasing the number of professors, supporting the professional development of lecturers and assistants, and maintaining a balance between experienced and younger faculty members.	
3.	The tenure teachers from the higher education cover, during a university year, maximum three workloads irrespective of the educational institution in which they carry out their activity. Findings from the Self-Evaluation Report/ Visit: The calculation of the amount of educational activities at the University is carried out in accordance with the "Regulations on planning and accounting of the pedagogical workload of academic staff at Igor Sikorsky Kyiv Polytechnic Institute", approved and put into effect by the Order No. NU/14/2022 dated January 20, 2022 (https://osvita.kpi.ua/node/31). Forms of the teaching load plan of academic staff members of the department are available on https://osvita.kpi.ua/node/3. According to the discussions with the representatives of the KPI: - there are currently no restrictions on working in a position with employment of less than 1. The restrictions were removed by Resolution of the Cabinet of Ministers of Ukraine dated November 22, 2022 № 1306	compliance

	(https://zakon.rada.gov.ua/laws/show/1306-2022-%D0%BF#Text); - the teachers with workload less than 1 have proportional reduced salary with workload. Recommendations: - none.	
4.	The number of tenure teachers in the higher education, according to the legal provisions, considered for the evaluated study programme, is the one resulted by considering the full-time jobs from the organisational charts and the part-time jobs which they cover in the respective programme. Findings from the Self-Evaluation Report/ Visit: According to the discussions to the visit: - the educational process in accordance with the study programme is carried out by academic staff members who work full-time (BN), part-time (BN) and hourly payment (HP); - the number of academic staff members is determined by the need for qualified teachers according to the curriculum of the teaching programme; this number is reflected in the staff schedule, and their individual workload is reflected in the form of the educational workload plan of scientific and pedagogical staff of the department. Total no. of teaching staff is 36 (35 tenures + 1 associated) and occupy total of 12,65 positions (12,5 BN + 0,15 HP). Recommendations: - none.	compliance
5.	At least 70% of the total jobs of the study program are assigned to tenure teachers in the higher education institution, according to the legal provisions – with basic workload or reserved position, and at least 25% of them are covered by university professors and associate professors. Findings from the Self-Evaluation Report/ Visit: According to the discussions to the visit: - in order to ensure the educational process under the programme, the number of vacancies is calculated based on the available contingent of students; - calculations of student contingent at the department are carried out in accordance with the dedicated procedure for calculating the estimated contingent of the department. Total no. of teaching staff is 36 (35 tenures + 1 associated) and occupy total of 12,65 positions, as follows:	compliance

	TOTAL POS.: **12,65(100%)** of which: **BN: 12,5** (98,8%); **HP: 0,15 (1,2%)** **12,65 (100%)** of which: **Prof.**: **1,4** (11,1%); **Assoc.**: **7,7** (60,9%); **Lect.**: **2,85** (22,5%); **Asist.**: **0,7** (5,5%). **Total no. of pos. occupied by Prof. + Assoc. prof. = 1,4 + 7,7 = 9,1** (71,9%) **Total no. of pos. occupied by tenured teaching staff in the university: 12,5** (100 %) of which: **Prof.**: **1,4** (11,2%); **Assoc.**: **7,55** (60,4%); **Lect.**: **2,85** (22,8%); **Asist.**: **0,7** (5,6%). **Total no. of pos. occupied by associated teaching staff: 0,15** (100%) of which: **Prof.**: **0** (0%); **Assoc.**: **0,15** (100%); **Lect.**: **0** (0%); **Asist.**: **0** (0%). **Total no. of pos. occupied by pensioners (retired): 2,85** (22,5%). Recommendations: - none.	
6.	The full-time academic staff appointed according to the law, who retired at the age limit or due to other reasons, may work in the capacity of associated academic staff in accordance with the legal provisions, but they may cover at most one workload in the respective educational institution. Findings from the Self-Evaluation Report/ Visit: Labor Code of Ukraine provide the equality of labor rights of citizens of Ukraine and non-discrimination in the field of labor (https://zakon.rada.gov.ua/laws/show/322-08#Tex). According to the information from Annexes 3, 4 – VS, from a total of 36 teaching staff, the total number of pensioners (retired) is 7 (19,44%). Number of teaching staff of age over 65 is 5 (13,89%). Together, they occupy (2,85/12,65)*100=22,5% positions. Recommendations: - in order to preserve the scientific and didactical potential of the department, draw up a plan to recruit younger teachers, to increase the number of educational activities conducted by teachers classified as young teachers.	compliance
7.	The tenure teachers have the scientific title of PhD and they comply with at least one of the following conditions: they hold a Bachelor’s diploma in the field of the taught disciplines; they are PhD supervisors in the field of the taught disciplines; the theme of their PhD thesis is in the field of the taught disciplines. The other teachers should have the initial training and skills in the field of the taught discipline. Findings from the Self-Evaluation Report/ Visit: By the Regulation on the organization of the educational process at the KPI, positions of the academic staff can be held by persons with a scientific degree or academic title, as well as persons with a master's degree/specialist (https://kpi.ua/regulations).	compliance

	According to SAR: „All teachers of the department who teach at the EPP fully meet the licensing requirements set by the Ministry of Education and Science of Ukraine.” The procedure of filling vacant positions of the academic staff is available on website: https://osvita.kpi.ua/sites/default/files/downloads/Pologennia_ped_navantagennia_2022.pdf. From a total of 36 teaching staff, 33 are Phd (91,67%) and 3 (8,33%) have Master’s qualification. **Recommendations:** - none.	
8.	The tenure teachers have prepared courses and other didactic material necessary to the educational process, which fully cover the issues of the respective discipline, in accordance with the subject description (syllabus). The teachers have relevant training for the subjects approached in the developed learning resources. **Findings from the Self-Evaluation Report/ Visit:** Procedure for creating and approving work programs (syllabuses) of academic disciplines (educational components) at Igor Sikorsky Kyiv Polytechnic Institute is available on website: https://osvita.kpi.ua/node/174. According to SAR: “Curriculum disciplines have syllabuses, which present the purpose, the main thematic content, the distribution of the number of hours, seminars, the rating system for evaluating the success of students and other activities by topic, a minimal bibliography, regulated and adequate examination methods. Syllabuses are approved at the chair meeting and signed by the course lecturer and the head of the chair.” According to SAR: The results of current control of academic disciplines and preparation of course projects and works are regularly entered by teachers to the Electronic Campus environment (https://cutt.ly/LHCEJ7o), as well as to distance courses of the Sikorsky platform (https://cutt.ly/dHCE8eK), and by separate EC in the online table (https://cutt.ly/S9aF65F). The didactic materials are posted in the ELAKPI (Electronic Archive of Igor Sikorsky Kyiv Polytechnic Institute): https://ela.kpi.ua/. **Recommendations:** - consider ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic.	compliance
9.	The teachers who occupy positions of assistant should have certified pedagogical training. **Findings from the Self-Evaluation Report/ Visit:** According to the “Procedure for conducting competitive selection or election for filling vacant positions of academic staff and concluding employment agreement (contract) with them” (https://osvita.kpi.ua/competition), the necessary level of professionalism of the academic staff is ensured by the competitive selection. So, the mandatory nature of a certificate of pedagogical education is not provided for by the regulatory documents of Ukraine.	compliance

	1 teacher held the position no. 19 of assistant. He has the specialization 141 Electric power engineering, electrical engineering and electromechanics (Ph.D. in Electrical Engineering). **Recommendations:** - none.	
10.	The associated teachers are bound to notify in writing the head of the institution where they occupy the primary position and the head of the institution in which they are associates with regard to the number of classes taught by association; in case they hold the primary position in another higher education institution, it is necessary to obtain the consent from the university senate of the respective institution. **Findings from the Self-Evaluation Report/ Visit:** Associated teachers provide a signed and stamped certificate from the institution where they occupy the primary position. This certificate is considered as the consent of the management of the primary place of work for employee's part-time work (https://osvita.kpi.ua/competition). The specialists coming from companies working at the evaluated program, as part-time teachers are: 1. **Ivan Shapoval** National Academy of Sciences of Ukraine Institute of Electrodynamics; 2. **Hanna Zemlianukhina**, SIEMENS Ukraine. **Recommendations:** - none.	compliance
11.	The institution provides to the academic staff opportunities to improve their teaching skills and the skills of using the new technologies for teaching purpose. **Findings from the Self-Evaluation Report/ Visit:** The possibility/opportunity for academic staff to improve their pedagogical skills is governed by the "Regulations on improving the qualifications academic staff" (Order No. 7/134 from 03.08.2020 (https://osvita.kpi.ua/node/714). These are offered by University's Institute of Postgraduate Education (http://ipo.kpi.ua/povyshenie_kvalif/pidvish-kvalif-spivrob-kpi-108). For academic staff and other participants in the educational process, there is an opportunity to complete a scientific internship and improve qualifications with a scientific component (discussions at the evaluation visit). Examples: Tolochko O.I. (2018); Pushkar M.V. (2018); Buryan S.O. (2019); Peresada S.M. (2018-2020); Kovbasa S.M. (2018-2021). According to the discussions to the visit, there is a 5 years plan, for all KPI's teaching staff, to obtain B2 certificate for English. **Recommendations:** - none.	compliance

12.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
	A.3.2 Availability of the auxiliary staff necessary to implement the study programme	
1.	The auxiliary staff who provides the technical support in the didactic and research laboratories is adequate to ensure the performance of the practical activities from the programme curriculum. **Findings from the Self-Evaluation Report/ Visit:** The auxiliary staff consist of 6 engineers. Basically, this number of auxiliary staff members is sufficient to ensure practical classes from the programme curriculum. **Recommendations:** - none.	compliance
	B. EDUCATIONAL EFFICACY	
	B.1 Content of the study programmes	
	B.1.1 Student admission	
1.	The higher education institution applies a transparent policy of student recruitment and admission, which is publicly announced at least six months prior to the application. The university marketing promotes real and correct information, indicating verification and confirmation possibilities. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The information provided to entrants and the procedure for its publication are regulated by the Rules of admission to study for higher education at Igor Sikorsky KPI in 2024 (https://cutt.ly/6eEgcY7X). Recruitment of students to the educational program is carried out on the basis of general university admission rules based on the results of independent external evaluation of graduates of gymnasiums, schools and lyceums." University applies a transparent policy of recruitment and admission of students, which is publicly announced in January of each year, but no later than six months before applicants submit an application for admission. Full information about the admission company is posted on the main website of the university https://pk.kpi.ua/. According to the discussion during the visit, all admission documents can be submitted online or in person at KPI. **Recommendations:** - none.	compliance

2.	The students are recruited based on own admission procedures of the institution. At university/faculty level there is a methodology/regulation of admission in the university Bachelor's study cycle – distinct document or a document which is part of an entrance methodology/ regulation document for all the study cycles from the university. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "Recruitment of students to the educational program is carried out on the basis of general university admission rules based on the results of independent external evaluation of graduates of gymnasiums, schools and lyceums. Independent assessment for admission to the specialty 141 "Electrical energetics, Electrical Engineering and Electromechanics " takes place in 4 disciplines: Mathematics, Ukrainian language, Ukrainian history are mandatory, the fourth discipline is chosen by the applicant from among those proposed by the Ministry of Education, for example, physics, English, etc." The Rules of admission to Igor Sikorsky KPI which regulate all aspects of the entrance campaign for the bachelor's educational level, are provided at the university (https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf). The rules of admission to KPI are approved at the meeting of the Academic Council (https://pk.kpi.ua/, https://pk.kpi.ua/official-documents/). **Recommendations:** - none.	compliance
3.	The admission is based exclusively on the academic skills of the candidate and no discriminatory criterion is applied. Signing-up for the entrance examination is based only on the baccalaureate degree or other documents of equivalent studies. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The recruitment of students is carried out on the basis of the general university admission rules for higher education, which are based on the results of an external independent evaluation conducted by the Ukrainian center for the evaluation of the quality of education. This center is a state institution that carries out external independent evaluation of learning results obtained at a certain educational level and conducts monitoring studies of the quality of education and ensures transparency of selection for training and the absence of any discriminatory criteria. The Ministry of Education has defined the categories of beneficiaries in 2024, who will enter based on the entrance exams or the results of external examinations: - persons who have diseases that do not allow them to take the external examination; - orphans; - children deprived of parental care; - demobilized after November 30, 2017; - combatants, who took part in war with russia. The category of beneficiaries who will be admitted on the basis of an interview is also defined:	compliance

	- Chernobyl residents and victims of the accident at the Chernobyl nuclear power plant; - disabled people, who cannot attend an educational institution; - citizens, who are recognized as russia war disabled.” The Rules of admission to Igor Sikorsky KPI which regulate all aspects of the entrance campaign for the bachelor's educational level, are provided at the university (https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf). **Recommendations:** - none.	
4.	The results of student evaluations after the first year of study confirm the adequacy of the admission conditions applied for the evaluated study programme. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The percentage of first-year students successfully complete the 1st year of study according to the educational program, which is confirmed by orders on transfer to the 2nd year and examination data of the 1st and 2nd sessions, which is presented in the electronic system of the university "Electronic Campus" is 84%. The content of the fundamental disciplines provided by the curriculum for the 1st year of study (mathematics, physics, computer science, etc.) is coordinated with the practical tasks of using the acquired knowledge in engineering, which is confirmed by the content of the syllabi of the relevant disciplines.” At the level of KPI exists Center for Innovative Monitoring of Education Quality (https://kpi.ua/eqmi). **Recommendations:** - none.	compliance
5.	*Other requirements provided in the standards specific to the Bachelor’s field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case
	B.1.2 Structure and presentation of the study programme	
1.	The study programme is presented in the form of a package of documents which includes: mission and aims general and specific goals; curriculum with the disciplines weighted in ECTS study credits, and with the disciplines successively arranged in the learning period; the syllabi of the disciplines included in the programme curriculum and the learning outcomes, flexible learning paths, as the case may be; modality of organisation and content of the study completion examination; compatibility with the national framework of qualifications; compatibility with similar study programmes from the European Union and/or from other world countries.	partial compliance

Findings from the Self-Evaluation Report/ Visit:

According to SAR: “The educational program is structured in such a way that students acquire knowledge, skills and abilities both from the fundamental educational components of the specialty 141 "Electrical energetics, electrical engineering and electromechanics", and from the specialized ones that relate to the educational program itself. The uniqueness of this educational program is that it has a significant multidisciplinary structure, which includes such classic areas as "electric drive" and "electromechanical systems", "control theory" and "automated electric drive", as well as "industrial automation" and "electromobility".”

The study programme corresponds to the sixth level of education of the National Qualifications Framework (https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf).

The study program is presented in the form of the next documents:

1. Professional Educational Program, that includes: General information, Educational programme purpose, Educational programme characteristics, Eligibility of graduates for employment and further study, Teaching and assessment, Programme competencies, Programme learning outcomes, Resource provision for programme implementation, Academic mobility, Components of educational programme, Structural and logical scheme of the educational programme (Annex 2 – VS);
2. Curriculum, that includes the disciplines, their weight in ECTS credits and distribution between lectures, practices, laboratory works, type of the final assessment (exam or final test) and individual student assignments (course projects, course works); the curriculum is placed in the free access via https://drive.google.com/file/d/1bm-c2LQgMbt-obP3dRMuGmAmQtmjKNop/view; also, working curriculums (admission in 2021, 2022, 2023, 2024) are presented in Annexes to the Self-Assesment Report of the study programme Electromechanical automation systems, electrical drive and electromobility (EASEDEM);
3. Syllabuses for each academic year, which are posted on the website of the department (https://cutt.ly/69aGFGM) and the Electronic Campus portal (https://cutt.ly/LHCEJ7o), which becomes available to applicants after the beginning of the semester (SAR, pg. 16), accesible with user and password;
4. Mandatory educational components of the general training cycle; Mandatory educational components of the professional training cycle; Elective educational components of the general training cycle; Educational components for studying in the 2nd, 3rd, 4rd years (https://epa.kpi.ua/en/bachelor-student-learning/syllabus_22_23/).

It should be noted that:

- Catalog of selective educational components, posted on website (https://cutt.ly/69aGFGM), are valid for academic year 2022-2023;
- Departmental CATALOG of elective academic disciplines of the professional training cycle of the educational and professional program "Electromechanical Automation Systems, Electric Drive and Electromobility " in specialty 141 -

	"Electric power engineering, electrical engineering and electromechanics" of the first (bachelor's) level of higher education, presents a short form of the content of the disciplines for choice; - in the Self-Assesment Report cannot find information about the compatibility of the evaluated study programme with similar study programmes from the European Union and/or from other world countries. **Recommendations:** - consider providing clear and up-to-date information about syllabuses via the institution's website; - consider providing clear and consistent information about the syllabuses of all elective educational components, that can be selected by students of the study programme (see the content of the disciplines for choice); - consider to realize analysis of the compatibility with similar study programmes from the European Union and/or from other world countries; - in addition to the current form of the curriculum, analyse the possibility to provide for the students (and not only) the curriculum as a document organized by semesters; it would mean to have one list of subjects/disciplines for each semester, with totals of hours, credits etc. at the end of each.	
2.	The personnel involved in the design/implementation and evaluation of the content of the study programme has adequate academic and pedagogic experience. The teaching methods and learning activities are selected / conceived so that to ensure the achievement of the programme outcomes. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “General information about students and teaching staff of the university is also available in the Unified State Electronic Database of Education, which is an automated system for collecting, registering, processing, storing and protecting information and data of education. The owner of the Unified State Electronic Database of Education is the state, the administrator is the Ministry of Education of Ukraine, and the technical administrator is the state enterprise "Inforesurs".” The teaching staff team includes professors and associate professors, doctors and candidates of sciences with pedagogical and scientific experience. Teaching staff (with four exceptions) have more than 11 years of experience as seniority in higher education. Contacts of the department are summarized in the table, address is 20-th building in Igor Sykorsky KPI (https://epa.kpi.ua/en/department/contacts/). “In accordance with the "Regulations on the Organization of the Educational Process" (https://cutt.ly/oHCbPJE), the following forms of education are used in teaching at the EPP (clauses 4.1, 4.2): educational classes (lectures, laboratory works, practical classes, individual classes, consultation), independent work, practice and control measures. During training sessions, teachers use both classical teaching methods (verbal, visual, practical, working with information resources and literature), and interactive methods (surveys, situational exercises, demonstrations on mock-ups, discussions, events), multimedia technologies	compliance

	(presentations on projectors, video lectures) and application software.” The curriculum and syllabuses guide educational activities and the application of teaching methods to achieve program results. According to the legislation of Ukraine, the teaching staff must complete advanced training courses, according to the "Regulations on improving the qualifications of pedagogical and scientific-pedagogical staff" (Order No. 7/134 of 03.08.2020, https://osvita.kpi.ua/node/714). **Recommendations:** - none.	
3.	The study programme curriculum is approved at institutional level. **Findings from the Self-Evaluation Report/ Visit:** The curriculum of the study programme is approved by the Academic Council of Igor Sikorsky Kyiv Polytechnic Institute. Ukrainian version of the curriculum is available on the website of the institution: https://drive.google.com/file/d/1bm-c2LQgMbt-obP3dRMuGmAmQtmjKNop/view. **Recommendations:** - consider placing the approved curriculums in English (scanned copies with the signatures and stamps) on the official website of the NTU KPI.	compliance
4.	The programme curriculum is designed so that the corroborated learning outcomes declared for all the disciplines to ensure the achievement of the programme outcomes. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „The provision of programmatic learning outcomes by relevant ECs is represented by the matrix of programmatic learning outcomes, which are reflected in the EC curriculum and the structural and logical scheme of the EP (https://cutt.ly/2eWZNieP). The program learning outcomes defined in the EPP fully meet the requirements and content of the standard. The uniqueness of the EPP is formed by the relevant professional competencies (K22-K27) and program learning outcomes (PR20-PR29), which are not included in the standard. According to the current legislation of Ukraine, the EPP itself is the main document of educational and methodical support of the EC, which is regulated by the "Regulations on the organization of the educational process in Igor Sikorsky KPI" (https://cutt.ly/m9oHWGA).” Section 7 of the educational programme refers to the programme learning outcomes (https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). **Recommendations:** - none.	compliance

5.	Based on the content of the fundamental disciplines, the curriculum for the 1st year of study is conceived so that to help and motivate the students for the study of the engineering sciences. **Findings from the Self-Evaluation Report/ Visit:** The curriculum for the first year includes courses of general training as: Higher mathematics, Physics, Engineering Graphics, Computer Technology and Programming, Technical Mechanics, Elecgtrotechnical Materials etc., the content of which give the basis and motivation for studying the subsequent courses of vocational training. Among the disciplines of the first course is "History of Science and Technology", which interests and motivates students to study engineering disciplines. The university also offers adaptation and remedial courses (https://kpi.ua/adapt), which help first-year students in the study of fundamental disciplines and motivate them to continue their studies. **Recommendations:** - none.	compliance
6.	The curriculum is structured so that to allow the graduation, during the period usually assigned for the study cycle of the programme. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „The educational process at Igor Sikorsky Kyiv Polytechnic Institute is regulated by the "Regulations on the Organization of the Educational Process" (https://cutt.ly/q9aQSMb). The academic year consists of two semesters of 18 weeks each, with 28 academic hours per week, depending on the course and semester of study.” According to the standard, EPP has a clear structure structured by semesters and years of study with a study period of 3 years and 10 months. The structure/semesters/weeks of the academic results, clear, from the curriculum: total number of weeks for the classes is equal to 18 for all semesters, except the 8th semester (10 weeks). During this period, students have the opportunity to pass all the normative courses of the educational program, as well as a number of optional courses to take the necessary amount of 240 ECTS credits. **Recommendations:** - none.	compliance
7.	The curriculum reflects the student-centred learning, allowing flexible learning paths through optional and facultative disciplines and encouraging the students to have a proactive role in the learning process. **Findings from the Self-Evaluation Report/ Visit:**	compliance

	According to the Regulation on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39) educational activity is based on the principles of student-centered learning. According to SAR: “120 credits out of 240 (50%) are allocated to the study of mandatory ECs that provide competencies and program learning outcomes of the standard, 60 credits (25%) are allocated to selective ECs.” From the curriculum (Annex 1 – VS, https://drive.google.com/file/d/1bm-c2LQgMbt-obP3dRMuGmAmQtmjKNop/view) results: - 110 credits out of 240 (45,83%) are allocated to the disciplines from the General training cycle; - 70 credits out of 240 (29,17%) are allocated to the disciplines from the Professional training cycle; - 60 credits out of 240 (25,00%) are allocated to the disciplines from the Elective educational package. According to SAR: “The individual study plan of a student contains a list of disciplines selected by the student from the general university GU-catalog (https://cutt.ly/2eWXAlil) and the professional P-catalog (https://cutt.ly/eeWXS7gT) of optional ECs in the amount of 60 ECTS credits (25% of the total volume of EPP).” To make a choice of selective ECs, a catalog is created from which students have to choose 16 ECs. Two of them are chosen from the GU catalog EC, the other 14 - from the P-catalog. The selection of EC for the next academic year is carried out in the spring semesters from the first to the third year. It should be noted that: - Catalog of selective educational components, posted on website (https://cutt.ly/69aGFGM), are valid for academic year 2022-2023; - Departmental CATALOG of elective academic disciplines of the professional training cycle of the educational and professional program "Electromechanical Automation Systems, Electric Drive and Electromobility " in specialty 141 - "Electric power engineering, electrical engineering and electromechanics" of the first (bachelor's) level of higher education, presents a short form of the content of the disciplines for choice. **Recommendations:** - analysing a different approach regarding the elective components, as follow: transform some elective courses imposed by the faculty in real elective courses; transform the common part of elective discipline into a compulsory discipline and proposing of the elective disciplines with unique content; form the groups of elective disciplines with 3, 4 options, where the student can free select only one discipline.	
8.	The programme curriculum consists of fundamental, domain, specialty and complementary disciplines grouped in mandatory, elective and optional disciplines in accordance with the regulatory requirements established at national level and with the standards specific to the Bachelor’s field/ study programme. **Findings from the Self-Evaluation Report/ Visit:**	compliance

	The requirements for the structure, content and design of curricula are determined by Order No. NOD/263/24 dated 08.04.2024 "On the organization and planning of the educational process for the 2024-2025 academic year". The study programme “Electromechanical automation systems, electrical drive and electromobility” curriculum consist of: - Normativ educational componenets, divided in two categories: General training cycle and Professional training cycle; - Elective educational components, divided in two categories: Elective educational components from the general university catalog and Elective educational components from Interfaculty/Faculty/Department cataloques. The curriculum and the content of the syllabuses allow the classification into ARACIS categories: fundamental disciplines (those in year I); domain disciplines (those in years II and III); specialty disciplines (those in year IV), roughly respecting the specific engineering requirements. **Recommendations:** - none.	
9.	The programme curriculum is designed so that to meet the educational needs of the employers, including the acquirement of practical skills. **Findings from the Self-Evaluation Report/ Visit:** The practical training of students is ordered by the Regulations on the procedure for conducting the practice of higher education applicants (http://osvita.kpi.ua/node/184). According to SAR: „The duration of the pre-diploma practice is 4 weeks, the volume is 6 credits. Main places of practice: Institute of Electrodynamics of the National Academy of Sciences, State Enterprise "Antonov", KP "Kyiv Metropoliten" and other specialized enterprises (https://cutt.ly/B9avnyD).” According to SAR: “The session of the 8th semester is held in the first half of April, followed by five weeks of pre-diploma practice, preparation of diploma projects (from the end of May to mid-June) followed by their defense in the second half of June. Calendar plan of students' work in 2024/2025 study year is at the link (https://kpi.ua/files/calendar_2024-2025.pdf).” The curriculum includes 180 hours of pre-diploma practice, with 6 credits (Annex 1 - VS). According to SAR: “Employers also take an active part in providing various proposals for improving the EPP, in particular, during the last update of the EPP, the proposals of the "Technoserviceprivod" company, the Kyiv Plant of Lifting and Transport Equipment and the Institute of Electrodynamics were taken into account (https://cutt.ly/b9oO3ow). Employers also participate in the implementation of the educational process under the EPP: in 2021, Prof. V.M. Myhalskyi (Institute of Electrodynamics of the National Academy of Sciences of Ukraine), and other employers are involved in one-off lectures, seminars, etc. (https://cutt.ly/Y9oP0ap). In addition, job fairs are held at University, which allow to reveal an objective picture of the needs of employers (https://kpi.ua/fair) and promote the employment of graduates.” According to discussion with employers:	compliance

	- employers are very satisfied by the competencies of the graduates; some of them consider that the graduates prove a high level of expertise; - depending of the type of work, the graduates become independent in (2...6) month; National Academy of Sciences of Ukraine needs graduates with PhD. **Recommendations:** - consider delivering correct information about the duration of the pre-diploma practice; - consider extension of practice training by adding the practice (internship) on the 2nd and/or 3rd year of study that should improve the acquire of practical skills.	
10.	The disciplines included in the programme curriculum are provided in a logical sequence and they are weighted by ECTS study credits. **Findings from the Self-Evaluation Report/ Visit:** The educational process is organized in accordance with the Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39). The bachelor's study program requires a total of 240 ECTS credits, equivalent to 7200 hours of training (1 ECTS = 30 hours of study (national standard). The number of ECTS credits of each discipline is indicated in a dedicated column in the curriculum. The total number of self-study, resulting from the curriculum is 3466 hours, meaning aprox. 48% from total hours of training. The number of classroom hours gradually decreases from 30 hours (1st year, 1st semester of training) to 26 hours (8th semester of training). Elective courses make up 25% of the total number of ECTS credits. **Recommendations:** - none.	compliance
11.	The higher education institution disposes of internal mechanisms for the harmonization of the discipline contents and avoidance of their overlapping. **Findings from the Self-Evaluation Report/ Visit:** The study programme “Electromechanical automation systems, electrical drive and electromobility” is conducted in the field of „141 Electrical Energetics, Electrical Engineering and Electromechanics” and has fundamental and professional-oriented core disciplines. According to discussion during the visit, at the level of the department, are held periodical meetings, where the structural and logical scheme of teaching, and the methodology and content of teaching disciplines are considered.	compliance

	Recommendations: - none.	
12.	The disciplines from the programme curriculum have syllabi with the objectives, basic thematic content, distribution of the number of courses, seminars, and applicative activities etc. by themes, minimal bibliography, adequate examination methods for the planned learning outcomes; the syllabi are signed by the course, seminar/ other applicative activity holder and by the head of department. Findings from the Self-Evaluation Report/ Visit: According to SAR: „Syllabuses for each academic year are posted on the website of the department (https://cutt.ly/69aGFGM) and the Electronic Campus portal (https://cutt.ly/LHCEJ7o), which becomes available to applicants after the beginning of the semester. In addition, teachers convey this information to students at the first lecture session on the discipline. The syllabi can also be posted by teachers on the distance learning platform "Sikorsky" (https://cutt.ly/dHCE8eK), which applicants get access to at the beginning of the corresponding semester.” The syllabus contains of the next parts: Description of the educational discipline, its purpose, subject of study and learning outcomes; Pre-requisites and post-requisites of the discipline; Content of the academic discipline; Educational materials and resources; Methods of mastering an educational discipline; Student's independent work; Policy of academic discipline; Types of control and rating system for evaluating learning outcomes; Additional information on the discipline (Annex S02 – Syllabuses). It should be noted that: - Catalog of selective educational components, posted on website of the Department of Electromechanical Systems Automation and Electrical Drives (https://cutt.ly/69aGFGM), are valid for academic year 2022-2023; - Departmental CATALOG of elective academic disciplines of the professional training cycle of the educational and professional program "Electromechanical Automation Systems, Electric Drive and Electromobility" in specialty 141 - "Electric power engineering, electrical engineering and electromechanics" of the first (bachelor's) level of higher education, presents a short form of the content of the disciplines for choice; - at the end of the syllabuses valid for academic year 2024-2025 (Annex S02 – Syllabuses), is mentioned that these were approved by the Department of Automation of Electromechanical Systems and Electric Drives (Protocol No. 15 dated 13.06.2024) and agreed by the Methodical Commission of the faculty (protocol No. 10 of June 20 , 2024); however there are not signed by the course, seminar / other applicative activity holder and by the head of department. Recommendations: - consider providing clear and up-to-date information about syllabuses via the institution's website;	compliance

	- consider providing clear and consistent information about the syllabuses of all elective educational components, that can be selected by students of the study programme (see the content of the disciplines for choice).	
13.	The syllabi provide correlations between the declared learning outcomes which the discipline contributes to, its content and the modality of evaluating the learning outcomes acquired by the student. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Information on the procedures and forms of the examination and assessment criteria is contained in the syllabus of the academic discipline. Diagnostic tools in the form of a list of exam questions are also given in the syllabus.” The syllabi of the disciplines present the preliminary requirements for the student to choose a certain discipline for study. Non-compliance with the prerequisites of the discipline makes it impossible for the student to study it further. Learning takes place step by step according to the accumulation system, which corresponds to the structural and logical scheme and prerequisites and post-requisites in each syllabus. **Recommendations:** - none.	compliance
14.	The syllabi reflect the student-centred learning, including by providing activities specific to the individual study (homework, individual or team projects etc.) and their inclusion in the evaluation process. **Findings from the Self-Evaluation Report/ Visit:** According to the Regulation on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39) educational activity is based on the principles of student-centered learning. According to SAR: “Forms and methods of learning and teaching at this EPP correspond to a student-centered approach: applicants take part in discussions with teachers who offer them to choose certain teaching methods, forms of conducting modular control, defense of coursework, handing in laboratory and calculation works, etc. Teachers periodically conduct express surveys of test takers as part of their ECs in order to timely adjust the chosen teaching methods, in particular, as part of the EC "Automation System-1" at the beginning of the semester, test takers were asked to choose the form of knowledge assessment at lectures: testing or interactive exercises. Based on the voting results, testing was chosen, and interactive exercises were chosen as additional points for activity. Applicants are in constant communication with teachers using Telegram and Viber channels or e-mail. Applicants can submit their suggestions and comments regarding the organization of the educational process to the teacher personally or through the survey "Teacher through the eyes of students" (https://cutt.ly/gHCUXam) or "Survey on improving the quality of educational services" (https://cutt.ly/6eWX1GjD).” The total number of self-study, resulting from the curriculum is 3466 hours, meaning aprox. 48% from total hours of training. **Recommendations:**	compliance

	- none.	
15.	The nomenclature of the disciplines contained in the programme curriculum and the content of such disciplines indicated in syllabi correspond to the Bachelor's field and study programme. **Findings from the Self-Evaluation Report/ Visit:** List of curriculum disciplines and their content correspond to the Bachelor's field and study programme. **Recommendations:** - none.	compliance
16.	The academic year is structured on two semesters of 14 weeks on average, with 22-28 classes/week, depending on the university education fields, except the study programmes regulated under the directives of the European Union. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The educational process is carried out in accordance with the educational plan, in which all educational components of the educational program planned for 4 years are coordinated. … From the first to the third year, the academic year is divided into two semesters of 18 academic weeks each. Education in the first (autumn) semester begins in the first decade of September and ends in the last decade of December. The winter session is held during January. During the last decade of January and the first decade of February, students have holidays. The second (spring semester) begins in the first decade of February and lasts until the end of May. June is allocated for the session, July and August - vacations. In the fourth year of training, the structure of the autumn semester is the same as in the first three years of training. The spring semester is shortened, it lasts only 9 weeks. The session of the 8th semester is held in the first half of April, followed by five weeks of pre-diploma practice, preparation of diploma projects (from the end of May to mid-June) followed by their defense in the second half of June." The calendar plan of students' work in 2024/2025 study year is available on wesite: https://kpi.ua/files/calendar_2024-2025.pdf. According to SAR, pg. 19: "The educational process at Igor Sikorsky Kyiv Polytechnic Institute is regulated by the "Regulations on the Organization of the Educational Process" (https://cutt.ly/q9aQSMb). The academic year consists of two semesters of 18 weeks each, with 28 academic hours per week, depending on the course and semester of study. During the academic year, a minimum of 8 weeks of vacation is provided." According to the curriculum, depending on the year of study, students of the educational programme have between 26 to 30 hours of classroom instruction per week. According to the "Regulations on the Organization of the Educational Process", the student's weekly workload should not exceed 45 hours. **Recommendations:**	compliance

	- analysing the possibility to reduce the total number of classes per week from 30 to 28 (first year of study).	
17.	Each semester shall have 30 ECTS study credits for the mandatory disciplines (including those selected by the student from the category of optional disciplines), irrespective of the form of education. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „Each semester has 30 ECTS study credits for compulsory subjects (including those that the student chooses from the category of optional disciplines) regardless of the form of study, which is reflected in the individual study plan of each student and which is located in the operating system of evaluation office in the electronic system "Electronic Campus" and in printed form (at the chair and with the student).” This situation is confirmed by the curriculum of the educational programme. **Recommendations:** - none.	compliance
18.	The optional disciplines, irrespective of the study semester in which they are provided in the programme curriculum, complete with an examination, and the credit points which are granted are in addition to the 30 credit points of the respective semester. **Findings from the Self-Evaluation Report/ Visit:** Ukraine legalisation in the field of higher education requires 25% of ECTS credits of each educational programme devote to the elective disciplines. Their credit points should be included in 30 ECTS credits of each semester. According to SAR, pg. 7: „120 credits out of 240 (50%) are allocated to the study of mandatory ECs that provide competencies and program learning outcomes of the standard, 60 credits (25%) are allocated to selective ECs.” According to SAR, pg. 9, 10: „The individual study plan of a student contains a list of disciplines selected by the student from the general university GU-catalog (https://cutt.ly/2eWXAlil) and the professional P-catalog (https://cutt.ly/eeWXS7gT) of optional ECs in the amount of 60 ECTS credits (25% of the total volume of EPP).” From the curriculum results: - 110 credits out of 240 (45,83%) are allocated to the disciplines from the General training cycle; - 70 credits out of 240 (29,17%) are allocated to the disciplines from the Professional training cycle; - 60 credits out of 240 (25,00%) are allocated to the disciplines from the Elective educational package. According to SAR, pg. 9, 10: „In addition to choosing EC, the applicant can choose a foreign language to study (English, German, French), participate in academic mobility programs offered by the department (https://cutt.ly/l9azTWJ) or existing in university (https://cutt.ly/h9azO4G), as well as to choose the topics of individual tasks, coursework/ projects, qualification papers, scientific research, place of practice.” The form of semester control – credit or exam – is determined by the curriculum.	compliance

	Recommendations: - consider adding to the curriculum of free elective disciplines (with extra credits to the 30 compulsory of the semester).	
19.	The ratio between the course hours and the hours of applicative didactic activities – seminars, laboratories, projects, practice etc. should be in accordance with the standards specific to the Bachelor's field/ study programme. Findings from the Self-Evaluation Report/ Visit: According to SAR: "The main form of classroom classes with students are lectures, practical classes and laboratory work. The total number of hours allocated to lectures and in total to practical and laboratory work is approximately equal. In particular, 1,872 hours (51%) were allocated to lectures, 1,090 hours (29.5%) to practical classes, and 728 hours (19.5%) to laboratory classes. A total of 3,510 hours are allocated to the independent work of applicants, that is, about 50% of the total amount of study time." According to the curriculum out of 3734 hours of classroom classes: - 1870 hours are allocated to lectures; - 1266 hours are allocated to practical; - 598 hours are allocated to laboratory. As such the course to applications ratio is: 1870/(1266+598) = 1,00 (according to ARACIS methodology). Recommendations: - none.	compliance
20.	At least 50% of the forms of verification of the disciplines provided in the programme curriculum are examinations. Findings from the Self-Evaluation Report/ Visit: According to SAR: "Semester control sessions have the following structure: approximately the first ten days are allocated for the passing of credits and the defense of coursework/projects; the next two weeks are allocated for taking exams. The curriculum is designed in such a way that there are no more than 3 exams per semester. The total number of semester controls should not exceed 10." According to SAR: "For each discipline of the educational program, there is a mandatory semester certification, which can be presented in the form of exams or tests." During the entire period of study, the students have 58 disciplines and takes 20 exams, resulting the ratio: 20/58*100=34,48%. Recommendations: - consider increasing the number of exams in the educational programme, in order to reach at least 50% (in order to be in accordance with the ARACIS methodology).	partial compliance

21.	The programme curriculum provides 2-3 weeks of practice per year as of the second year of study, and for the preparation of the graduation thesis in the last year of study. **Findings from the Self-Evaluation Report/ Visit:** The practical training of students is ordered by the Regulations on the procedure for conducting the practice of higher education applicants (http://osvita.kpi.ua/node/184). According to SAR: „The duration of the pre-diploma practice is 4 weeks, the volume is 6 credits. Main places of practice: Institute of Electrodynamics of the National Academy of Sciences, State Enterprise "Antonov", KP "Kyiv Metropoliten" and other specialized enterprises (https://cutt.ly/B9avnyD).” According to SAR: “The session of the 8th semester is held in the first half of April, followed by five weeks of pre-diploma practice, preparation of diploma projects (from the end of May to mid-June) followed by their defense in the second half of June. Calendar plan of students' work in 2024/2025 study year is at the link (https://kpi.ua/files/calendar_2024-2025.pdf).” The curriculum includes 180 hours of pre-diploma practice, with 6 credits. It should be noted that, it is partially compliant the requirements of ARACIS and EURACE label, which impose minimum 240 hours of practice for the Bachelor studies (divided into domain, specialty and diploma practice). **Recommendations:** - consider delivering correct information about the duration of the pre-diploma practice; - consider introducing into the curriculum, practice in enterprises ("Industrial Internship", "Industrial Training", or "Work Placement"), to reach 240 hours of practice in total (in order to be in accordance with the ARACIS methodology).	partial compliance
22.	For the practice periods, the higher education institution has concluded collaboration agreements, contracts, or other documents with the practice units, which provide: the location and period of practice, modality of organisation and guidance, persons in charge from the education institution and practice unit etc. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „The formation of an individual educational trajectory is regulated by the "Regulation on the Individual Study Plan of a Higher Education Applicant" (https://cutt.ly/UJIcjcw) and the "Regulation on the Implementation of the Right to Free Choice of Educational Disciplines by Higher Education Applicants" (https://cutt.ly/ d9aztA6). ... Also, during their studies, students undergo internships at industrial enterprises of the country. Performance of laboratory works, course and diploma projects are coordinated with representatives of stakeholders and is carried out on the modern material and technical basis of the chair, which is constantly updated.” According to SAR: “Issues related to the organization and conduct of internships are covered in the "Regulations on the procedure for conducting internships for students of higher education" (https://cutt.ly/HJIUjuN).”	complicance

Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI and Methodological recommendations on issues of organization of students' practice and preparation of work programs of practice at Igor Sikorsky KPI are available on website: https://osvita.kpi.ua/node/184, https://kpi.ua/practical_training_period.

According to discussion to the visit and SAR, pg. 29: Pre-diploma practice of students takes place at leading electrotechnical enterprises and scientific institutions, in particular at the Institute of Electrodynamics of the National Academy of Sciences of Ukraine, JSC Antonov, KP Kyiv Metropoliten, JV Kyiv Thermal Networks, KP Kyivteploenergo, LLC Octavis Engineering, PRIVATE LIMITED LIABILITY COMPANY "Kyiv Roshen Confectionery Factory", LLC "Ventcontrol", LLC "Handrex Mobility", LLC "X-Market", LLC "Vent-Service", LLC "Greentech Harvest" and others.

Annex S17 – Agreements for students practice-internship, contains examples of practice agreements for the evaluated programme (2023, 2024).

The Regulations on Conducting Practice at Igor Sikorsky Kyiv Polytechnic Institute define the responsibilities of both students and companies during the internship period. These obligations are formalized through agreements between the university and host organizations, ensuring structured supervision and assessment of student performance (https://osvita.kpi.ua/sites/default/files/downloads/Regulations_conducting_practice.pdf).

During the practice, each student is required to maintain a practice diary, which serves as the primary document for tracking progress. This diary must reflect the tasks assigned throughout the internship, including an individual task tailored to both the company’s needs and the student’s academic requirements. The diary also includes feedback from the assigned company supervisor, documenting the student’s achievements, compliance with assigned duties, and overall performance. At the end of the internship, the diary is reviewed and evaluated both by the company and the university.

The companies hosting students are obligated to provide structured supervision and ensure the proper execution of tasks. They must appoint a supervisor to oversee the student’s work, conduct safety training, and introduce them to workplace regulations. The company is responsible for equipping students with the necessary resources and assigning relevant tasks aligned with the educational objectives of the practice. Throughout the internship, supervisors monitor student engagement and record observations in the practice diary, offering constructive feedback that contributes to the final assessment.

Upon completion of the internship, students are required to submit a final report, summarizing their activities and key learning outcomes. This report is assessed by a university commission, which considers both the tasks completed and the supervisor’s evaluation. The final grade reflects the student’s engagement, adherence to assigned responsibilities, and ability to integrate academic knowledge into practical work. If a student fails to fulfill the internship requirements without a valid reason, they may be required to retake the practice or face expulsion from the academic program.

Recommendations:

- none.

23.	The practice syllabi are adequately prepared, being focused on the students acquiring the practical skills which to allow them, after graduation, to get a job on the labour market. **Findings from the Self-Evaluation Report/ Visit:** Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI and Methodological recommendations on issues of organization of students' practice and preparation of work programs of practice at Igor Sikorsky KPI are available on website: https://osvita.kpi.ua/node/184, https://kpi.ua/practical_training_period. The curriculum includes 180 hours of pre-diploma practice, with 6 credits. According to discussions with the graduates: - skills acquired during the bachelor's degree are very useful on the labor market in Ukraine and abroad, and the diploma was helpful to get a job. **Recommendations:** - consider introducing into the curriculum, practice in enterprises ("Industrial Internship", "Industrial Training", or "Work Placement"), to reach 240 hours of practice in total (in order to be in accordance with the ARACIS methodology).	compliance
24.	The graduation examination is a summary examination which certifies the assimilation of the learning outcomes corresponding to the university qualification (study programme). **Findings from the Self-Evaluation Report/ Visit:** According to the EPP (https://cutt.ly/XKdKzbN), the final certification is the defense of the qualification work. According to SAR: “The curriculum is structured in such a way as to allow graduation within the period (4 years of undergraduate studies) normally assigned to this study cycle.” According to SAR: „During the period of quarantine restrictions and the introduction of martial law, the "Regulations for conducting semester control in remote mode" and the Regulations for organizing and conducting defenses of qualification works and attestation exams in remote mode have been implemented in the University (https://osvita.kpi.ua/node/148).” Graduation certification is conducted in the form of a public defense of a diploma project, which fully certifies the assimilation of learning outcomes, meets the qualification requirements. The diploma project demonstrates the student's ability that independently perform the assigned task at the level of the established standards of specialty 141 "Electrical energetics, Electrical Engineering and Electromechanics". According to discussions with the graduates: - they consider that theory and practice are well balanced, also hardware and software. **Recommendations:** - none.	compliance

25.	The themes for the preparation of the final paper (graduation theses) contain subjects proposed by / developed in collaboration with the industry. **Findings from the Self-Evaluation Report/ Visit:** According to the Regulations on the examination commission and certification of applicants for higher education, in Igor Sikorsky KPI (https://osvita.kpi.ua/node/35), topics of qualification papers can be proposed by practice managers from practice bases, stakeholders with the necessary justification of the expediency of its development and the possibility of implementation. According to the discussions with the graduates and employers, regarding the collaboration with faculty: - companies offer internships for students; - companies send proposal for projects, invite teaching staff to visit the companies and receives feedback from faculty. The list of topics for diploma projects is approved at the beginning of the academic year at a department meeting (Annex S03 – List of diploma themes). Examples: Electromechanical system of a small electric vehicle, Automated electric drive of a rotary mechanism of the rotary excavator, Automated electric drive of a roller conveyor. **Recommendations:** - none.	compliance
26.	The structure of the study programme remains unchanged for one study cycle; it may be modified only as of the 1st year of the following academic year. **Findings from the Self-Evaluation Report/ Visit:** Specified procedures for development, approval, monitoring and periodic review of educational programs are considered in the Regulation on the organization of the educational process (https://osvita.kpi.ua/node/39) and Regulation on the development, approval, monitoring and revision of educational programs (https://osvita.kpi.ua/node/137). According to SAR: “According to the results of the last two reviews of the EPP, the following changes were made: to the learning outcomes for the purpose of correcting and clarifying the wording (in particular, minor changes were made to the wording of professional competencies K22, K24 and program learning outcomes PR21, PR25); content of the EC (in particular, the EC "Theory of automatic control" and "Mathematical methods in electromechanics" were combined into a single EC "Theory of automatic control", the EC "Power converters of electric drives", the EC "Fundamentals of microprocessor technology" were added to the mandatory part of the EP. In 2024, the following changes took place: EC "Synthesis of logical circuits” was increased by 1 credit - doubled hours of practical classes according to the proposals of applicants; EC "Automation systems. Course project" was moved from 4th to 5th semester; EC "Theory of automatic control" was moved from the 3rd to the 4th semester, the EC "Electrical drive" has been increased to 5 credits; the new EC "Modeling of Electromechanical Systems" has been introduced to reinforce the PR 20 and PR 22, taking into account the requirements and recommendations regarding the	compliance

	design of educational programs and curricula, specified in Appendix 3 of Order No. NOD/263/24 dated April 8, 2024 "On planning and organizing the educational process for the 2024-2025 academic year".” The structure of the curriculum remains unchanged during one study cycle; the curriculum can be changed only from the 1st year of the next academic cycle. Currently, the chair offers 4 different curriculums for 4 studying years (discussions to the visit). **Recommendations:** - none.	
27.	*Other requirements provided in the standards specific to the Bachelor’s field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:** - none.	Not the case
	B.1.3 Relevance of the study programme	
1.	The study programme is designed by involving the representatives of the academic sector, including students, industry and economic sector, and labour market. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “In the city of Kyiv and the Kyiv region, there are a number of enterprises whose activities are related both to the specialty 141 "Electrical energetics, electrical engineering and electromechanics" in general, and to electromechanical systems, automation and electric drive (https://cutt.ly/neWZLo5b), in particular, "NEC Ukrenergo", KP "Kyivteploenergo", PJSC "DTEK Kyiv Electric Networks ", PJSC "DTEK Kyiv Regional Electric Networks", LLC "Polytechnoservice", LLC "Schneider Electric", LLC "SV ALTERA", SE Siemens Ukraine, LLC "Technoservice privod" and other.” According to SAR: “Every year, the Educational and Scientific Center of Applied Sociology "Socioplus" conducts a survey of graduates and employers regarding satisfaction with acquired competencies. Consultations with representatives of the scientific and industrial sector are held annually during the employment period of graduates, at the profession fair, during internships by students. The results of consultations are documented in the form of meeting protocols and letters from institutions (https://cutt.ly/49oRgwJ). Chair holds consultations with partner institutions twice a year according to an agreed schedule during a student's internship. (https://cutt.ly/b9oO3ow).” SAR highlights some examples: - senior researcher, deputy director for scientific work of the Institute of Electrodynamics of the National Academy of Sciences of Ukraine I.A. Shapoval was included in the project group., (https://cutt.ly/49oRgwJ), who is also involved in teaching the EC "Power converters of electric drives"; - the proposals of the "Technoserviceprivod" company, the Kyiv Plant of Lifting and Transport Equipment and the Institute of	compliance

	Electrodynamics were taken into account (https://cutt.ly/b9oO3ow); - in 2021, Prof. V.M. Myhalskyi (Institute of Electrodynamics of the National Academy of Sciences of Ukraine), and other employers are involved in one-off lectures, seminars, etc. (https://cutt.ly/Y9oP0ap). Also, some activities involving department and employers are presented on website: https://epa.kpi.ua/bachelor-student-learning/cooperation-with-employers/. In accordance with the Regulations on the internal quality assurance system in higher education (https://osvita.kpi.ua/sites/default/files/downloads/REGULATIONS%20_Eng.pdf), a survey of students is conducted and their proposals are taken into account. The website of the Department of Electromechanical Systems Automation and Electrical (https://epa.kpi.ua/en/bachelor-student-learning/questioning/) present the Questionnaire and the results (Surveys of higher education applicants and their results) valid for 2021/2022 to 2023/2024. During the discussion to the visit, it has been confirmed that: - exists a work group for the study programme; this team consist of 3 teachers, 1 stake holder and 1 student; - at the end of each semester, students take a survey about the quality of the educational process, the quality of assessment; - companies and faculty have meetings to discuss the curriculum content. Recommendations: - none.	
2.	The study programme is revised on regular basis by considering the peer-reviews together with students, graduates, and representatives of the employers, in this way benefiting from external expertise and reference points. Findings from the Self-Evaluation Report/ Visit: The revision of the study programmes is conducted by the Regulation on the development, approval, monitoring and revision of educational programs (https://osvita.kpi.ua/node/137). According to SAR: “The curriculum of the program is designed to meet the educational needs of employers, including the acquisition of practical knowledge and skills. The development team took into account the following: employer reviews of the educational program, letters of support regarding the educational program, annual requests from companies for graduates, meetings of students with representatives of employers, round tables with the participation of stakeholders, meetings during the annual "Career fair", reviews of representatives of companies that participated in the defense of diploma projects, protocols of regular meetings with enterprise specialists. Taking into account the demands and proposals of employers was approved at the meetings of the chair (and with the participation of industry representatives).” According to SAR: “In addition, the recommendations of experts of the National Agency for Quality Assurance of Higher Education, given during the national accreditation in 2023, were taken into account (https://cutt.ly/CeEguhwH), in particular:	compliance

	the revised content of the EC "Control of energy conversion in renewable sources and electric vehicles" in the direction of expanding the topics related to the provision of PR13 "Understanding the importance of traditional and renewable energy for the successful economic development of the country"); adjusted content of the EC "Industrial ecology" and "Electrical part of stations and substations" in terms of increasing the volume of topics related to the provision of PR4 "Know the principles of operation of bioenergy, wind energy, hydropower and solar energy plants" and PR13 "Understand the importance of traditional and renewable energy for a successful economic development of the country"; the number of course works/projects and computational graphic works has been optimized to decrease." According to the discussions to the visit: - the students are regularly involved in surveys in order to find out the degree of satisfaction with the conditions of study; - at the level of the study programme exists a work group consisting of 3 teachers, 1 stake holder and 1 student; - companies and faculty have meetings to discuss the curriculum content. **Recommendations:** - none.	
3.	The higher education institution disposes of mechanisms for annual peer-review of the way in which knowledge is transmitted to and assimilated by students. **Findings from the Self-Evaluation Report/ Visit:** Igor Sikorsky Kyiv Polytechnic Institute annually conducts complex monitoring of the quality of specialist training (https://kpi.ua/monitoring-about). According to SAR: „In accordance with the "Regulations on the organization of the educational process" (https://cutt.ly/oHCbPJE), the EPP provides for input, current, calendar, rector's and final types of control. Entrance control is carried out at the beginning of studying the discipline in the form of a test. Rector's control (comprehensive monitoring of the quality of specialist training https://cutt.ly/r9aGb55) is designed to assess the residual knowledge of the applicants. According to the "Regulations on current, calendar and semester control" (https://cutt.ly/jKdHeV2), current control is carried out during the semester, and the forms of its conduct are determined by the EC syllabus. The results of current monitoring are entered in the "Current Monitoring" module of the Electronic Campus and are available to applicants." Examples: - in the two last update were taken into account: the recommendations received from applicants during the questionnaires (https://cutt.ly/D9amlc1), in particular, to develop a new EC dedicated to learning programming languages and specialized software according to the profile educational program (result – new ECs "Software implementation of automatic control tasks" https://cutt.ly/79am2ym and "Information technologies in automation" https://cutt.ly/z9am7a1) were implemented;	compliance

	- recommendations of employers and graduates (https://cutt.ly/p9amDCN), in particular, to strengthen the field of automation through the implementation of the EC "Practicum on automation", where applicants will be able to perform a number of practical tasks using the available laboratory equipment (the result is the introduction of a new EC "Workshop on automation of technological processes" https://cutt.ly/79aQeQt). **Recommendations:** - none.	
B.1.4 Organisation and coordination of the study programme		
1.	The didactic process is organised and coordinated so that to ensure the fulfilment of the mission and aims and achievement of the programme outcomes. **Findings from the Self-Evaluation Report/ Visit:** The Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute are the main regulatory document regulating the organization and implementation of educational activities at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (https://kpi.ua/regulations). The focus of the didactic process on fulfilling the missions, goals and achieving the results of the program are clearly traced in its Professional Educational Programme (Annex 2 – VS, https://cutt.ly/2eWZNieP). Based on it, the curriculum is drawn up, which provides an appropriate sequence of teaching to implement connections between disciplines. In the syllabus of each discipline its goals and learning outcomes are given, and the disciplines on which it is based and for which it itself is the basis are indicated. The study of all regulatory disciplines ensures the achievement of the missions, goals and results of the programme. **Recommendations:** - none.	compliance
2.	There are prerequisites set to ensure the development of the skills by natural and correlated accumulation of knowledge and skills mentioned in the syllabi (for example, conditioned discipline groups). **Findings from the Self-Evaluation Report/ Visit:** The sequence of disciplines reflected in the curriculum, Professional Educational Programme and in the syllabuses of the disciplines ensures accumulation and development of knowledge and skills. Examples: 1. Theoretical foundations of electrical engineering. Part 1. Linear electric circuits of direct and alternating current	compliance

	● The subject of the educational discipline is the laws of the theory of linear electric circuits, typical mathematical methods of analysis of electric circuits of constant and single-phase sinusoidal currents. ● Pre-requisites and post-requisites of the discipline: to successfully master the discipline, the student must possess the theoretical base of the disciplines "General Mathematics", "General Physics". The discipline "Theoretical foundations of electrical engineering-1" precedes the study of the disciplines "Theoretical foundations of electrical engineering-2", "Electric machines", "Automated electric drive". 2. Automatic control theory ● The subject of the educational discipline is the principles and methods of construction, calculation and research of linear continuous automatic control systems used for the automation of electromechanical objects of various purposes. ● Pre-requisites and post-requisites of the discipline: to study the disciplines "Theory of Automatic Control" precede the basic educational components "Higher Mathematics" and "General Physics". Competencies, knowledge and skills acquired during the study are necessary for further study of the disciplines "Electric drive", "Automated electric drive", "Control of electric drives", "Electromechanical systems of typical technological applications", "Modeling of electromechanical systems", " Electromobility". **Recommendations:** - none.	
3.	The results of the analyses regarding the quality of the student evaluation with regard to the developed skills confirm the adequacy of the evaluation methods used and the proper deployment of the process. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „Evaluation measures are regulated by the "Regulations on the Organization of the Educational Process" (https://cutt.ly/oHCbPJE), "Regulations on Current, Calendar and Semester Control of Study Results" (https://cutt.ly/jKdHeV2) and "Regulations on distance learning" (https://cutt.ly/SKd0lYn). These regulations are posted on the university portal (https://cutt.ly/BKdhdrC) and are available to all participants of the educational process. Forms of conducting and evaluation criteria of control measures are developed by the teacher responsible for the discipline in accordance with the "Regulations on the system of evaluation of learning results "(https://cutt.ly/5Kd0XDF). ... The main forms of ongoing control within the educational disciplines are: performance and defense of laboratory works or computer workshops, reports at seminars, work in practical classes, performance of modular control works, passing tests, preparation and protection of home control works or calculation and graphic works. Current control of course projects and works is carried out through performance analysis tasks according to the calendar work plan.	compliance

	... Calendar control of educational disciplines is carried out from the first to the seventh semester in the 7-8 and 14-15 weeks of study. It consists in the defined level of performance of current tasks at the time of control: in the case of obtaining more than 50% of the maximum possible number of points, it is assigned "certified", and in the opposite case, "not certified".” Such multi-level control of success allows the authorities to adjust the process during training to improve the results from both the teachers and the students. According to discussion to the visit: - the students assured us that they have an open and direct dialog with all their teachers; - students learn about all the requirements for awarding points from the syllabi and curricula of the disciplines; - according to students, all teachers inform them about the relevant assessment criteria at the first lesson of the relevant discipline. **Recommendations:** - none.	
4.	The achievement of the learning outcomes by students is adequately assessed, covering the 8 learning areas defined by the EAFSG: 1- Knowledge and Understanding; 2- Engineering Analysis; 3- Engineering Design; 4- Investigations; 5- Engineering Practice; 6- Making Judgements; 7- Communication and Teamwork; 8- Lifelong Learning. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The standard of higher education in specialty 141 for the first (bachelor) level was approved and put into effect by Order of the Ministry of Education and Science of Ukraine No. 867 dated 06/20/2019 (https://cutt.ly/i9oHfjE). The standard provides for graduates to acquire integral, general and special professional competencies (К01-К21) with corresponding program learning outcomes (ПР01-ПР19), which are ensured by the teaching of mandatory components of the EPP, which are fully reflected in it.” According to SAR: “According to the current legislation of Ukraine, the EPP itself is the main document of educational and methodical support of the EC, which is regulated by the "Regulations on the organization of the educational process in Igor Sikorsky KPI" (https://cutt.ly/m9oHWGA). … The provision of programmatic learning outcomes by relevant ECs is represented by the matrix of programmatic learning outcomes, which are reflected in the EC curriculum and the structural and logical scheme of the EP (https://cutt.ly/2eWZNieP).” The Professional Educational Program, highlight: General information, Educational programme purpose, Educational programme characteristics, Eligibility of graduates for employment and further study, Teaching and assessment, Programme competencies, *Programme learning outcomes*, Resource provision for programme implementation, Academic mobility, Components of educational programme, Structural and logical scheme of the educational programme (https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf).	compliance

	The adequacy of the assessment is confirmed by the results of the rector's control conducted at the university in the first (entrance control), second and fourth years of studying in the main disciplines. Rector's control is independent and impartial, teachers of the department have no opportunity to influence the evaluations (https://kpi.ua/monitoring-about). Another way to check the adequacy of the evaluation is the survey of students regarding their satisfaction with the evaluation, which is conducted in the "Electronic Campus" system (https://ecampus.kpi.ua/) and it is anonymous. It is held in the student's personal office. Another way to check the adequacy of the assessment is an open survey by the teacher at the end of the semester. The achievement of the learning outcomes of the disciplines is adequately assessed. **Recommendations:** - none.	
5.	The students are supported in the didactic activities or by other specific actions to understand the necessity of continuing their education through lifelong learning to maintain, after graduation, an updated level of their knowledge in the studied field. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Every year, the department graduates about 40 bachelors, most of them continue their studies at the master's level.” According to SAR: “All students who do not continue their studies in the master's degree are accepted for work within six months after receiving the diploma. They are accepted for positions corresponding to the qualification level of bachelor in electrical engineering. At least 70% of the graduates of the last two graduations of the EASEDEM educational program continue their studies at the master's level.” At the evaluation visit it was relevant that teachers give students advice and consultations, also regarding their further education and career (Career Development Center of Igor Sikorsky Kyiv Polytechnic Institute, https://robota.kpi.ua/). **Recommendations:** - none.	compliance
6.	The ratio between the number of teachers and the number of students enrolled in the evaluated study programme complies with the provisions of the standards specific to the Bachelor’s field of the programme. To assess the quality, it is considered that a teacher has the primary working hours in a single university. **Findings from the Self-Evaluation Report/ Visit:** The number of full-time students for one full-time position of a teacher in state-owned higher educational institutions for the educational qualification level of a bachelor is regulated by Resolution of the Cabinet of Ministers of Ukraine No. 1134 of August 17, 2002 (https://zakon.rada.gov.ua/laws/show/1134-2002-%D0%BF#Text).	compliance

	According to the Annexes 4, 5 – VS, the number of teaching staff with activities to the evaluated study programme is 36. Considering the total number of the students enrolled in the 2024-2025 academic year, results: **36/90=0,4.** **Recommendations:** - none.	
7.	The study batches – series, groups, sub-groups – are sized so that to ensure the efficient deployment of the educational process. **Findings from the Self-Evaluation Report/ Visit:** The number of students in lecture streams and during group training sessions is determined by the Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute (https://kpi.ua/regulations): The number of students enrolled to the evaluation programme in 2024-2025 academic year, is as follows: 1st year: 23 students, 2nd year: 31 students, 3rd year: 23 students, 4th year: 13 students. Explanations regarding groups studying under integrated curricula (according to the faculty representative, Annex 5 – VS): “The prerequisites for admission to the educational program are the presence of a complete general secondary education. In Ukraine, such education can be obtained after graduating from a general secondary school or college. When entering an educational program after a college, part of the educational components of the curriculum of such an applicant can be recognized by the disciplines that he studied at the college. This reduces the total duration of study to 2 years and 10 months. An integrated curriculum is formed up for such students, which contains all the educational components of the educational program, but distributed not over four academic years, but over three. Acts of recognition of the results of previous education are formed up for each student. Such students are enrolled in a separate group (for example: the second-year study group ЕП-31 is for school graduates and ЕП-п31 is for college graduates). Each such group studies according to its own schedule, but they can be combined for lectures with groups of students studying for 4 years into streams for those disciplines that coincide in semesters. Unfortunately, according to the results of the 2024 admissions, very few college graduates entered and were enrolled in another educational program at the faculty. Because of this, there is no ЕП-п41 group of college graduates in the first year of this educational program. Issues related to the recognition of the results of previous education are set out in the Regulations on recognition in Igor Sikorsky Kyiv Polytechnic Institute results of previous education and Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute.” The number of students in educational activities are: - lectures: maximum 70 students (students from EASEDEM and other study programmes, having common courses; examples: Mathematics, Physics); - practical classes: maximum 25 students;	compliance

	- laboratory classes: maximum 15 students. **Recommendations:** - none.	
8.	From the timetable of the evaluated study programme results the possibility of normal deployment of the educational process, in accordance with the law. **Findings from the Self-Evaluation Report/ Visit:** The schedule is made according to the capabilities of the auditorium fund (https://schedule.kpi.ua/). **Recommendations:** - none.	compliance
9.	The results obtained by the student during years of study are registered in the Academic Record, and they are attested based on the Diploma Supplement. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „All student learning results are registered in the "Electronic Campus", that which any student has permanent access. The results obtained by the student during the years of study are registered in the academic certificate and certified he the basis of the Supplement that the diploma." Procedure for ordering, printing, issuing and accounting of academic certificates at Igor Sikorsky Kyiv Polytechnic Institute is available on website: https://osvita.kpi.ua/index.php/node/122. After graduation, the final grades for all disciplines of the program studied by the student for all years are included in the appendix to the European-style diploma in Ukrainian and English (https://kpi.ua/files/diploma-2017-1.pdf). **Recommendations:** - none.	compliance
10.	The higher education institution has regulated the procedure for the promotion of the student from one year of study into another, depending on the accumulated ECTS study credits, and the procedure of covering two years of study in a single year, in accordance with the legal regulations in force. **Findings from the Self-Evaluation Report/ Visit:** The University has a Regulation on the expulsion, interruption of studies, renewal and transfer of students of higher education in Igor Sikorsky KPI (https://osvita.kpi.ua/index.php/node/178), formed on the basis of the Law of Ukraine "On Higher Education".	compliance

	This regulation prescribes the criteria for the implementation of the individual study plan and the grounds for expelling students from the university. Individual study plans provide, as a rule, 30 credits per semester, which must be credited to the student according to the results of his studies. According to SAR: „The higher educational institution established the procedure for transferring a student from one course that another, depending he accumulated ECTS study credits, in agreement with current legal norms, and does not provide for the procedure of covering two years of study in one year. The procedure for covering two years of study in one year is not provided for by the law of Ukraine "On higher education".” According to SAR: „For students with learning difficulties, adaptation programs are provided in a number of disciplines: mathematics, physics. In cases of good reasons, students with learning difficulties are provided with individual schedules for the implementation of the educational program.” Students with learning difficulties have the opportunity to study at adaptation and remedial courses of the Educational and Scientific Center of the Institute for Monitoring the Quality of Education (https://kpi.ua/adapt). **Recommendations:** - none.	
11.	For accreditation, the series of graduates of the higher education institutions authorized to operate on temporary basis have taken the Bachelor’s exam in accredited institutions with the same Bachelor’s field or study programme, established by ARACIS. The teachers who have carried out activities in the faculties or study programmes which the candidates taking the respective Bachelor’s degree examination come from shall not be part of the examination commissions. **Findings from the Self-Evaluation Report/ Visit:** This is a periodic evaluation of bachelor study programme in the view of re-accreditation and EUR-ACE label awarding. Currently, according to the information from https://epa.kpi.ua/wp-content/uploads/2023/06/cert_2023_bach.png, the educational programme EASEDEM operates within the framework of the license issued by the National Agency for Quality Assurance of Education - NAQA (Certificate № 5475, date of issue – 07/07/2023, validity period - 5 years, until 01/07/2028, https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). **Recommendations:** - none.	Not the case
B.1.5 Partnerships		
1.	The partnerships concluded with public and private organisations for the practice of the students are sufficient and with an adequate content (regarding the practice period, number of practice locations, tutorship guaranteed in the company etc.) in order to obtain the expected results of the study programme.	compliance

	Findings from the Self-Evaluation Report/ Visit: The internship is organized in accordance with "Regulations on the internship of students of higher educational institutions of Ukraine" 24.09.20 (https://document.kpi.ua/files/2020_7-172.pdf, https://osvita.kpi.ua/sites/default/files/downloads/Regulations_conducting_practice.pdf). According to SAR, pg. 28: “Work is being carried out at KPI to involve practicing professionals and representatives of employers in the organization and implementation of the educational process. A number of cooperation agreements have been concluded with leading enterprises working in the specialty (https://cutt.ly/UJ9qCew), in particular NEC Ukrenergo, DTEK Kyivskie Elektromerezhi, ANTONOV LLC Polytechnoservice and others. Equipment used in the educational process and scientific research was transferred by leading enterprises. In particular, within the framework of the DAAD program, state of the art equoipmnet and electrical motors and software were obtained, including a syncronouus reluctance motor from ABB, a position tracking drive and other equipment. Siemens provided 2 Siemens Logo logic controllers with expansion modules and other equipment (https://cutt.ly/F9lyk1d), and SV Altera Lovato logic controllers, which are used in the EC "Automation Systems". Frequency converters, soft start devices, and auxiliary equipment were provided by ABB and NORD-Ukraine and are used during classes on the EC "Control of electric drives" and "Fundamentals of mechatronics" and others (https://cutt.ly/2J9eGQZ). The Ital-techno company provided a new stand for EC "Electromechanical systems of typical technological applications" with a modern control system for pumping units based on Santerno converters (https://cutt.ly/Z9lodBW). The training of acquirers was held at the center of the Schneider Electric company (https://cutt.ly/CJ9jYTP).” The list of the potential employers with contact details and information about the companies, including some videos, are available on the website: https://epa.kpi.ua/en/bachelor-student-learning/employment/. These companies provide the necessary number of places for the practice of students of the educational programme (discussion to the visit). **Recommendations:** - none.	
2.	There are partnerships concluded with organisations with which prior consultations were held in order to identify the educational needs of the study programme (see criterion A.1.2.5) **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Job fairs are held for applicants (https://kpi.ua/fair), where they have the opportunity to communicate with representatives of employer enterprises. Representatives of employers are involved in the educational process, who are involved for part-time work: D.Sc. Shapoval I.A. (IED of the National Academy of Sciences of Ukraine) gives lectures on the subjects "Power converters of electric drives" and "Management of energy conversion in renewable sources and electric vehicles", D.Sc. Myhalsky V.M. (IED of the National Academy of Sciences of Ukraine) in 2021 worked as the head of examination	compliance

	commissions for the defense of bachelor theses. Representatives of employers actively hold one-off lectures and seminars with applicants. For example, an employee of the Siemens company Victor Reshetnyk arranged an online lectures for students within the framework of studying the EC "Automation systems" (https://cutt.ly/r9lo2o9), which was devoted to general questions and the structure of automation systems, the periphery of programmable logic controllers, languages and programming standards, HMI panels. Employee of the TESLA company, graduate of the department Yevgeny Terletsky, held a seminar on the development and programming of process control systems with HMI-interfaces and SCADA (https://cutt.ly/69lpq5a).” According to discussions to the visit: - in particular, Siemens is a close partner in the educational program; this company organized certified courses for students; - companies offer internships for students; - companies and faculty have meetings to discuss the curriculum content; - companies invite teaching staff to visit the companies and receive feedback from faculty. **Recommendations:** - none.	
3.	The partnerships concluded with other higher education institutions from abroad correspond for the purpose of achieving international mobility and achievement of programme outcomes. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The international activity of the Higher Education Institution is carried out by the Department of International Cooperation (http://icd.kpi.ua/), and the organization of academic mobility is regulated by the "Regulations on Academic Mobility" (https://cutt.ly/YH09yza) and is organized by the Department of Academic Mobility (https://mobilnist.kpi.ua/). Teachers and students of the department annually participate in Erasmus+ and DAAD academic mobility programs in accordance with the existing agreements with the University of Applied Sciences of Hesse and the University named after Otto von Gerike (Germany), University of Warwick (UK), University of West Bohemia (Czech Republic) (https://cutt.ly/hHX19Lp).” Some examples of teachers and students are presented in SAR. Currently, the majority of students in the program are boys who, according to the current rules in Ukraine, cannot go abroad to participate in mobility (discussion to the visit). **Recommendations:** - none.	compliance

B.2 Learning results

B.2.1 Pass rate of students and graduates

1. For the accreditation of the study programme, the higher education institution should prove as follows:

- minimum 51% of the total graduates of each series have passed the Bachelor's degree examination;
- minimum 40% of the graduates of the first series are hired with legal labour contract on positions corresponding to the specialization obtained when graduating.

compliance

Findings from the Self-Evaluation Report/ Visit:

The results of students' surveys held by the Scientific Research Center of Applied Sociology "Socioplus" (https://kpi.ua/socioplus), and the contacts with students and enterprises in the professional field show that in their further careers most of them get a job in their specialty.

The University has a Career Development Center of Igor Sikorskyi Kyiv Polytechnic Institute, which is an interactive space for cooperation between higher education applicants/graduates and employers (https://robota.kpi.ua/).

The statistics presented in Graduates passed final exam, shows the following results:

Academic year	Number of students of the 4th study year	Number of students, who successfully passed the final attestation	Percentage of students, who successfully passed the final attestation	Number of students, who successfully enrolled to the masters studies	Percentage of students, who successfully enrolled to the masters studies
2021/2022	35	35	100 %	18	51,4 %
2022/2023	36	36	100 %	25	69,4 %
2023/2024	29	27	93,1 %	20	74,1 %

Recommendations:

- none.

2. The institution disposes of internal mechanisms to monitor the student progression with regard to:

- academic results during the years of study,
- drop-out rate,
- credits accumulated by the students which pass from one year into another (as credited students),
- time to graduation.

The results of the monitoring confirm the efficiency of the educational process.

compliance

	Findings from the Self-Evaluation Report/ Visit: According to SAR: “All student learning results are registered in the "Electronic Campus”, that which any student has permanent access.” According to SAR: “Accounting of students educational activities at Igor Sikorsky KPI takes place in the automated electronic information and telecommunication system "Electronic Campus", as well as in the "Deanery" system integrated in the information and telecommunication system "Electronic campus".” All grades are given in the "Electronic Campus" system (https://ecampus.kpi.ua/) which automatically calculates the success rates. The time until the graduation of bachelor degree program is fixed, with rare exceptions, if the student takes an academic leave. **Recommendations:** - none.	
B.2.2 Valorisation of the university qualification by hiring on the labour market or by continuing the university studies		
1.	The educational institution monitors on ongoing basis the career of its graduates based on a system developed for this purpose, and it annually provides a detailed report regarding the evaluated study programme. **Findings from the Self-Evaluation Report/ Visit:** The Career Development Center of Igor Sikorskyi Kyiv Polytechnic Institute, which is an interactive space for cooperation between higher education applicants/graduates and employers (https://robota.kpi.ua/) helps with the employment. The active association of university graduates (https://alumni.kpi.ua/) is one of the effective tools of communication with graduates. According to SAR: “Every year, the Educational and Scientific Center of Applied Sociology "Socioplus" conducts a survey of graduates and employers regarding satisfaction with acquired competencies.” According to SAR: „Department AES-ED, on which EPP is implemented, together with the Educational and Scientific Center of Applied Sociology "Socioplus" (http://socioplus.kpi.ua/), the Educational and Scientific Center for Innovative Monitoring of the Quality of Education (https://kpi.ua/eqmi) annually monitor EPP.” The university annually provides a detailed report on the demand for graduates of educational programs. "Annex S11. Graduates report" presents the results of an evaluation of the Faculty of Electric Power Engineering and Automation graduates at Igor Sikorsky Kyiv Polytechnic Institute, based on feedback from 122 employers who hired graduates in 2023. 40% of employers consider graduates' qualifications fully suitable for their positions, 34.3% find them mostly suitable, while 25.7% expressed some concerns. The average professional competency rating of graduates is 8.1 out of 10.	compliance

	Key weaknesses identified include digital skills (software development – 3.7, AI tools usage – 2.8) and management competencies (leadership – 4.0, customer orientation – 5.8). However, graduates received high scores for corporate ethics (9.3), motivation (8.8), discipline (8.8), and teamwork (8.2). Overall, 77.1% of employers see no significant issues with graduates' performance, but 38.7% indicate that new employees require additional training at the workplace. The results of this study can be used to modernize educational programs and improve graduates' adaptation to the demands of the modern labor market.	

Category	Key Findings
Survey Participants	122 employers who hired KPI graduates in 2023
Employer Satisfaction	40% - fully satisfied with qualifications, 34.3% - mostly satisfied, 25.7% - concerns
Average Professional Level	8.1 out of 10
Key Strengths	Corporate ethics (9.3), motivation (8.8), discipline (8.8), teamwork (8.2)
Key Weaknesses	Software development (3.7), AI tools usage (2.8), leadership (4.0), customer orientation (5.8)
Workplace Adaptation	77.1% of employers see no major issues, 38.7% say graduates require additional training
Recommendations	Improve digital skills, enhance leadership training, modernize educational programs

	Recommendations: - none.	
2.	At least 50% of the graduates are hired within two years as of graduation at the level of their university qualification. Findings from the Self-Evaluation Report/ Visit: According to SAR: “The structure of the educational program is presented in such a way that all these directions have clear logical connections and, in combination, give graduates the opportunity to find a promising job in various fields of specialization.” According to SAR: “Job fairs are held for applicants (https://kpi.ua/fair), where they have the opportunity to communicate with representatives of employer enterprises.” According to SAR: „The university organizes a survey of graduates and employers regarding the career growth of graduates (Department of professional growth, Socio+ service). The university and the department monitor the careers of graduates according to the procedure developed for this purpose. The university annually provides a detailed report on the demand for graduates of educational programs. The results of such surveys are a part of university department ratings. All students who	compliance

do not continue their studies in the master's degree are accepted for work within six months after receiving the diploma. They are accepted for positions corresponding to the qualification level of bachelor in electrical engineering."
The leaders of the department and its staff are in contact with the main employers and the graduates (discussions to the visit).

Recommendations:
- none.

3. At least 20% of the graduates from the last two series of the study programme enrol in Master's degree programmes irrespective of the field. — compliance

Findings from the Self-Evaluation Report/ Visit:
At least 70% of the graduates of the last two graduations of the EASEDEM educational program continue their studies at the master's level.
At least 50% of the graduates of the last three graduations of the EASEDEM educational programme continue their studies at the master's level.

Academic year	Number of students of the 4th study year	Number of students, who successfully passed the final attestation	Percentage of students, who successfully passed the final attestation	Number of students, who successfully enrolled to the masters studies	Percentage of students, who successfully enrolled to the masters studies
2021/2022	35	35	100 %	18	51,4 %
2022/2023	36	36	100 %	25	69,4 %
2023/2024	29	27	93,1 %	20	74,1 %

Recommendations:
- none.

4. The results of the process of monitoring the graduates employability, the opinion of the hired graduates and employers with regard to the training during the university studies confirm the value of the obtained qualification, the adequacy of the programme aims and outcomes in relation to the needs of the labour market. — compliance

Findings from the Self-Evaluation Report/ Visit:
According to SAR: "Consultations with representatives of the scientific and industrial sector are held annually during the employment period of graduates, at the profession fair, during internships by students. The results of consultations are documented in the form of meeting protocols and letters from institutions (https://cutt.ly/49oRgwJ). Chair holds consultations with partner institutions twice a year according to an agreed schedule during a student's internship. (https://cutt.ly/b9oO3ow)."

	According to SAR: “Department AES-ED, on which EPP is implemented, together with the Educational and Scientific Center of Applied Sociology "Socioplus" (http://socioplus.kpi.ua/), the Educational and Scientific Center for Innovative Monitoring of the Quality of Education (https://kpi.ua/eqmi) annually monitor EPP. Also, experts, practicing professionals, higher education providers and other stakeholders can be involved in monitoring. According to the "Regulations on the development, approval, monitoring and revision of educational programs" (https://osvita.kpi.ua/node/137) monitoring involves: an annual survey of the participants of the educational process who are involved in the implementation of the EPP (university applicants, scientific and pedagogical workers, teaching and support and administrative and management staff of the university); surveys of graduates, employers and other external stakeholders, etc. The results of this monitoring are discussed at the meetings of the department (https://cutt.ly/i9IbmnD) and the scientific and methodical commission of the faculties/educational and scientific institutes, which are approved by the order of the rector (https://osvita.kpi.ua/node/134). The conclusions of the comission regarding the revision of the EPP are considered by the Methodical Council of KPI and approved at a meeting of the Scientific Council. Also, the results of labor market monitoring, insufficient validity of assessment results, etc., may be grounds for revising the EPP.” Consultative support for applicants regarding employment, in particular, is provided by holding "Profession Fairs", which invite representatives of Ukrainian enterprises and organizations (https://rabota.kpi.ua/about-fairs/). The employers confirm that: - they are very satisfied by the competencies of the graduates; some of them consider that the graduates prove a high level of expertise; - depending of the type of work, the graduates become independent in (2...6) month; National Academy of Sciences of Ukraine needs graduates with PhD; - the impact of the university on their companies is crucial. **Recommendations:** - none.	
5.	The involvement of the companies in partnership with the evaluated study programme in the graduates’ employability confirms the value of the obtained qualification, adequacy of the programme aims and outcomes in relation to the needs of the labour market. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “In the city of Kyiv and the Kyiv region, there are a number of enterprises whose activities are related both to the specialty 141 "Electrical energetics, electrical engineering and electromechanics" in general, and to electromechanical systems, automation and electric drive (https://cutt.ly/neWZLo5b), in particular, "NEC Ukrenergo", KP "Kyivteploenergo", PJSC "DTEK Kyiv Electric Networks ", PJSC "DTEK Kyiv Regional Electric Networks", LLC "Polytechnoservice", LLC "Schneider Electric", LLC "SV ALTERA", SE Siemens Ukraine, LLC "Technoservice privod" and other.”	compliance

	Eligibility for employment: “Specialists are able to hold positions, the qualification requirements of which require a bachelor's degree in electrical enginetics, electrical engineering, and electromechanics. Graduates can be employed in positions (according to the current Classifier of Professions of Ukraine DK 003:2010): 3113 Supervisor of electromechanical service; 3113 Escalator service manager; 3113 Electromechanic; 3113 Electromechanic of group handling machines; 3113 Electromechanic of the station; 3113 Electromechanic of lifting installations; 3113 Electromechanic mentor; 3113 Electrician technician; 3113 Design-technician (electrical engineering); 3113 Technologist- technician (electrical engineering). During the discussion to the visit it has been mentioned that the graduates are accepted for positions corresponding to the qualification level of bachelor in electrical engineering; examples: product engineer, hardware developer, research and teaching, automation engineer. **Recommendations:** - none.	
B.2.3 Level of satisfaction of the students in relation to the professional and personal development provided by the university		
1.	The higher education institution owns and applies regulations for mechanisms of regular sounding of the students’ opinion with regard to their satisfaction relative to the educational process, student services and infrastructure provided by the university. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Monitoring of students' opinion is carried out constantly at the level of the university, faculty and chair. There is a "Good KPI/Bad KPI" page in the Telegram channel at the university and faculty level. This is an informal channel for studying the current opinion of students. Based on the results of the analysis of the opinion of students, conclusions are quickly drawn and, if necessary, the educational process is corrected. There is a student council BOT for expressing dissatisfaction with students. There is a bot of the Department of educational work, which summarizes the opinion of students at the university level. Every semester there is a survey of students in the Electronic Campus regarding satisfaction with the educational process. The survey covers many questions, such as the current state of education and satisfaction with all components of the educational process (Campus). In particular, the survey contains questions about the infrastructure of the university and the services provided by the university.” During the discussion with students, it has been mentioned that: - at the end of each semester, students take a survey about the quality of the educational process, the quality of assessment, etc.; - sometimes, at the initiative of the teachers, they additionally conduct a survey at the last class in their discipline. **Recommendations:** - none.	compliance

2.	The process of monitoring the opinion of the students is adequate with regard to the relevance of the collected information, rate of reply and improvement measures (identified and implemented). **Findings from the Self-Evaluation Report/ Visit:** Monitoring of students' opinions is regularly conducted by the Socioplus Research Center of Applied Sociology (https://kpi.ua/socioplus). According to SAR: „Also, in each semester, an anonymous survey "Teacher through the eyes of students" is conducted, in which the students evaluate the work of each teacher according to the following categories: objectivity of assessment, ability to convey the material to students, ability to establish partnership relations with students, friendliness and tact towards students, organization interaction with students in the conditions of distance education. At the end of each academic year, the results of the survey are reviewed and analyzed at the department meeting, appropriate conclusions and recommendations for improving the quality of teaching are formed. Separate surveys are conducted twice a year on the department's website in order to obtain students' opinions about the quality of the educational program and its individual components. The survey results are discussed at chair meetings and taken into account when updating the educational program and syllabi.” The communications channels are available for all students, and it gives the opportunity to cover the opinion of the wide range of students. During the discussion with students, it has been mentioned that: - some students shared their experience of making suggestions for improvement; in particular, a student made a recommendation to improve the discipline “Theory of Automatic Control” through a discussion with the teacher and the head of the department; after that, the list of topics for study in this discipline was revised. This shows that: “…39 students participated in the survey, including: 11 first-year students (3 of them studying in the shortened form), 2 second-year students (1 of them studying in the shortened form), 13 third-year students (8 of them studying in the shortened form), 13 fourth-year students. The questionnaire consisted of 23 questions, of which 11 were separate for each group of students and were formed in accordance with the working curricula (7 groups in total), and 12 were common to all students. 22 questions were mandatory and in them students were asked to evaluate various criteria for organizing the educational process and, if desired, to provide their recommendations or suggestions on each topic of questions. 1 question was optional - in it students were asked to provide their recommendations or suggestions on issues that were not considered in the mandatory questions.” In a survey assessing various aspects of university educational practices, results showed that 92.3% (36 students) perceived no bias in knowledge assessment, though 7.7% (3 students) noted bias, specifically in the Design of electromechanical systems. On awareness of procedural issues, 82.1% of students felt informed about conflict resolution, 94.9% about re-passing controls, 84.6% regarding appeal processes, and 100% were aware of academic integrity policies. Classes with industry professionals were reported by only 38.5% of students, while the majority, 61.5%, did not experience such classes. The quality of the	compliance

	educational environment received an average rating of 7.85/10. Regarding university support mechanisms, 23.1% of students used offered supports, whereas 76.9% did not engage with these resources. Recommendations: - regarding the process of monitoring the opinion of the students, conduct the specific activities, in order to increase the rate of responses.	
3.	Monitoring the opinion of the students about the didactic process confirms the efficiency of the respective process and provided support services. More than 50% of the students positively assess the learning/ development environment provided by the university and their own learning path. Findings from the Self-Evaluation Report/ Visit: Monitoring of students' opinion is carried out constantly at the level of the university, faculty and chair. Students are regularly involved in surveys in order to find out the degree of satisfaction with the conditions of study, participation in the updating of the educational programme, monitoring of employment etc. (discussions to the visit). During the meeting with the students, the experts were convinced that the students were quite satisfied with the educational process. Students confirmed their regular participation in surveys and questionnaires. In general, students can submit their proposals for improving the educational process or individual disciplines, either online anonymously or directly in a dialogue with the head of the department or the relevant teacher. According to Students opinion: The survey on student satisfaction within the Bachelor’s program "Electromechanical Automation Systems, Electric Drive, and Electromobility" had a low participation rate, with only 39 students responding, representing less than 10% of the total enrolled students. The overall satisfaction score for the program was 7.94 out of 10, with first-year students rating it at 7.75 and third-year accelerated students giving the highest score of 8.62. The learning environment was rated at 7.85, reflecting a generally positive perception, though concerns were raised about distance learning, lack of practical training, and limited interaction with industry professionals. More than 75% of students positively evaluated the university’s academic support, while 92.3% reported no bias in assessments, though 7.7% raised concerns in specific subjects. Only 38.5% of students had direct interactions with industry professionals, indicating a need for better industry collaboration. Additionally, 76.9% of students did not utilize university support services, suggesting a lack of awareness or accessibility. The findings highlight the need to increase student participation in feedback surveys, improve practical training opportunities, and enhance collaboration with employers to align the program more closely with industry needs.	compliance

	Recommendations: - regarding the process of monitoring the opinion of the students, conduct the specific activities, in order to increase the rate of responses.	
B.2.4 Student-centred learning		
1.	The teaching methods are adequate in order for the students to obtain the learning outcomes, including transversal skills. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Forms and methods of learning and teaching at this EPP correspond to a student-centered approach: applicants take part in discussions with teachers who offer them to choose certain teaching methods, forms of conducting modular control, defense of coursework, handing in laboratory and calculation works, etc. Teachers periodically conduct express surveys of test takers as part of their ECs in order to timely adjust the chosen teaching methods, in particular, as part of the EC "Automation System-1" at the beginning of the semester, test takers were asked to choose the form of knowledge assessment at lectures: testing or interactive exercises.” According to SAR: “During training sessions, teachers use both classical teaching methods (verbal, visual, practical, working with information resources and literature), and interactive methods (surveys, situational exercises, demonstrations on mock-ups, discussions, events), multimedia technologies (presentations on projectors, video lectures) and application software.” The "Regulations on the Organization of Inclusive Education at Igor Sikorsky Kyiv Polytechnic Institute” is implemented at the university (https://osvita.kpi.ua/ppoin)u The formation of learning outcomes are checked during the semester control, as well as during the final certification in accordance with the provision on the evaluation system of learning outcomes of Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/37). For students with learning difficulties, adaptation programs are provided in a number of disciplines (examples: mathematics, physics). **Recommendations:** - none.	compliance
2.	The teacher – student relationship is of partnership, each of them being responsible for obtaining the learning outcomes. The learning outcomes are explained and discussed with the students from the perspective of their relevance for their development. **Findings from the Self-Evaluation Report/ Visit:** The curriculum is designed according to Regulations on the system for evaluating learning outcomes at Igor Sikorsky KPI (https://osvita.kpi.ua/node/37), in order to align with the educational program's structural and logical scheme, ensuring that the learning outcomes for disciplines are met. According to SAR: “… in each semester, an anonymous survey "Teacher through the eyes of students" is conducted, in which	compliance

	the students evaluate the work of each teacher according to the following categories: objectivity of assessment, ability to convey the material to students, ability to establish partnership relations with students, friendliness and tact towards students, organization interaction with students in the conditions of distance education.” According to SAR: “For junior year applicants, the practice of "Student Curators" has been implemented, who are appointed from among senior year applicants under the same EPP and help younger students adapt to the educational environment of higher education institutions.” Curators provide assistance to students in relations with teachers and in other matters (discussion to the visit). Curriculum contains comprehensive, up-to-date and easily accessible quantitative and qualitative public information about the aims, teaching and learning process, resources, outcomes and organizational framework. These materials are presented on the website of the chair and in Electronic Campus. **Recommendations:** - none.	
3.	The teaching-learning process considers both face-to-face didactic activities and individual study. **Findings from the Self-Evaluation Report/ Visit:** According to the curriculum plan of the study programme the total number of hours for study cycle is 7200. The total number of self-study, resulting from the curriculum is 3466 hours, meaning aprox. 48% from total hours of training. In didactic activities, part of the evaluation points can be obtained for individual training of student within the framework of non-formal/informal education, which is provided by the "Regulations on recognition of learning results acquired in non-formal/informal education at Igor Sikorskyi Kyiv Polytechnic Institute. **Recommendations:** - none.	compliance
4.	Teachers use the resources of the new technologies (e.g. email, personal webpage/e-learning platform for themes, bibliography, resources in electronic format and dialogue with the students) and auxiliary materials, from the blackboard to flipchart and video projector etc. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “In accordance with the "Regulations on the Organization of the Educational Process" (https://cutt.ly/oHCbPJE), the following forms of education are used in teaching at the EPP (clauses 4.1, 4.2): educational classes (lectures, laboratory works, practical classes, individual classes, consultation), independent work, practice and control measures. During training sessions, teachers use both classical teaching methods (verbal, visual, practical, working with	compliance

	information resources and literature), and interactive methods (surveys, situational exercises, demonstrations on mock-ups, discussions, events), multimedia technologies (presentations on projectors, video lectures) and application software.” All ECs are equipped with educational and methodical materials, which are placed in the Electronic Campus system (https://ecampus.kpi.ua). In addition, all ECs have distance courses on the Sikorsky platform (https://cutt.ly/bFMjdlH) in the Moodle (https://cutt.ly/DHCDtdL) or Google Workspace (https://cutt.ly/wHCDp9G) environments . Students have free access to information, knowledge, ideas and technologies and to the formation of information literacy skills by means of modern and innovative services in comfortable conditions (https://www.library.kpi.ua/). There is available electronic access to the KPI library (https://discovery.kpi.ua/), as well as available open access to the libraries of world universities. **Recommendations:** - none.	
5.	Teachers flexibly use a variety of pedagogical methods by which they encourage the debates, exchange of opinions and teamwork. **Findings from the Self-Evaluation Report/ Visit:** According to discussion to the visit, teachers use discussion and simulation methods, as well as the modeling method, brainstorming as the main teaching methods indicated in the syllabuses. **Recommendations:** - none.	compliance
6.	The higher education institution has recognition and completion procedures fit for purpose in cases of students’ study mobility/practice. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The international activity of the Higher Education Institution is carried out by the Department of International Cooperation (http://icd.kpi.ua/), and the organization of academic mobility is regulated by the "Regulations on Academic Mobility" (https://cutt.ly/YH09yza) and is organized by the Department of Academic Mobility (https://mobilnist.kpi.ua/).” According to SAR, pg. 12: „Recognition of study results obtained in other institutions of higher education, in particular during academic mobility, in Igor Sikorsky KPI is regulated by the "Regulations on the organization of the educational process", in particular in the section "Recognition of study results" (https://cutt.ly/KJIGZSf) and "Regulations on recognition at Igor Sikorsky KPI results of preliminary training" (https://cutt.ly/bJIHojy).” Completion of study, which is carried out in accordance with the "Regulations on expulsion, interruption of study of higher education applicants at Igor Sikorskyi Kyiv Polytechnic Institute" (https://osvita.kpi.ua/node/178). **Recommendations:**	compliance

	- none.	
7.	Teachers have standby classes available for the students, and they customize the guidance upon the request of the student. There are tutors or other forms of association between a teacher and a group of students. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The procedures for conducting current, calendar and semester control are demonstrated to applicants in the first session of each discipline. In addition, the day before each exam, consultations are held at which this information is re-delivered to the test takers, the test taker's comments and suggestions are considered, and teachers provide answers to questions.” According to SAR: “In accordance with the "Regulations on the Organization of the Educational Process" (https://cutt.ly/oHCbPJE), the following forms of education are used in teaching at the EPP (clauses 4.1, 4.2): educational classes (lectures, laboratory works, practical classes, individual classes, consultation), independent work, practice and control measures.” Curators are in constant contact with students and provide assistance on any issues of students' lives. Their activities are regulated by the "Regulations on the Curator of the Academic Group of Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/document_curator). Teachers conduct consultations both on the schedule and at time approved by mutual agreement, using all available means of communication, e-mail etc. (discussions to the visit). **Recommendations:** - none.	compliance
	B.3 Scientific research activity	
	B.3.1 Research planning	
1.	The Bachelor’s field and the study programme subjected to evaluation dispose of own scientific plan included in the strategic plan of the faculty and of the institution which it belongs to, being certified with documents kept in the department, faculty etc. **Findings from the Self-Evaluation Report/ Visit:** List of the most important directions of fundamental and applied scientific researches of KPI is available on website: https://kpi.ua/research, https://kpi.ua/en/research. Educational programme has a scientific plan, which corresponds to the plan of strategic development of Igor Sikorsky Kyiv Polytechnic Institute. **Recommendations:**	compliance

	- consider providing information on research activities of the faculty/department (on web site), both in Ukrainian and English languages.	
2.	The research themes included in the plan are within the scientific area of the field which the study programme subjected to evaluation is part of. **Findings from the Self-Evaluation Report/ Visit:** Organizational research and innovation activities are provided by the Research Unit and the Department of Innovation and Technology Transfer, which through a system of competitions and incentives contribute to strengthening the activity of scientists at the national and international levels (https://science.kpi.ua/en/science/) . The topics of scientific research are correlated from the directions of scientific research of the department's teachers (Annex 4 - VS). The terms of scientific topics execution are reflected in the plan of scientific activity of the faculty/department (Annex S13 – Scientific plan of EASEDEM-FEA). Bachelors choose topics for diploma projects from the list of topics for bachelors' diploma projects (Annex S03 – List of diploma themes). The analysis of the correlation between diploma project topics and the scientific interests and achievements of the faculty members of the Department of Automation of Electromechanical Systems and Electric Drive (AEMS-EP) was conducted based on List of Diploma Themes, Research EASEDEM, and Scientific Plan of EASEDEM-FEA. The diploma projects focus on vector control of electric drives, automation of industrial and transport processes, intelligent energy systems, and the development of laboratory stands for experimental research. These topics reflect contemporary challenges in the field of automation and electromechanical systems and directly align with the scientific interests of faculty members. Notably, the research activities of Serhii Burian, Serhii Kovbasa, Mykola Pechenik, and Serhii Peresada are centered on energy-efficient control of electric drives, vector regulation of synchronous and asynchronous motors, and automation of technological processes. Their expertise is confirmed by their scientific publications in professional journals indexed in Scopus and Web of Science, as well as patents, which demonstrate the applied nature of their research. In turn, Scientific Plan of EASEDEM-FEA presents indicative performance metrics for the department, defining key strategic directions such as attracting external research funding, modernizing laboratory infrastructure, increasing the number of publications in international scientometric databases, and expanding international collaboration. It is important to note that this plan is not personalized and does not contain specific research topics for faculty members, making it unsuitable for a direct analysis of the correlation between diploma project topics and individual research interests. However, the department’s strategic development, as outlined in this document, aligns with the general research directions represented in diploma projects. Thus, the analysis confirms a high level of correspondence between the diploma research topics and the scientific interests of the faculty members. This alignment enhances students' preparation for research activities and strengthens the connection	compliance

	between academic education and real-world research projects. At the same time, the department's scientific plan serves as a strategic guideline, ensuring the overall direction of research development without specifying individual topics. **Recommendations:** - consider providing information on research activities of the faculty/department (on web site), both in Ukrainian and English languages.	
B.3.2 Research resources		
1.	The research disposes of sufficient financial resources in order to meet the proposed goals. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "The university is a public institution and receives funding in accordance with the law on higher education, which fully ensures the implementation of the educational program." Therefore, the main funding of scientific activity comes from the state. In addition, there are grants and self-financing projects financed by separate contracts with research customers (discussions to the visit). **Recommendations:** - none.	compliance
2.	The research disposes of sufficient logistic resources in order to meet the proposed goals. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "Financial, material and technical resources and educational and methodological support are sufficient for the defined objectives of the EPP and for program learning outcomes. Laboratory work for applicants under this EPP is carried out in modern laboratories, which are equipped with modern equipment from well-known companies such as Siemens, Eaton, ABB, Schneider Electric, Nord, Nuvoton (https://cutt.ly/M9GMLUS). Each laboratory has its own web page on the website of the department, for example: laboratory classes on the EC "Automation systems" are held in the laboratory "Automation of technological processes, installations and complexes" (https://cutt.ly/NeWXnu4k); from the EC "Fundamentals of microprocessor technology" in the laboratory "Digital signal processors and microcontrollers" (https://cutt.ly/mFMgMZg); from EC "Control of electric drives" in the laboratory of "Electric drive and means of automation" (ABB Scientific and Technical Center) (https://cutt.ly/sFMg8IN)." **Recommendations:** - drawing up a 4 or 5 years modernization plan, so that the laboratories are in line with new technologies.	compliance
3.	The research disposes of sufficient human resources in order to meet the proposed goals. **Findings from the Self-Evaluation Report/ Visit:** Research topics are carried out under the guidance and with the direct participation of qualified scientific and pedagogical	compliance

	workers and students of the educational programme. There are: 33 doctors of science and 3 with master's qualification specific to the specific of the study programme. Recommendations: - none.	
B.3.3 Performance and valorisation of research		
1.	Teachers carry out scientific research activities in the field of the disciplines include in their workload, which are valorised in: publications in scientific journals or publishing houses from the country or abroad, scientific papers presented in sessions, symposiums, seminars etc. from the country and/or abroad, contracts, expertise, consultancy etc. based on contracts or agreements concluded with partners from the country and/or abroad, with evaluation certified by specialty commissions, patents and technological transfer through consultancy centres, science parks or other forms of valorisation, development of new products etc. Findings from the Self-Evaluation Report/ Visit: The university conducts an annual self-analysis of the departments which reflects all the achievements of each teacher over 5 years. The teachers of the study programme publish the results of their research. Their topics correspond to the field of disciplines delivered by the teachers. The report from Scientific research activities, shows the indicators of the scientific and research activities for 2020-2024 of Department of Automation of Electromechanical Systems and Electric Drives. Examples:	compliance

No. of the company	Metrics /indicators	2020	2021	2022	2023	2024
	I. Information on the main results of scientific activity					
1.	**Scientific publications:**					
1.1.	Articles in journals indexed by scientometric databases:					
	- Scopus and/or WoS , total, units					
	of which with quartile Q1 and Q2 at the time of publication, units			1	2	1
	of which with quartile Q 3 and Q 4 at the time of publication, units	8	6	1	2	4
1.2.	Articles in scientific journals (without quartile), collections of scientific papers, conference proceedings, etc., indexed by scientometric databases Scopus or Web of Science Core Collection (except those included in p.1.1), units	15	5	12	17	22
1.3.	Articles in professional Ukrainian publications of category A, which in the reporting year are indexed by scientometric databases Scopus or Web of Science Core Collection , unit.	8	6	7	2	4
1.4.	Articles in scientific professional publications of Ukraine of category "B", units.	5	23	5	2	5
1.5.	Articles in periodicals from other countries that have an ISSN, units.					1

Recommendations:
- consider increasing the visibility of the published research (higher ranked journals and conferences).

2.	Every teacher has at least one annual publication or didactic or scientific achievement. **Findings from the Self-Evaluation Report/ Visit:** Annual publication is obligatory for the teachers which is taken into account when hiring and renewing contracts (https://osvita.kpi.ua/competition). On average, each teacher has more than one publications per year. **Recommendations:** - none.	compliance
3.	The students are supported and stimulated to carry out research activities, they are involved in research projects, and they are financially supported to participate in national and international scientific conferences / symposiums. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “During their studies, the students are actively involved in scientific work at the department of automation of electromechanical systems and electric drives. In particular, as part of the course and diploma design, the students take part	compliance

	in the development of laboratory installations both for scientific research of the department and for the educational process (https://cutt.ly/jeWXCml2), in particular: Hudobets V.O. (2019, supervisor V.I. Teryaev, topic "Electric drive and automation of the conveyor layout") developed and implemented the installation for the EC "Electromechanical systems of typical technological applications". Students also take an active part in scientific competitions, in particular the All-Ukrainian competition of scientific works in the field of "Electrical engineering and electromechanics", which takes place in the city of Kamianske (https://cutt.ly/KeWX4gy6). Since 2017, more than 10 students of this EPP (https://cutt.ly/dHX1uAA) have participated in this competition." From time to time, teachers inform students about scientific conferences. The student told us about his experience of writing abstracts with a teacher and successfully participating in an online conference (discussiont s to the visit). **Recommendations:** - none.	
4.	The faculty organises with the teachers, researchers, students and graduates, on regular basis, scientific sessions, symposiums, conferences, round tables, and the papers are published in scientific volumes with ISBN and ISSN or in proceedings dedicated to the organised activity. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „In order to approve their own scientific research, the Faculty of Electrical Engineering and Automation holds an annual international scientific and technical conference of young scientists, graduate students and students "Modern Problems of Electrical Engineering and Automation" (https://cutt.ly/XHCXfUk), at which the applicants make reports." According to this EPP, the intellectual club "What? Where? When?" (https://cutt.ly/xHCVuYW) is organized. Students of 2, 3 and 4 years are actively participate in club meetings. During participation in a series of intellectual games, applicants answer questions, most of which relate to the specialty 141, both general and scientific. **Recommendations:** - none.	compliance
5.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	Not the case

C. QUALITY MANAGEMENT		
C.1 Quality assurance strategies and procedures		
1.	In the higher education institution, there is a central quality assurance commission and commissions for study programmes, who work on integrated basis. There is a commission for quality assessment and assurance at the level of the faculty/department coordinating the study programme, which coordinates the application of the quality assessment and assurance procedures and activities. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The activities of the structural divisions of the Higher Education Institution regarding the internal quality assurance of higher education are regulated by the "Regulations on the system of internal quality assurance of higher education at the National Technical University of Ukraine "Ihor Sikorskyi Kyiv Polytechnic Institute" (https://osvita.kpi.ua/node/121). According to this provision, a 5-level structure of the educational process has been implemented.” Level 5 refers to the system-forming decisions (Scientist, Supervisory Board, Rector). Their implementation belongs to the competence of the following units: - Vice-Rector for Scientific and Pedagogical Work - Management of quality of education in Higher Education Institutions; - methodical council (https://osvita.kpi.ua/metodrada) – development of the strategy of higher education institutions in the field of ensuring the quality of educational activities; - department of the quality of the educational process (https://osvita.kpi.ua/diaop) – methodical support and support of licensing and accreditation procedures, control of structural units to correspond to education quality requirements through their annual internal accreditation; - education quality monitoring center (https://kpi.ua/eqmi) - creation of education quality monitoring technologies and its implementation; - department of organization of the educational process (https://osvita.kpi.ua/node/20) - control of the educational process and graduation certification; "Socioplus" center (https://socioplus.kpi.ua/). According to the discussions to the meeting with the Quality Evaluation and Quality Assurance Committee: - the activities are developed according to the normatives given by ministry and university; all procedures are validated at the level of the university; - there are quality assurance committees at four levels: 1 – students; 2 – educational departments; 3 – Quality Department; 4 – university. **Recommendations:** - none.	compliance

2.	The quality assurance policies and strategies are active in the faculty coordinating the study programme, and they stimulate the participation of each member of the didactic and research team and also of the students. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “The all-university system of quality assurance applies to all educational programs. The administration and teachers constantly monitor the quality of the educational process and review educational programs and syllabi annually. This is regulated by the “Regulation on the organization of the educational process” and the “Regulation on the development, approval, monitoring and revision of educational programs”. The university has a Center for ensuring the quality of education, which works in accordance with the provisions of the National Agency for the Quality of Higher Education, a department for verification and control of educational programs, which works on an integrated basis, and relevant methodological units at the faculties. At the level of the department, which coordinates training, there is a commission for evaluation and quality assurance of the educational program.” „Applicants, teachers and employers evaluate and provide suggestions for improving the EPP; the project group headed by the EPP guarantor reviews these proposals and makes changes to the EPP; the EPP support group, teachers of the departments directly responsible for the educational components of the EPP implement the proposed changes, while updating the syllabi of the educational components; the dean, members of the academic council - discuss and agree on the EPP at the faculty level”. According to the discussions to the meeting with the Quality Evaluation and Quality Assurance Committee: - Sociology Center analyse the categories of questionnaires (students, employers, graduates) every academic year; the questionnaires are available online (Google form) ensuring anonymity; Sociology Center elaborate reports valid at different levels (university, faculties, departments, study programmes). **Recommendations:** - none.	compliance
3.	The educational institution prepares and presents an annual report regarding the modality of complying with the provisions of the programme of quality policies and to the positive and negative aspects of the internal quality assurance, which it makes public. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “According to the order No. HOH/253/2022 dated 15.09.2022 "Conducting self-analysis of the activities of chairs (internal accreditation)" and similar orders every next year a self-analysis of Igor Sikorsky KPI chairs activities is conducted. The purpose of annual self-analysis is internal higher education quality assurance and determination of the compliance of university chairs with the requirements of licensing conditions for teaching activities as well as to criteria for external accreditation.”	compliance

	According to SAR: “Department AES-ED, on which EPP is implemented, together with the Educational and Scientific Center of Applied Sociology "Socioplus" (http://socioplus.kpi.ua/), the Educational and Scientific Center for Innovative Monitoring of the Quality of Education (https://kpi.ua/eqmi) annually monitor EPP.” The department annually conducts a self-analysis and its results are discussed at the meeting of the Academic Council of the university. Based on the results of the discussion, managerial decisions regarding structural changes at the university can be made (discussions to the visit). **Recommendations:**	
4.	The study programme is part of the institutional system of internal quality assurance, and it implements the identified measures to improve the quality of the educational process. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Polling of students' opinions is carried out constantly through a page on the website of the chair, Electronic Campus, the Faculty's BOTs in messengers and other communication networks. Cooperation with stakeholders is regulated by the schedule approved by the chair. Teachers update subject programs based on the results of professional development and stakeholder recommendations.” The curriculum is a part of the internal quality assurance system at the University. These events are carried out by the Department of Quality of the Educational Process (https://osvita.kpi.ua/diaop). The evaluation study programme states the learning outcomes subjected to quality control, types of semester control, and final certification. **Recommendations:** - none.	compliance
	C.2 Procedures regarding the initiation, monitoring and periodic review of study programmes	
1.	A regulation regarding the initiation, approval, monitoring and periodic review of the study programmes exists, and it is applied. **Findings from the Self-Evaluation Report/ Visit:** Regulations on the development, approval, monitoring and revision of educational programs at Igor Sikorsky Kyiv Polytechnic Institute is adopted (https://osvita.kpi.ua/sites/default/files/downloads/Regulation%20educational%20programs.pdf, https://osvita.kpi.ua/node/137, https://document.kpi.ua/files/2020_7-70.pdf,). **Recommendations:** - none.	compliance

2.	The study programme is periodically reviewed in terms of objectives and labour market need, teaching and learning process, resources, outcomes and management system, to guarantee their continuing relevance and effectiveness. **Findings from the Self-Evaluation Report/ Visit:** The program is updated annually in accordance with the dedicated regulation (https://osvita.kpi.ua/sites/default/files/downloads/Regulation%20educational%20programs.pdf) taking into account the need to improve the teaching process, the results of self-analysis, and the wishes of employers, students and graduates. In the process of revising the study programme, consultations are held with stakeholders / employers, teachers and students. The approved changes are reflected in the curriculum, syllabi of educational components, practice. **Recommendations:** - none.	compliance
3.	The process of periodic review of the study programme considers: (i) the interest of the representatives of the labour market for the study programme and the satisfaction regarding the training of students/graduates; (ii) the interest of the practice partners for the study programme and satisfaction regarding the training of students; (iii) results of monitoring the opinion of the students with regard to the didactic process. **Findings from the Self-Evaluation Report/ Visit:** “According to the "Regulations on the development, approval, monitoring and revision of educational programs" (https://osvita.kpi.ua/node/137) monitoring involves: an annual survey of the participants of the educational process who are involved in the implementation of the EPP (university applicants, scientific and pedagogical workers, teaching and support and administrative and management staff of the university); surveys of graduates, employers and other external stakeholders, etc.” According to SAR: „The results of this monitoring are discussed at the meetings of the department (https://cutt.ly/i9lbmnD) and the scientific and methodical commission of the faculties/educational and scientific institutes, which are approved by the order of the rector (https://osvita.kpi.ua/node/134).” Some changes which were made, according to the results of the last two reviews of the study programme, are persented on SAR. Examples: content of the EC (in particular, the EC "Theory of automatic control" and "Mathematical methods in electromechanics" were combined into a single EC "Theory of automatic control", the EC "Power converters of electric drives", the EC "Fundamentals of microprocessor technology" were added to the mandatory part of the EP. The results of monitoring students’ opinions regarding the didactic process are taken into account based on the results of surveys, conducted by "Socioplus" (http://socioplus.kpi.ua/). According to the discussion at the evaluation, at the level of the study programme exists a work group, consisting of 3 teachers, 1 stake holder and 1 student. Their recommendations are analysed and – if case – after approval, are implemented in curricula, starting with new academic year.	compliance

	Recommendations: - none.	
4.	An annual study programme internal evaluation report is prepared, and it includes proposals to improve the quality of the education. **Findings from the Self-Evaluation Report/ Visit:** In accordance with the Regulation on the development, approval, monitoring and revision of educational programs in Igor Sikorsky KPI (https://osvita.kpi.ua/sites/default/files/downloads/Regulation%20educational%20programs.pdf), the department annually conducts a self-analysis and its results are discussed at the meeting of the Academic Council of the university. **Recommendations:** - prepare and publish annually the quality assessment report for the evaluated study programme.	partial compliance
	C.3 Objective and transparent procedures for the evaluation of the learning outcomes	
1.	The higher education institution has a regulation regarding the examination and grading students, which is rigorously and consistently applied. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Evaluation measures are regulated by the "Regulations on the Organization of the Educational Process" (https://cutt.ly/oHCbPJE), "Regulations on Current, Calendar and Semester Control of Study Results" (https://cutt.ly/jKdHeV2) and "Regulations on distance learning" (https://cutt.ly/SKd0lYn). These regulations are posted on the university portal (https://cutt.ly/BKdhdrC) and are available to all participants of the educational process. Forms of conducting and evaluation criteria of control measures are developed by the teacher responsible for the discipline in accordance with the "Regulations on the system of evaluation of learning results "(https://cutt.ly/5Kd0XDF). The procedures for conducting current, calendar and semester control are demonstrated to applicants in the first session of each discipline.” In "Regulations on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute” the following main types of control measures: current, calendar, rector's and final (semester control and certification) control are provided (https://kpi.ua/en/regulations, https://osvita.kpi.ua/node/39, https://document.kpi.ua/files/2020_7-124.pdf). The content and forms of conducting each of the specified types of control are determined by the "Regulations on current, calendar and semester control of studying results at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/node/32, https://document.kpi.ua/files/2020_7-137.pdf). Each student of higher education can view the results of current, calendar and semester control in the personal account of the "Electronic Campus" system (https://ecampus.kpi.ua/home). The procedures for submitting and reviewing appeals regarding the results of control measures are defined by the "Regulations on Appeals at Igor Sikorsky Kyiv Polytechnic Institute» (https://osvita.kpi.ua/node/182).	compliance

	Recommendations: - none.	
2.	Besides the course holder, at least another specialty teacher participates in the examination. The evaluation methods are diverse, and they encourage critical thinking, creativity, teamwork, case studies. **Findings from the Self-Evaluation Report/ Visit:** According to "Regulations on current, calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/index.php/node/32) the exam is taken by the examiner. According to SAR: “The objectivity of the examiners is ensured by: timely and equal access of applicants to information regarding the procedures and forms of semester control and evaluation criteria; openness of means of diagnostics of semester control; the same complexity of examination tickets; the openness of oral exams; storage of written examination papers during the year; the possibility of the applicant to challenge the results of the examination by filing an appeal; the possibility of passing the commission exam in the event of a conflict situation between the applicant and the examiner.” Forms of current, calendar and final control are displayed in the syllabi of academic disciplines. The main forms of ongoing control within the educational disciplines are: performance and defense of laboratory works or computer workshops, reports at seminars, work in practical classes, performance of modular control works, passing tests, preparation and protection of home control works etc. **Recommendations:** - none.	compliance
3.	The evaluation of students includes the objective examination and grading based on criteria and methods clearly established in the beginning of the semester and on standards presented to the students, together with other criteria for the assessment of the carried-out activity. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Information on the procedures and forms of the examination and assessment criteria is contained in the syllabus of the academic discipline.” The forms of the current and final control are indicated in the training plan and the individual training plan of the applicant, which is developed on the basis of the "Regulations on the individual training plan of the applicant of higher education at Igor Sikorsky Kyiv Polytechnic Institute" (http://osvita.kpi.ua/node/117). All the necessary information are available in the "Electronic Campus" (https://ecampus.kpi.ua/), on the distance learning platform "Sikorsky" (https://www.sikorsky-distance.org/) and specified in the syllabi of the disciplines. Regarding the information about the formation of evaluation criteria (discussions to the visit):	compliance

	- students learn about all the requirements for awarding points from the syllabi and curricula of the disciplines; also, according to students, all teachers inform them about the relevant assessment criteria at the first lesson of the relevant discipline; if there were situations when a student was dissatisfied with his or her result, he or she could agree with the teacher on the possibility of completing an additional task for extra points or other ways to improve his or her grade. **Recommendations:** - none.	
4.	The methods and criteria used to evaluate the students with regard to the developed skills and competences are adequate and allow the verification of actual acquirement by them of the knowledge and skills provided in the discipline syllabi. **Findings from the Self-Evaluation Report/ Visit:** The methods and criteria of student evaluation are set out in the syllabi of the disciplines. They are aimed at checking the developed competencies and program learning outcomes, according to the educational standard. Regarding the evaluation of the students (discussions to the visit). - using their own account students access E-Campus, Moodle etc.; by sharing, test examples, videos, educational materials, results, information system, were presented; - the specified criteria are adequate, as they allow checking the actual level of knowledge of applicants for each educational component. **Recommendations:** - none.	compliance
5.	For the disciplines provided with laboratory and/or project activities, the evaluation methods and criteria included in the discipline syllabi contain detailed information on the evaluation of the students in the different types of activity: course/ laboratory/ project (for example, percentage of the final grade, minimum performance standard). **Findings from the Self-Evaluation Report/ Visit:** Evaluation methods and criteria are detailed in the syllabi and drawn up in accordance with the Regulation on the system of evaluation of learning results at Igor SikorskyKyiv Polytechnic Institute (https://osvita.kpi.ua/node/37). According to SAR: “Current control of course projects and works is carried out through performance analysis tasks according to the calendar work plan. The current control of pre-diploma practice is carried out by practice managers from higher education institutions and the enterprise. ... Calendar control of educational disciplines is carried out from the first to the seventh semester in the 7-8 and 14-15 weeks of study. It consists in the defined level of performance of current tasks at the time of control: in the case of obtaining more than 50% of the maximum possible number of points, it is assigned "certified", and in the opposite case, "not certified". The calendar	compliance

	control of course projects and works is carried out in the same terms, and a positive assessment is given in case of compliance with the project implementation plan.” According to SAR: “Final control can be semester or certification. Semester control of educational disciplines is carried out in the form of a credit or exam, course projects and works - in the form of defense of a course project or work, pre-diploma practice - in the form of defense of a report on practice. According to the EPP (https://cutt.ly/XKdKzbN), the final certification is the defense of the qualification work. The choice of the form of semester control of educational disciplines at EPP is implemented based on the following approaches: the form of semester control of all selective disciplines is credit; the vast majority of mandatory disciplines that provide general competencies also end with a credit; the vast majority of mandatory disciplines that provide professional competences are completed by an exam.” **Recommendations:** - none.	
6.	During the practical activity evaluation process, the assessments of the practice tutor from the company where the respective activity was carried out shall be considered. **Findings from the Self-Evaluation Report/ Visit:** The practice is regulated by the "Regulations on the procedure for conducting the practice of higher education at Igor Sikorsky Kyiv Polytechnic Institute” (https://osvita.kpi.ua/sites/default/files/downloads/Regulations_conducting_practice.pdf). According to point 7.1: “At the end of the internship, higher education students report on the implementation of the program and the individual task. The internship reporting form is the submission of a written report, signed and evaluated directly by the supervisor from the internship database.” Also, each student keeps a practice diary during the internship, which includes the followings information/sections: - instructions for practice; - memo on the provisions of practice and diary keeping; - calendar plan of practice with an individual task; - remarks of managers during the internship, response of the manager from the company about the internship by the applicant; - conclusion of the head of the department about the practice of the applicant with higher education with a credit assessment of practice. **Recommendations:** - none.	compliance

7.	The number and distribution of the forms of examination in a semester are organised so that to ensure the time necessary to the training of the students and deployment of the evaluation process. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „Semester control sessions have the following structure: approximately the first ten days are allocated for the passing of credits and the defense of coursework/projects; the next two weeks are allocated for taking exams. The curriculum is designed in such a way that there are no more than 3 exams per semester. The total number of semester controls should not exceed 10.” For each discipline of the educational program, there is a mandatory semester certification, which can be presented in the form of exams or tests, according to "Regulations on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute" (https://kpi.ua/en/regulations) and "Regulations on current, calendar and semester control of studying results at Igor Sikorsky Kyiv Polytechnic Institute " (https://document.kpi.ua/files/2020_7-137.pdf). **Recommendations:** - none.	compliance
8.	There is an official procedure for the students to contest the evaluation and to solve the appeals, which is presented to the students. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “According to the Code of Honor (https://cutt.ly/VKdjylJ), biased evaluation is unacceptable in higher education institutions. … The resolution of conflict situations is carried out in accordance with the "Regulations on the Resolution of Conflict Situations " (https://cutt.ly/DKd2JbJ). Conflict situations between applicants and teachers within the University division are considered by the Faculty's Conflict Situations Resolution Commission. In the event of a conflict situation, the dean may create a exam commission before the exam.” The commission includes: the chairman, at least two members and the secretary. The chairman of the appeal commission is usually the head of the graduation department, and the members can be experts from the relevant field, the curator of the academic group or representatives of student organizations. The meeting of the appeal commission must be held no later than two working days from the moment of its creation. The student who is contesting the result must be present at the meeting, and the teacher who conducted the control event may be invited. Based on the results of the review, the commission makes a decision to keep the result or change it to a new one. The decision of the appeal commission is final (discussions to the visit). **Recommendations:** - none.	compliance

9.	There are regulations with regard to re-examinations, taking the medically postponed examinations and credited examinations, sanctioning the frauds discovered during examinations, other circumstantial situations. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „Repeated control measures are carried out in accordance with the "Regulations on the provision of additional educational services to students of higher education" (https://cutt.ly/eKd9lDp). Repeated passing of control measures or passing individual components of educational disciplines in excess of the scope established by the curriculum are paid educational services. Such services can be provided when the applicant wishes to increase the final grade in the discipline, or wishes to transfer its study partially or completely to one of the following semesters. Re-studying of disciplines in order to improve the final grade is possible no more than three times during the entire period of study.” The examiner has the right to remove the applicant from taking the exam/credit, if the fact of violation of the principles of academic integrity or moral and ethical norms of behavior was discovered (https://kpi.ua/files/honorcode_2021.pdf). **Recommendations:** - none.	compliance
10.	The completion of studies implies the preparation of a graduation thesis, which demonstrates the capacity of the student to fulfil an independently assigned task at the level of the imposed standards. The higher education institution disposes of plagiarism prevention mechanisms. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Graduation certification is not conducted in the form of an exam, but in the form of a public defense of a diploma project, which fully certifies the assimilation of learning outcomes, meets the qualification requirements (curriculum and educational program). The topic of the diploma project is formed taking into account the wishes and needs of employers and industrial partners of the chair. The diploma project demonstrates the student's ability that independently perform the assigned task at the level of the established standards of specialty 141 "Electrical energetics, Electrical Engineering and Electromechanics". The project presents the use of acquired competencies he examples of practical issues. The university takes measures that prevent plagiarism, the plagiarism check of the project, together with the review of the project, is a prerequisite for admission that the defense.” The University has implemented policies, standards and procedures for compliance with academic integrity (https://kpi.ua/academic-integrity). The Unicheck/StrikePlagiarism system checks for borrowed parts of the text, displays text matches and generates a similarity report. In case of detection of borrowings without proper registration of references, the work is returned to the author for revision. All theses are uploaded to the electronic archive of scientific and educational materials of Igor Sikorsky Kyiv Polytechnic Institute	compliance

	- ELAKPI (https://ela.kpi.ua). **Recommendations:** - none.	
11.	In the process of evaluating the graduation theses with themes proposed by/prepared in collaboration with the industry, the assessments of the company representative in collaboration with whom the respective activity was carried out shall be considered. Representatives of the industry are invited to participate in the presentation of the graduation theses. **Findings from the Self-Evaluation Report/ Visit:** The procedure of higher education applicants certification is determined by the "Regulations on the examination commission and certification of applicants for higher education at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/sites/default/files/downloads/Regulations_EC_certification.pdf, https://osvita.kpi.ua/node/35). According to SAR: “Performance of laboratory works, course and diploma projects are coordinated with representatives of stakeholders and is carried out on the modern material and technical basis of the chair, which is constantly updated.” According to SAR: „After the defense of diploma projects, the chair analyzes the results and, in cooperation with stakeholders, forms directions for improving the quality of education, specifies the topics of the projects.” The topic of the diploma project is formed taking into account the wishes and needs of employers and industrial partners. **Recommendations:** - none.	compliance
	C.4 Procedures of regular quality assessment of the academic staff ESG 1.5	
1.	The peer-review is organised on regular basis, being based on general criteria and clear and public procedures. **Findings from the Self-Evaluation Report/ Visit:** The evaluation of teachers takes place annually in the form of filling out a rating in the "Electronic Campus" system (https://ecampus.kpi.ua/) in accordance with the "Regulations on the Rating of Scientific and Pedagogical Workers of Ihor Sikorsky Kyiv Polytecnic Institute" (https://osvita.kpi.ua/sites/default/files/downloads/Pol_reityng_NPP_30-12-2021.pdf) and scoring norms (https://osvita.kpi.ua/sites/default/files/downloads/Normy_Reityng_NPP_2021-2022.pdf). According to SAR: “In order to determine the necessary level of professionalism during consideration at meetings of departments and expert qualification (competition) commissions (ECC) of faculties/educational and scientific institutes in competitive cases of applicants for filling vacant positions of the stuff, the following is checked: compliance with Clause 38 of the Licensing Conditions for Conducting Educational Activities (https://cutt.ly/W9lwRZi); the results of the annual rating of the stuff (https://document.kpi.ua/2021_HOH-315); the results of the "Teacher through the eyes of students" surveys (https://cutt.ly/39lq6JE, https://cutt.ly/n97Blv7); availability and completion of distance courses of the distance learning platform	compliance

	"Sikorsky" (https://cutt.ly/29IwHg2); fulfillment of the terms of the previous contract." Point 38 of the Licensing Conditions for Educational Activities specifies 20 criteria that a teacher must meet. According to the meeting with the Quality Evaluation and Quality Assurance Committee: - inner surveys are implemented: peer to peer reviews (expecially for young teachers), self-evaluation of each teacher (annually), evaluation of teaching staff by the head of department (examples, in five years: professors – 2 Scopus articles, other – Ukrainian publications). **Recommendations:** - none.	
2.	The evaluation by students is mandatory. There is an evaluation form provided to students to evaluate all their teachers, being approved by the Senate, and applying after each semester training cycle. It is filled-in exclusively in the absence of any external factor and by guaranteeing the confidentiality of the appraiser. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: "At the end of each semester, the results of a survey of "Teacher through the eyes of students" (https://cutt.ly/R9IkFeO, https://cutt.ly/n97BIv7) students are conducted, which are taught in the Electronic Campus system. For junior year applicants, the practice of "Student Curators" has been implemented, who are appointed from among senior year applicants under the same EPP and help younger students adapt to the educational environment of higher education institutions. Information support for applicants is carried out by constantly providing up-to-date information regarding: the organization of the educational process in higher education institutions, access to all types of educational resources, access to all types of academic and non-academic support. Current information for applicants is published on the website of the Higher Education Institution (https://kpi.ua/), the website of the faculty (https://fea.kpi.ua/) and the website of the department (https://epa.kpi.ua). " SAR: "According to the results of the analysis of the last survey, in which 66 applicants toEC part (https://cutt.ly/pHCl05u), the quality of teaching is 8.24 out of 10, the rating of practical training is 7.61 out of 10, the rating of the educational environment is 8.21 out of 10, and satisfaction with the content of the EPP is 7.92 out of 10, which is a high score." According to discussions to the visit: - Sociology Center analyse the categories of questionnaires (students, employers, graduates) every academic year; the questionnaires are available online (Google form) ensuring anonymity; Sociology Center elaborate reports valid at different levels (university, faculties, departments, study programmes). **Recommendations:** - none.	compliance

3.	The academic staff carries out self-evaluation and he/she is also evaluated by the head of the department. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „Once a year, the results of the teaching staff rating as well as the improvement of their qualifications and the validity of their appointment are analyzed.” According to the Regulation on the rating of academic staff of Igor Sikorsky KPI (https://osvita.kpi.ua/node/30), heads of departments, and all teaching staff must be subject to rating evaluation. Self-assessment by teachers is carried out in the form of filling out a rating in the "Electronic Campus" system (https://ecampus.kpi.ua/). According to the meeting with the Quality Evaluation and Quality Assurance Committee: - inner surveys are implemented: peer to peer reviews (expecially for young teachers), self-evaluation of each teacher (annually), evaluation of teaching staff by the head of department (examples, in five years: professors – 2 Scopus articles, other – Ukrainian publications); - the rating of each teacher is available to the head of the department. **Recommendations:** - none.	compliance
	C.5 Accessibility of the adequate learning resources	
1.	The faculty disposes of incentive programmes for the students with outstanding results and recovery programmes for the students with learning difficulties. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: „In Igor Sikorsky KPI students of the budgetary form of education have the opportunity to receive scholarships of three types: academic, social, and personal. Academic scholarships are awarded to students for academic success on the basis of a performance rating. Students of the first year of study receive an academic scholarship based on the entrance competitive score before the first semester control. The accrual of the academic scholarship is reviewed after each session. Social scholarships are awarded to eligible students on the basis of laws establishing state benefits and guarantees for awarding social scholarships to certain categories of students. The right to receive a social scholarship is available to students who study full-time under the state order and who are not on academic leave.” According to SAR: „The faculty as well as stakeholders from industry provides nominal and advanced scholarships for students with outstanding academic results. For example, in 2023-2024 study year company IKNET has provided its scholarship for 5 students of our faculty per semester. Two of them studied on this EPP.	compliance

	For students with learning difficulties, adaptation programs are provided in a number of disciplines: mathematics, physics. In cases of good reasons, students with learning difficulties are provided with individual schedules for the implementation of the educational program.” Students with learning difficulties have the opportunity to study at adaptation and remedial courses of the Educational and Scientific Center of the Institute for Monitoring the Quality of Education (https://kpi.ua/adapt). **Recommendations:** - none.	
2.	The higher education institution has structures and procedures to facilitate the mobility of the students in the same system or between different systems of higher education, like the International Relation Office, commissions for the recognition of formally or non-formally acquired qualifications/ skills and competences, etc. **Findings from the Self-Evaluation Report/ Visit:** The department of academic mobility of Igor Sikorsky Kyiv Polytechnic Institute is responsible for information support and documentation in matters of academic exchange of students and teachers, namely (https://mobilnist.kpi.ua/): informing and consulting; program coordination; development of cooperation with Ukrainian and foreign universities; organization of information events aimed at popularizing programs. According to SAR: “Recognition of study results obtained in other institutions of higher education, in particular during academic mobility, in Igor Sikorsky KPI is regulated by the "Regulations on the organization of the educational process", in particular in the section "Recognition of study results" (https://cutt.ly/KJIGZSf) and "Regulations on recognition at Igor Sikorsky KPI results of preliminary training" (https://cutt.ly/bJIHojy). For the results of studies under academic mobility programs, recognition is carried out on the basis of curricula agreed by partner universities or individual parts of curricula, i.e. ECs and academic disciplines, according to the Resolution of the Cabinet of Ministers of Ukraine "Regulations on the Procedure for the Implementation of the Right to Academic Mobility" dated 12.08.2015 No. 579 and "Regulations on academic mobility of Igor Sikorsky KPI" (https://cutt.ly/xJIHAU3) taking into account the European credit transfer and accumulation system.” Currently, the majority of students in the program are boys who, according to the current rules in Ukraine, cannot go abroad to participate in mobility (discussion to the visit). **Recommendations:** - none.	compliance
3.	The faculty, through the university, disposes of social, cultural and sports services for students, like: accommodation premises for at least 10% of the students, sports centre, various advisory services, which have an efficient management. The students are informed on the existence of such services.	compliance

	Findings from the Self-Evaluation Report/ Visit: According to SAR: “Higher education graduates are provided with educational, organizational, informational, advisory and social support in accordance with the "Regulations on the organization of the educational process at Igor Sikorsky KPI" (https://cutt.ly/zF90MZ0).” According to SAR: “University provides social support for applicants: provision of accommodation in a dormitory (https://studmisto.kpi.ua/), use of a sports complex, polyclinic, food centers and recreation centers. Also, the trade union organization deals with the social and legal protection of applicants (https://studprofkom.kpi.ua/). According to the results of the last survey (https://cutt.ly/pHCI05u), 45.5% of applicants used educational, organizational, informational, advisory and social support mechanisms. There are no complaints and comments regarding the quality of support. University informs about the right to education of persons with special needs through the official website and social networks. ” Social and psychological support for students is provided by the Student Social Service, the main task of which is the social development of students, psychological assistance, and promotion of an active social position of young people (https://dnvr.kpi.Ua/#m6). Students living in dormitories reported that all the living quarters were in good condition. There is a slight need for minor repairs and improvements, but the university provides all the facilities necessary for students. The university also ensures the appropriate condition of the bomb shelter and maintains security for students both in the dormitories and in the educational process. **Recommendations:** - none.	
4.	The study programme provides relevant support to students for the learning process (career advice, tutorship, and assistance), in this way facilitating the acquirement of knowledge and skills and passing in a superior year of study. **Findings from the Self-Evaluation Report/ Visit:** Consulting on career development is also provided by the University's Career Development Center, which holds job fairs and other information events on employment (https://robota.kpi.ua/). Support for students in the educational process is also provided by the KPI library, which is a partner of the university and professional community in the development of the educational and scientific environment (https://www.library.kpi.ua/about-library/misiya-biblioteky/). Each academic group at the department has a curator, a person with an extensive teaching experience who in his work is guided by the regulation on the curator of the academic group of Ihor Sikorsky Kyiv Polytechnic Institute, as well as each group has the senior student curator (http://osvita.kpi.ua/node/173). According to SAR: “Special consultations in mathematics, physics and English are organized for first-year students to help them	compliance

	master the basic training subjects. Consultations make it possible to level the basic training of students by the end of the first year. The organization of consultations is coordinated by subject teachers and students with the obligatory participation of curators.” **Recommendations:** - none.	
5.	There are sufficient personnel with adequate training to provide support services to students. **Findings from the Self-Evaluation Report/ Visit:** The department has 6 persons of the support staff, which is sufficient to provide support services to students. Support staff has the necessary engineering training. **Recommendations:** - none.	compliance
	C.6 Information management	
1.	At faculty level, the institution has a computer system which facilitates the collection, processing and analysis of data and information relevant for the efficient organisation and operation of the study programmes and of the other activities. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Accounting of students educational activities at Igor Sikorsky KPI takes place in the automated electronic information and telecommunication system "Electronic Campus", as well as in the "Deanery" system integrated in the information and telecommunication system "Electronic campus". The website of the chair presents catalogs and descriptions of general, normative and selective educational disciplines. All diploma projects are stored in the electronic archive of diploma projects. General information about students and teaching staff of the university is also available in the Unified State Electronic Database of Education, which is an automated system for collecting, registering, processing, storing and protecting information and data of education. The owner of the Unified State Electronic Database of Education is the state, the administrator is the Ministry of Education of Ukraine, and the technical administrator is the state enterprise "Inforesurs".” The "Electronic campus" system operates at the university, it contains and automatically processes all information related to the organization of the educational process at the university and its divisions (https://ecampus.kpi.ua/). This system includes information from the personnel department of teachers and students, from educational plans and the electronic document management system. The facilities offered by the information system were verified during the on-site visit on January 16, 2025, of evaluator prof. Volodymyr Pavlenko and also, were presented by sharing at the meeting with teaching staff.	compliance

	Recommendations: - none.	
	C.7 Transparency of the information of public interest with regard to the study programmes	
1.	The study programme provides complete, updated and easily accessible, both quantitative and qualitative, public information on the aims, teaching-learning process, resources, results and management system. **Findings from the Self-Evaluation Report/ Visit:** According to SAR: “Information about the educational program is constantly updated on the website of the chair, starting with the goals, conditions of admission and course of study, and ending with the defense of diploma projects, continuation of studies and employment. There is general information about the educational program, teaching staff, basic documents regulating the educational process (curriculum, educational program, certificate programs), information about disciplines (general training, basic training, disciplines of the educational program, selective disciplines).” Updating information about the goals, the teaching and learning process, as well as the rights and obligations of all participants in the educational process at Ihor Sikorsky Kyiv Polytechnic Institute are regulated by the "Statute of the National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute" (https://kpi.ua/statute), "Rules of Internal Procedure" (https://kpi.ua/admin-rule), "Regulations on the organization of the educational process in Ihor Sikorsky Kyiv Polytechnic Institute " (https://osvita.kpi.ua/node/39), "Code of honor of Igor Sikorsky Kyiv Polytechnic Institute" (https://kpi.ua/files/honorcode.pdf), which are freely available and posted on the university's official website. Curriculum of the bachelor’s educational program “Electromechanical Automation Systems, Electric Drive and Electromobility” (https://cutt.ly/6eEjGj5G). Regulations on the internal quality assurance system in higher education at the Igor Sikorsky KPI (https://cutt.ly/weEjJmGu). Educational and professional bachelor’s program “Electromechanical Automation Systems, Electric Drive and Electromobility” (https://cutt.ly/jeEjvrsW). Reviews (https://cutt.ly/QeEjQxZg) and protocols of meetings with stakeholders (https://cutt.ly/6eEjQ5mx). Working curriculum of the educational and professional bachelor’s program “Electromechanical Automation Systems, Electric Drive and Electromobility” (https://cutt.ly/7eEjDzgz). Official website of Department of Electromechanical Systems Automation and Electrical Drives (https://epa.kpi.ua/en/). The information are partially available in English. **Recommendations:** - ensuring the translation of all public interests content in English.	compliance
2.	The graduates receive, free of charge, the Diploma Supplement, which contains all the information provided by the regulations in force.	compliance

	Findings from the Self-Evaluation Report/ Visit: Graduates receive free of charge an appendix to the diploma, which contains a list of all disciplines with grades for the entire period of study, in two languages (Ukrainian and English, Annex S09 – Diploma and diploma supplement). **Recommendations:**	
	C.8 Quality assurance by periodic external review	
1.	The higher education institution complies with the legal provisions regarding the external cyclical review of the evaluated study programme. **Findings from the Self-Evaluation Report/ Visit:** University complies with the legal provisions regarding the external periodic review of the educational program in accordance with the Legislation of Ukraine and the provisions of the National Agency for Quality Assurance of Higher Education (https://en.naqa.gov.ua/). According to Self-Assessment Report: “The educational-professional program (EPP) "Electromechanical automation systems, electrical drive and electromobility" at the first (bachelor's) level of higher education in the speciality 141 "Electrical energetics, electrical engineering and electromechanics" was developed in 2018 and put into effect by order of the rector of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute".” The study programme of the first bachelor's level EASEDEM is managed by the Department of Electromechanical Systems Automation and Electrical Drives, Faculty of Electrical Power Engineering and Automatics of “Igor Sikorsky Kyiv Polytechnic Institute” (https://epa.kpi.ua/en/bachelor-student-learning/educational-program/#opp_description). Currently, according to the information from https://epa.kpi.ua/wp-content/uploads/2023/06/cert_2023_bach.png, the educational programme EASEDEM operates within the framework of the license issued by the National Agency for Quality Assurance of Education - NAQA (Certificate № 5475, date of issue – 07/07/2023, validity period - 5 years, until 01/07/2028, https://osvita.kpi.ua/sites/default/files/opfiles/141_oppb_emsaepem_2024.pdf). **Recommendations:** - none.	compliance

Other observations/findings:

The evaluation of the bachelor study programme Electromechanical automation systems, electrical drive and electromobility (EASEDEM), at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» (KPI) was organized in blended format, according to the ARACIS methodology, in January 15, 16 and 17, 2025.

Recommendations of the external evaluation committee:

- consider documenting meetings with stakeholders (records, minutes, etc.), including the topics of discussion, dated and signed;
- consider providing clear and up-to-date information about syllabuses via the institution's website;
- consider providing clear and consistent information about the syllabuses of all elective educational components, that can be selected by students of the study programme (see the content of the disciplines for choice);
- consider to realize analysis of the compatibility with similar study programmes from the European Union and/or from other world countries;
- in addition to the current form of the curriculum, analyse the possibility to provide for the students (and not only) the curriculum as a document organized by semesters; it would mean to have one list of subjects/disciplines for each semester, with totals of hours, credits etc. at the end of each;
- consider increasing the number of exams in the educational programme, in order to reach at least 50% (in order to be in accordance with the ARACIS methodology);
- consider introducing into the curriculum, practice in enterprises ("Industrial Internship", "Industrial Training", or "Work Placement"), to reach 240 hours of practice in total (in order to be in accordance with the ARACIS methodology).
- prepare and publish annually the quality assessment report for the evaluated study programme (in order to be in accordance with the ARACIS methodology).
- draws up a plan of measures following the recommendations resulting from the audit;
- update the financial and budgetary report on the KPI website;
- update some of the laboratory equipment (especially physical equipment) to the newer technology (available on the market);
- some of employers consider that the equipments from ABB and Siemens are very good and recommend to faculty to equip the laboratories and with apparatus from other producers;
- ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic;

- update the Collective agreement of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” on the official website of the KPI;
- attention should be given to increasing the number of professors, supporting the professional development of lecturers and assistants, and maintaining a balance between experienced and younger faculty members;
- in order to preserve the scientific and didactical potential of the department, draw up a plan to recruit younger teachers, to increase the number of educational activities conducted by teachers classified as young teachers;
- consider placing the approved curriculums in English (scanned copies with the signatures and stamps) on the official website of the NTU KPI;
- analysing a different approach regarding the elective components, as follow: transform some elective courses imposed by the faculty in real elective courses; transform the common part of elective discipline into a compulsory discipline and proposing of the elective disciplines with unique content; form the groups of elective disciplines with 3, 4 options, where the student can free select only one discipline;
- consider extension of practice training by adding the practice (internship) on the 2nd and/or 3rd year of study that should improve the acquire of practical skills;
- analysing the possibility to reduce the total number of classes per week from 30 to 28 (first year of study);
- consider adding to the curriculum of free elective disciplines (with extra credits to the 30 compulsory of the semester);
- regarding the process of monitoring the opinion of the students, conduct the specific activities, in order to increase the rate of responses;
- consider providing information on research activities of the faculty/department (on web site), both in Ukrainian and English languages;
- drawing up a 4 or 5 years modernization plan, so that the laboratories are in line with new technologies;
- consider increasing the visibility of the published research (higher ranked journals and conferences);
- ensuring the translation of all public interests content in English.

▶PROPOSAL OF THE EVALUATION COMMISSION

The proposal of the Permanent Commission of Specialty - Engineering Sciences II, adopted in online meeting from the date of 31.01.2025 was ***maintaining accreditation*** and ***awarding*** EUR-ACE certification of the bachelor's study programme ELECTROMECHANICAL AUTOMATION SYSTEMS, ELECTRICAL DRIVE AND ELECTROMOBILITY, for the form of education full-time, with 240 of credits and tuition capacity in the first year of studies of 45 students, according to the Extract from the minutes, the Evaluation Report of the Commission and the Evaluation Sheets, registered at ARACIS with no. 477 from 31.01.2025.

▶THE EVALUATION OF THE COUNCIL AND THE OPINION OF THE ARACIS COUNCIL

The ARACIS Council appreciated that the evaluation process was carried out in accordance with the provisions of Government Decision no. 915/2017 regarding the amendment of the annex to Government Decision no. 1.418/2006 for the approval of the External Evaluation Methodology, the standards, the reference standards and the list of performance indicators of the Romanian Agency for Quality Assurance in Higher Education.

From the analysis of the self-evaluation report, based on the reports submitted by the commission of permanent specialized experts and the opinion of the Director of the Accreditation Department regarding compliance with the procedures, the Romanian Agency for Quality Assurance in Higher Education found that:

Bachelor's study programme ELECTROMECHANICAL AUTOMATION SYSTEMS, ELECTRICAL DRIVE AND ELECTROMOBILITY satisfies mandatory normative requirements, standards and performance indicators, specific standards and standards for EUR-ACE label.

▶OPINION OF THE ARACIS COUNCIL

In the Report of the Romanian Agency for Quality Assurance in Higher Education, developed and approved in accordance with the provisions of Law no. 87/2006, it's being suggested:

⇒ MAINTAINING ACCREDITATION and ***awarding*** EUR-ACE label undergraduate study programme ELECTROMECHANICAL AUTOMATION SYSTEMS, ELECTRICAL DRIVE AND ELECTROMOBILITY;

⇒ Bachelor field – 141 Electrical Energetics, Electrical Engineering and Electromechanics / G3 Electrical Engineering;

⇒ from the Faculty of Electrical Power Engineering and Automatics;

06.02.2025

⇒ National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute“;

⇒ form of education – full-time;

⇒ number of credits – 240;

⇒ tuition capacity in the first year of study of 45 students.

The report of the Romanian Agency for Quality Assurance in Higher Education and the proposed solution were discussed and approved by the ARACIS Council on 06.02.2025.

Executive Office of the ARACIS Council

President	Univ. Prof. Dr. Eng. Valentin NĂVRĂPESCU	
Vice-president	Univ. Prof. Dr. Eng. Teodor-Ioan TRAŞCĂ	
General Secretary	Univ. Prof. Dr. Eng. Marius Gabriel PETRESCU	
Coordinator of the Department for Institutional Evaluation and Audit	Univ. Prof. Dr. Eng. Neculai-Eugen SEGHEDIN	
Coordinator of the Department for University Studies Evaluation	Univ. Prof. Dr. Nicoleta-Claudia MOLDOVAN	

This notice is valid five years from the date of communication of this report. The request for periodic evaluation will be submitted three months before the expiration of the validity period under the penalty of liquidation of the bachelor's study programme.

This opinion is submitted for the attention of the National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute“.

Bucharest, February, 2025 *NCM/CM*
UA01/ 477 MA

The synthetic presentation of the results of the ARACIS evaluation for the undergraduate university study programme analyzed:

No. crt.	Naming of the indicators	Remarks
1.	Higher education institution (name in Romanian and English)	National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute»
2.	The field of undergraduate university studies of the evaluated programme (name in Romanian and in English)	141 Electrical Energetics, Electrical Engineering and Electromechanics – Ukraine / G3 Electrical Engineering
3.	Bachelor's degree programme (title in Romanian and English)	Electromechanical automation systems, electrical drive and electromobility
4.	The number of enrolled students per year of study	Academic year 2024-2025: I: 23; II: 31; III: 23; IV: 13.
5.	The number of teaching staff teaching at the programme, of which holders	Total no. of teaching staff: 36 of which 35 tenured.
6.	Diploma issued	Bachelor of Electrical energetics, Electrical Engineering and Electromechanics
7.	Qualification level according to CNC	Level 6
8.	Duration of schooling (expressed in number of semesters)	4 years; 8 semesters.
9.	Total number of ECTS credits	240 ECTS
10.	Targeted qualifications/occupations	According to the current Classifier of Professions of Ukraine DK 003:2010: 3113 Supervisor of electromechanical service; 3113 Escalator service manager; 3113 Electromechanic; 3113 Electromechanic of group handling machines; 3113 Electromechanic of the station; 3113 Electromechanic of lifting installations; 3113 Electromechanic mentor; 3113 Electrician technician; 3113 Design-technician (electrical engineering); 3113 Technologist - technician (electrical engineering).
11.	The approval given to the evaluated study programme	Maintaining accreditation,

		Awarding EURACE label
12.	Date of last ARACIS assessment	National Agency for Quality Assurance of Education – NAQA: Certificate № 5475, date of issue – 07/07/2023, validity period - 5 years, until 01/07/2028.
13.	ARACIS commission of expert evaluators:	Assoc. prof. dr. eng. Mircea DULĂU – ARACIS, Romania, Prof. Volodymyr PAVLENKO – NAQA, Ukraine, Prof. dr. eng. Livia BANDICI – ARACIS, Romania Eng. Alexandru RADU – ARACIS, Romania, Stud. Valentyn VASECHKO – NAQA, Ukraine
14.	Evaluation visit period	January 15 – January 17, 2025