REPORT
The Romanian Agency for Quality Assurance in Higher Education

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

Bachelor study programme

Control Systems of Flight Vehicles and Complexes Engineering

Educational and Scientific Institute of Aerospace Technologies
National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute"

Bachelor's field - Electronics and telecommunications & Avionics
Form of education – full time

26.10.2023

▸ GENERAL CONSIDERATIONS

Through the application registered with the Romanian Agency for Quality Assurance in Higher Education, with no. 7055, from the date of 16.12.2021, 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 CONTROL SYSTEMS OF FLIGHT VEHICLES AND COMPLEXES ENGINEERING SYSTEMS from the Educational and Scientific Institute of Aerospace Technologies.

The file was registered at ARACIS with the number 3209 dated 11.05.2023.

The verification of the fulfillment of the mandatory normative requirements, the criteria, standards, and performance indicators, and of the specific standards was carried out by the Commission of permanent specialized experts – 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 COMMISSION OF PERMANENT SPECIALTY EXPERTS

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

	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: The study programme of the first bachelor's level "Control systems of flight vehicles and complexes engineering" (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) was developed and operates according 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 173 "Avionics" for the first (bachelor's) level of higher education (https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/03/173-avionika-bakalavr-VO-zatv.stand.01.11.pdf), which was approved by the order of the Ministry of Education and Science of Ukraine No. 385 dated 03.04.2020. The educational programme was approved by the protocol № 10 dated December 13, 2021, Academic Council of Igor Sikorsky Kyiv Polytechnic Institute (Self Assessment Report - SAR, pg. 3, Annex 2 – VS). At the time of writing the Self-assesment report, the study programme Control systems of flight vehicles and complexes engineering worked within the framework of the license granted by the Ministry of Education and Science of Ukraine on 30.04.13, valid until 01.07.2023 (Certificate of accreditation of the specialty series ND № 1192565). Currently, according to the information from Annex S1 – Certificates, the educational programme operates within the framework of the license issued by the National Agency for Quality Assurance of Education (Certificate № 5255, date of issue – 06/28/2023, validity period - 5 years until 07/01/2028), with the limit of number of students per study year equal to 50 - intramural form of education and 10 - external form of education. The number of students enrolled in the first year of study is: academic year	fulfilled

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

	2022-2023: 24; academic year 2023-2024: 39 (Annex 5 - VS); **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:** The mission of Igor Sikorsky Kyiv Polytechnic Institute is to form the society of the future based on the concept of sustainable development through the internationalization and integration of education, the latest scientific achievements and innovative developments (SAR, pg. 6, https://kpi.ua/files/2020-2025-strategy.pdf). The mission and aims of the programme (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) correspond to the mission of the higher educational institution as it provides training of highly qualified professionals in the field of development of avionics and control systems for aviation, rocket-space and robotic technology by matching the subject area with the needs of the high-tech labour market, the latest scientific achievements and innovative developments (SAR). **Recommendations:** - none.	fulfilled
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:** The aim of the professional study programme is to train specialists who are able to solve complex specialised tasks and practical problems of using and implementing avionics systems and devices (SAR, pg. 5). Professionals must acquire fundamental knowledge of natural sciences, as well as applied competencies in the field of avionics systems, which should allow understanding the trends of the development of the industry and society, adequately respond to the challenges of the labour market. The programme is publicly available and can be viewed on the department's website	fulfilled

[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*

	(https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf). **Recommendations:** - none.	
3.	The name of the study programme is in accordance with its aims, content and outcomes. **Findings from the Self-Evaluation Report/ Visit:** The name of the study programme is "Control systems of flight vehicles and complexes engineering", which corresponds to its goals, content, results and reflects its main focus, aimed at specialised education in the field of development, design, production of control systems for aviation, rocket and space technology and robotics (SAR, pg. 5). The name of the program corresponds to the Standard of higher education in specialty 173 "Avionics" for the first (bachelor) level of higher education (https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/03/173_-avionika-bakalavr-VO-zatv.stand.01.11.pdf), which was approved by the order of the Ministry of Education and Science of Ukraine No. 385 dated 03.04.2020. **Recommendations:** - none.	fulfilled
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:** Professionals must acquire fundamental knowledge of natural sciences, as well as applied competencies in the field of avionics systems, which should allow understanding the trends of the development of the industry and society, adequately respond to the challenges of the labour market (SAR, pg. 5). In the study programme (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) there is a deep consistency between (SAR, pg. 5,6): - mission and aims: training of specialists who are able to solve complex specialised tasks, practical problems of the use and implementation of systems and devices of avionics; - the professional profile of graduates: development, design, production and certification of devices and control systems of aircraft and rocket-space engineering objects and robotics; - the activities performed by students during the training programme and the results obtained during training. 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. The specificity of the professional profile of the graduates is constantly discussed with the representatives of leading enterprises in the industry. Consultations are regular in nature. Their results are analysed at the meetings of the Department of Aircraft	fulfilled

	Control Systems (one of the minutes of the meetings of the department is No. 12 dated 13.07.2022), when specifying the program results of training, the wishes of employers and students are taken into account (https://skla.kpi.ua/partnery/, SAR, pg. 3, Annex S5 - Framework plan of meetings with employers). These results are reflected in the letters of the employers posted on the website of the department: State Enterprise "Luch", State Enterprise "Arsenal". Recommendations: - none.	
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: The reason to update the study programme was the suggestion of the participants of the educational process involved in the implementation of the programme. In accordance with the Regulations on the internal quality assurance system in higher education (https://osvita.kpi.ua/node/121), a survey of students is conducted and their proposals are taken into account. As a result of the discussion of study programme latest edition, the proposals of graduates, representatives of employers, in particular, State Enterprise of Special Instrumetation “ARSENAL”, State Kyiv Design Bureau “LUCH”, regarding the expansion of the main focus of the programme, the generalised content of professional competencies were taken into account . Students are a part of the Academic Councils of the university and the Education and Research Institute of Aerospace Technologies, they take part in making all decisions, including the organization and quality assurance of education. Students’ proposals are taken into account by the project group involved in the programme development. Heads of student self-government directly participate in the discussion of issues and decision-making regarding the procedures for internal quality assurance of the study programme. The Department of Aircraft Control Systems closely cooperates with the leading enterprises of the industry: State Enterprise of Special Instrumentation “ARSENAL”, State Kyiv Design Bureau “LUCH”, SE “Antonov”, LLC "Progresstech - Ukraine", PJSC "Elmiz" and a number of others, which are potential employers for graduates of the department (one of the minutes of department meetings No. 12 dated July 13, 2022). The content of the programme was previously discussed with the representatives of the mentioned enterprises, was examined by them and was largely approved (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf, SAR, pg. 3, Annex S5 - Framework plan of meetings with employers). A separate page for working with employers, students, and graduates has been created on the department's website (http://surl.li/gvaxd). It should be noted that the working group for the development (adjustment) of the OP includes representatives of employers and students (http://surl.li/guzql), which additionally indicates that the interests of stakeholders are taken into account.	partially fulfilled

	During the discussion with students (both bachelor and masters programme) and graduates, it has been confirmed that they are more than welcome to present their opinion on what should be changed to better in the educational program. However, none of the respondents could give a clear explanation of how the procedure works after they present their vision to the leadership/teaching staff. Employers clearly stated that they make suggestions, but it is not clear how frequently these suggestions are analyzed. Recommendations: - consider to set-up an official board (teachers, stakeholders, partners) to participate to the improvement of the educational programme, meeting minimum once a year, with an official report; - consider establishing more systematic and procedural approach to the consultation of the stakeholders and the analysis and use of their feedback, including the documentation of the proceedings/consultations; - enhance interaction between students/graduates and leadership/teaching staff in this area by conducting this interaction in a more official way. For example, by creating a round table/discussion panel for these categories with results of this discussion and actions taken being listed on-line for public review (not just publishing the offer, but also a reaction and implementation of given offer).	
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: The needs and proposals of employers, as well as the results of the student survey, are taken into account by the project group when revising the study programme. The content of the programme is previously discussed with representatives of the enterprises, undergoes a rigorous examination. Consultations with employers are of a regular nature. Their results are analysed at meetings of the Department of Aircraft Control Systems (one of the minutes of the meetings of the department is No. 12 dated 13.07.2022). The heads of student self-government directly participate in the discussion of issues and decision-making regarding the procedures of internal quality assurance of the study programme. The Department of Aircraft Control Systems closely cooperates with the leading enterprises of the industry : SE SI “ARSENAL”, SE "DerzhKKB "Luch", SE "Antonov", JSC "Elmiz", Institute of Space Research of the National Academy of Sciences of Ukraine and the State Space Agency of Ukraine, and a number of others, who are potential employers for department graduates. The content of the programme was discussed with representatives of the leading enterprises of the industry and approved by them. It is planned, during the next update of the programme, to take into account the new proposals of employers regarding the content of students’ practical training, the themes for master degree final projects, and the expansion of the list of positions that graduates of the programme may occupy (discussions at the evaluation visit).	fulfilled

	Recommendations: - consider establishing more systematic and procedural approach to the consultation of the stakeholders and the analysis and use of their feedback, including the documentation of the proceedings/consultations.	
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: When reviewing the study programme (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) based on the proposals received from employers, such as SE SI "Arsenal", DKKB "Luch", DP "Antonov", the mission, aims and outcomes were clarified. In accordance with the employer's needs, the topics of diploma projects are determined; tasks are set for the pre-diploma practice, which also contributes to the achievement of program learning outcomes. The result of cooperation with stakeholders was the including of the following proposals in the OP: to deepen knowledge and practical skills in programming microcontrollers (considered in the learning outcomes of RN13, RN30), circuit engineering of analog electronics (considered in the learning outcomes of RN12); to gain practical experience of research and testing of inertial sensors of avionics systems using modern laboratory equipment (taken into account in the learning outcomes of PH17, PH28); to apply widely special software and modern information technologies (ANSYS, SolidWorks, Matlab, Simulink) for the analysis of structures and dynamics of avionics systems (taken into account in the learning outcomes of RN14, RN16, RN21, RN29); to attract specialists (former graduates of the Department) working at enterprises in their specialty to manage the practice from the enterprise (SAR, pg. 4). Recommendations: - consider adding more competencies and learning outcomes focused on the specificity of the programme and more practices according to employers' requests.	fulfilled
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 EURACE standards/ EAFSG. Findings from the Self-Evaluation Report/ Visit: The general and professional competences and PRN defined in the OP correspond to the standard of higher education of the first (bachelor) level of higher education in specialty 173 "Avionics" and expand it with additional requirements for specialists (ZK9-ZK12, FK11-FK14, RN20-RN30, respectively) in accordance with the needs of local employers (SAR, pg. 6). The Annex 2 – VS and Annex S4 - Structural and logical scheme of the educational program highlight the General Competences, Professional competencies, Program results of learning, Matrix of conformity of software competencies to the components of educational programs and Matrix of providing learning results by relevant components educational program.	fulfilled

	During the discussion with students, it has been mentioned that they are aware of the competencies they need to have in order to be successful employees. However, during the discussion with graduates, not all of them have been able to express their understanding and mention learning outcomes that have been of a good use after graduation (a very broad answer that more or less everything is needed). **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:** Graduates can hold positions as professionals in accordance with the current edition of the National Classifier of Ukraine DK 003:2010 (https://zakon.rada.gov.ua/rada/show/va327609-10#Text): professional in management and maintenance of systems, application programmer, designer, technical professional. Graduates of the program currently work at leading enterprises in the industry in engineering and managerial positions (https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/). They have a clear perspective of professional growth and the opportunity to continue their education in educational-professional or educational-scientific master's degree programs. Graduates are highly valued by the stakeholders. During their practice on elder courses they pretty much know what their job would look like, and they can also occupy organizational positions in the enterprises. Employers were mainly talking about engineering (in a wide sense) positions, not really managerial positions. **Recommendations:** - none.	fulfilled
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 for level 6, which corresponds to the first bachelor level of training for higher education applicants (https://mon.gov.ua/ua/osvita/nacionalna-ramka-kvalifikacij/rivni-nacionalnoyi- frame-qualifications, SAR, pg. 6), the National Register of Higher Education, the standard of the specialty 173 "Avionics" and complies with the principles of Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015). There is a significant similarity as compared to the requirements of Romanian CNC / RNCIS / ARACIS specific standards.	fulfilled

	Recommendations: - none.	
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: The evaluated programme is the only and unique one for Igor Sikorsky Kyiv Polytechnic Institute and other universities that train specialists in specialty 173 "Avionics". However, compared to other programs, the evaluated study programme implements an educational process in the field of autonomous motion control systems based on the achievements of the scientific school on gyroscopes and navigation systems and prepares applicants capable of creating control systems both for aviation and space objects, and for other types of moving objects - land, sea and robotic complexes. Recommendations: - none.	fulfilled
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, pg. 24, 25, academic integrity policy, standards and procedures at Igor Sikorsky Kyiv Polytechnic Institute are defined by: - the Code of Honour of the National Technical University of Ukraine "Kyiv Polytechnic Institute" (http://kpi.ua/code); - Regulations on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39); - Regulations on the system of prevention of academic plagiarism at the National Technical University of Ukraine "Ihor Sikorsky	fulfilled

[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”.*

	Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/47); - Regulations on the current calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/32); - Regulations on the Commission on Ethics and Academic Integrity of the Academic Council of Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/171); By 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); - cooperation agreement with Unicheck (No. 32 dated November 8, 2017). Igor Sikorsky Kyiv Polytechnic Institute has a system and normative and legal regulatory documents and resources for the development of a culture of academic integrity and prevention of plagiarism (https://kpi.ua/academic-integrity). The assessment of the state of compliance with the norms of academic integrity at the university is carried out by interviewing students, teachers and employees, checking qualification papers and scientific publications for plagiarism (Program for finding coincidences/identities/similarities of text from the Unicheck company (https://document.kpi.ua/2017_1-437). There have been no cases of violation of academic integrity at study programme. 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: 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 (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). The main technological solution for detecting and countering violations of academic integrity is the use of specialised software for checking academic texts for coincidence/similarity provided by the company Unicheck (https://kpi.ua/unicheck, SAR, pg. 26). The similarity report, prepared by the responsible person in the office of the Academic Secretary, is considered at the meeting of the Commission of the specialised scientific council, which is authorised to make a decision on its admission to defense. Other tools for combating violations of academic integrity are:	fulfilled

	- informing all participants of the educational process about academic ethics, popularising the concept of "academic integrity"; - placement of academic texts open access in the electronic archive of scientific and educational materials of Igor Sikorsky Kyiv Polytechnic Institute EIAKPI (https://ela.kpi.ua/). Control of compliance with academic integrity of bachelor's degree holders at Igor Sikorsky Kyiv Polytechnic Institute relies on their curators and managers. Academic integrity is popularised among students by the stuff of the Scientific and Technical Library named after G.I. Denysenko, who advise and teach students the issues of academic integrity (https://kpi.ua/library-science); conduct measures to clarify the use of the Unicheck coincidence/similarity detection system (https://ela.kpi.ua/bitstream/123456789/27452/1/unichek_kpi.pdf); place educational and scientific materials in the institutional repository ELAKPI (https://ela.kpi.ua/); The Institute of Postgraduate Education of Igor Sikorsky Kyiv Polytechnic Institute, that implemented the training course for scientific and educational staff "Academic integrity" (https://kpi.ua/ipo); implementation of measures for the formation and development of a culture of academic integrity (Order No. HOH.22.2021 dated 04.02.2021 https://document.kpi.ua/2021_HOH-22). Educational and Scientific Centre of Applied Sociology "SOCIOPLUS" at Igor Sikorsky Kyiv Polytechnic Institute conducts a survey on academic integrity among students (https://bit.ly/3nzovmm) and academic staff (https://bit.ly/3sdH1V9). **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:** Annually, according to the orders of the rector of the University (https://document.kpi.ua/files/2021_HOH-216.pdf), a self-analysis of the activities of the departments (internal accreditation) is carried out in order to determine the compliance of the educational process at the departments (according to the relevant OP) with the criteria of external accreditation educational programs. All procedures defined by the above Regulations and the rector's order are applied to the Department of Aircraft Control Systems. No deficiencies in the OP and in the educational activities of the department for the implementation of the OP have been identified. This is ensured by the annual improvement of educational plans, the educational program, syllabi of the educational components of OP, the updating of educational and methodical materials, and the improvement of the qualifications of scientific and pedagogical workers (SAR, pg. 49). In addition, the University: - has a Department of Labour Protection, which monitors the state of occupational health and safety in units (https://kpi.ua/web_op);	fulfilled

	- has a Security Department to ensure the appropriate level of public law and order and the safety in the units. Also, the departments of the University including the Department of Aircraft Control Systems annually prepares a self-analysis report on many areas of activity during the year and the compliance of the results with the licensing requirements for the specialty approved at the state level (https://document.kpi.ua/2022_HOH-253). **Recommendations:** - none.	
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) are approved by the rector's order No. 7-34 dated 04/21/2017. Educational activities at the University are regulated by: - the Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39, https://document.kpi.ua/files/2020_7-124.pdf); - provisions on the current calendar and semester control of study results Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/32, https://document.kpi.ua/files/2020_7-137.pdf), which are available for perusal of applicants. A number of provisions (https://osvita.kpi.ua/docs) that highlight and detail various aspects and procedural issues of the educational process complement the Regulations (SAR, pg. 54). **Recommendations:** - none.	fulfilled
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:** The University has created the conditions for educational activities and organised the accounting of students' educational activities in accordance with current legislation. For this purpose, the "Electronic Campus" system (https://ecampus.kpi.ua/), which is the only one for the entire University, was created and is functioning (SAR, pg. 47, 48). This resource contains all the necessary information for the organization, accounting and control of the educational process: curricula, schedule, methodical support of educational components, the database of the Dean's Office, the personnel department of the academic staff and students, academic certificates, transcripts, catalogues, diplomas, etc. The entire	fulfilled

	document circulation takes place in accordance with current legislation in the forms established in this regard: catalogues, final documents. Every teacher and student has an individual account in which the record of students' educational activities is organised and displayed. The "Electronic campus" system provides a solution to the issues of accounting for students' educational activities according to the "single window" principle. The "Electronic Campus" system allows the monitoring of the educational process, determination the number of students who successfully passed each type of control, the number of expelled, renewed, transferred students, etc. The scholar documents of the students have been verified at the Dean’s office, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko. **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 University has conducted its activities on the basis of the Information on educational activities in the field of higher education of the National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute" (code: 02070921) (https://osvita.kpi.ua/sites/default/files/downloads /Licenzia%20KP%D0%86_0.pdf) since 2019 and strictly adheres to them. Study programme of the first bachelor's level "Control systems of flight vehicles and complexes engineering" (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) was developed and 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 173 "Avionics" for the first (bachelor's) level of higher education (https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/03/173-avionika-bakalavr-VO-zatv.stand.01.11.pdf) and was approved by the Scientific Council of Igor Sikorsky Kyiv Polytechnic Institute on 13.12.2021, protocol No. 10. Currently, according to the information from Annex S1 – Certificates, the educational programme operates within the framework of the license issued by the National Agency for Quality Assurance of Education (Certificate № 5255, date of issue – 06/28/2023, validity period - 5 years until 07/01/2028). **Recommendations:** - none.	fulfilled
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:** In accordance with the Resolution of the Cabinet of Ministers of Ukraine No. 796 dated August 27, 2010 "On approval of paid services that can be provided by institutions of higher education, other institutions and educational institutions belonging to the state and communal form of ownership" (https://zakon.rada.gov.ua/laws/show/796-2010-%D0%BF#Text) in the University, the possibility of obtaining educational services has been realised in accordance with contracts concluded with natural or legal entities within the scope of the license. In Igor Sikorsky KPI, tuition fees in accordance with contracts concluded with individuals or legal entities are set by Order No. NGF/51/2022 dated 17/05/2022 "On setting tuition fees for the 2022/2023 academic year" (https://kpi.ua/files/2022_HGF-51.pdf; https://kpi.ua/files/2022_HGF-51a1.pdf). **Recommendations:** - none.	fulfilled
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:** The applicants have access to the information on financial assistance provided by the educational institution and the way of using the fee (SAR, pg. 38). 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). **Recommendations:** - none.	fulfilled
3.	The evaluated study programme disposes of sufficient financial resources for the proper performance of the activity. **Findings from the Self-Evaluation Report/ Visit:** Financial resources for the proper implementation of bachelor's training activities under the study programme come to the University from state budget expenditures (state order), 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).	fulfilled

	Recommendations: - none.	
	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: The University has 100% of its own premises for the educational process (SAR, pg. 33). The main building for the implementation of the study programme is the building of Educational and Scientific Institute of Aerospace Technologies (University Building 28) with a total area of 1,872.2 square meters., as well as the own areas of the Department of Aircraft Control Systems (486 sq.m.). Training takes place in computer classrooms, in a laboratory bench classroom with real samples of airplanes, missiles, and other on-board equipment of aircraft, in the laboratories of the Department of Aircraft Control Systems (161.4 square meters) on real samples of devices and avionics systems. There is an opportunity to use the material and technical base of the leading enterprises of the industry (permanent employers), in particular, "SE SI"Arsenal", DKKB "Luch", DP "Antonov" (https://youtu.be/ZjbND5iBl_A). The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission (Video: On_site_visit_KPI_laboratory). The on-site visit confirms what is presented in SAR and films that describe the laboratories. Recommendations: - none.	fulfilled
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: Lecture halls of the building, room 405, room 409 are used for conducting lectures under the study programme in groups of more than 20 students (SAR, pg. 34).	fulfilled

	Applied activities on OPP disciplines take place in the department's laboratories and general institute laboratories with special equipment, such as (Annex 7 - VS): - room 109 – robotics laboratory (chassis of a wheeled robot, engine control system, machine tools); - room 113 – measuring technology laboratory (equipment for studying measuring devices, inertial sensors and systems, bench testing equipment – rotary table, thermal camera); - room 115 – unmanned technology laboratory (equipment for studying the design and control systems of unmanned aerial vehicles); - room 401 – laboratory of satellite technologies (equipment for studying satellite navigation and communication systems, satellite receiver-transmitter); - room 301 – computer class (19 computers); - room 408 – a laboratory of control systems and microcontroller technology (15 computers, gyro-vertical training models; course-vertical, autopilots, software for debugging control systems); - stand hall - An-24 transport aircraft with equipment; military aircraft MiG-23 - with equipment; Mi-2 helicopter with equipment; robotic complexes; self-made unmanned aerial vehicles. The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission (Video: On_site_visit_KPI_laboratory). 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: The standard number of students in lecture streams and when conducting group training sessions is determined by the Regulations on the Organization of the Educational Process at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/index.php/node/39) and order No. HOH/47/2022 dated 02.07.2022 "On the organization and planning of the educational process for the 2022-2023 academic year" (https://document.kpi.ua/2022_HOH-47) and consists of (SAR, pg. 33, Annex 7 - VS): - lectures - 50-100 people; - group classes - 20-30 people; - practical classes - 15-25 people;	fulfilled

	- laboratory classes - 10-15 people. The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission (Video: On_site_visit_KPI_laboratory). **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:** For the implementation of the study programme, there is an appropriate number of lecture/seminar classrooms, research laboratories, as well as the institute's exhibition hall. These rooms have special equipment that ensures proper implementation of applied and practical activities. To carry out high-tech research and experiments, laboratories and equipment of partner enterprises, for example, SE SI "Arsenal", are used (Annex 7 - VS). The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission (Video: On_site_visit_KPI_laboratory). **Recommendations:** - none.	fulfilled
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:** Applied activities in the programme disciplines take place in the laboratories of the department and institute laboratories with special equipment, such as:	fulfilled

	- room 109 - robotics laboratory; - room 113 – laboratory of measuring instruments; - room 115 – laboratory of control systems; - room 401 – laboratory of satellite technologies, created under the TEMPUS programme; Computer classes: - room 301 – computer class; 19 computers; - room 408 – laboratory of control systems and microcontroller technology; - exhibition hall - An-24 transport aircraft; MiG-23 military aircraft; Mi-2 helicopter; robotic complexes; self-made unmanned aerial vehicles. There is an opportunity to carry out practical activities in aviation and rocket modelling circles, drone wrestling, to take part in research and development projects, for example, on the creation of nanosatellite navigation and control system. Classes on the following educational components are held in these rooms (SAR, pg. 34, Annex 7 - VS): - Basics of algorithmization and programming; - Fundamentals of the structure of control systems of aerial vehicles and satellites; - Theory of automatic control; - Electronics and basics of circuit technology; - Mathematical support of digital systems; - Modern systems of automatic control of moving objects; - Information and measuring devices; - Sensitive elements of avionics systems; On-board equipment of aerial vehicles and satellites and others according to the curriculum. The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission (Video: On_site_visit_KPI_laboratory). **Recommendations:** - it is recommended to update some of the laboratory equipment (especially physical equipment) to the newer technology (available on the market).	
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 laboratory premises with equipment. To implement the practical and research components of the study programme, the laboratories of the Department and ER IAT are used, as well as the institute's exhibition hall (video: https://skla.kpi.ua/%d0%ba%d0%b0%d1%84%d0%b5%d0%b4%d1%80%d0%b0-%d1%81%d0%ba%d0%bb%d0%b0/). Among the premises used for the implementation of the practical and research components of the programme are the following laboratories with equipment: room 109; room 113; room 115; room 401; room 301; room 408; exhibition hall (Annex 7 - VS). To carry out scientific research, the possibilities of the Center for Collective Use of Scientific Equipment of Igor Sikorskyi Kyiv Polytechnic Institute are used (SAR, pg. 34, 35). There is Department of Labour Protection at the university, which monitors the state of labour protection in units (https://kpi.ua/web_op). Graduates of higher education receive training on labour protection in a timely manner. There is a Security Department at the university, the task of which is to ensure the appropriate level of public law and order and the safety of students. The main educational spaces are presented in films (https://skla.kpi.ua/education/deplabbase0/) and uploaded on ARACIS cloud (Video_premises). Also, the educational spaces have been visited on-site, during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko and presented in an online video transmission. **Recommendations:** - it is recommended to update some of the laboratory equipment (especially physical equipment) to the newer technology (available on the market).	fulfilled
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:** Students get access to educational and methodological support in the Scientific and Technical Library (STL) at Igor Sikorsky Kyiv Polytechnic Institute (https://www.library.kpi.ua/, SAR, pg. 35). The library stock has more than 2,530,000 copies of educational and scientific literature, uses modern innovative technologies and technical means. 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/). On the Moodle platform, elements of distance learning have been implemented according to the educational components of	fulfilled

	the study programme. To train masters, premises of the Department of Aircraft Control Systems are used (486 sq.m.) as well as premises of the ER IAT and the University. Training takes place in computer classrooms, laboratories with real samples of airplanes, missiles, other on-board equipment of aircraft, in the laboratories of the Department (161.4 square meters) on real samples of devices and avionics systems. The facilities offered by the library have been verified during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko (Video: On_site_visit_KPI_library). 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 STL stock contains Ukrainian and foreign literature, fully covers the themes of the disciplines in the programme curriculum. STL named after G. I. Denysenko at Igor Sikorsky Kyiv Polytechnic Institute is the largest technical university library of Ukraine. The library building contains 15 reading rooms for 1,500 seats, catalogues, bibliographic information rooms, and 8 book repositories (SAR, pg. 35). The library electronic catalogue, available on the Internet 24x7x365, is a tool for fast and high-quality multi-faceted search and access to STL resources (https://www.library.kpi.ua/). The general fund (as of January 1, 2021) has 2,537,394 books and paper copies - 33,562 electronic resources (including 6,376 electronic manuals and textbooks written by the teachers of Igor Sikorsky KPI), prepaid databases: Scopus and Web of Science; access to full texts of international journals and e-books Springer Nature Publishing House (SAR, pg. 35). The facilities offered by the library have been verified during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko (Video: On_site_visit_KPI_library). In general, the Strategy of the KPI Library: 2021-2025 (https://ela.kpi.ua/handle/123456789/43215) considers the transition to a full digital book and educational materials, in particular through the creation and development of comfortable, safe, creative, accessible virtual space (pg. 14); formation and development of the current collection of information resources on various media (pg. 15). Recommendations: - consider adopting an institutional strategy for the transition towards the full digital books and educational materials; - ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic.	partially fulfilled
3.	The library stock should contain enough copies to cover the needs of all the students from the evaluated study programme.	fulfilled

	Findings from the Self-Evaluation Report/ Visit: The KPI library has all the necessary educational literature in sufficient quantity to provide for all students studying under this educational program. To search and order literature, you can use the electronic catalog https://discovery.kpi.ua/. Students and teachers have access to electronic archive of scientific and educational materials (https://ela.kpi.ua/) which is being updated. The facilities offered by the library have been verified during the on-site visit on September 12 of evaluator prof. Oleksandr Maistrenko (Video: On_site_visit_KPI_library). Recommendations: - consider adopting an institutional strategy for the transition towards the full digital books and educational materials.	
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: The Control Systems of Flight Vehicles and Complexes Engineering study programme is teached in Ukrainian. 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. The library cooperates with the Goethe Institute, the British Council in Kiev, the French Cultural Centre, the US Embassy Information Resources Service in Ukraine (SAR, pg. 35, 36). The library maintains close contacts with libraries and publishers from Germany, Austria, USA, Poland, Baltic countries and others (https://www.library.kpi.ua/). Recommendations: - none.	fulfilled
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 Control Systems of Flight Vehicles and Complexes Engineering study programme is teached in Ukrainian. At the moment of the evaluation visit, there are no international students at the KPI. According to the discussions to the visit, in the previous years were international students at the KPI and they have benefit of consultations in English, upon demand. For the study programmes taught in foreign languages, there are study materials available in the teaching language that are of adequate quality and in a sufficient number of copies. According to SAR, pag. 35, 36, the library cooperates with the Goethe Institute, the British Council in Kiev, the French cultural centre, and the information resources service of the US Embassy in Ukraine. The library maintains close contacts with libraries and publishers from Germany, Austria, the USA, Poland, the Baltic countries and others (https://www.library.kpi.ua/).	partially fulfilled

	Recommendations: - consider adopting an institutional strategy for the transition towards the full digital books and educational materials; - ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic.	
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:** Students of Igor Sikorsky Kyiv Polytechnic Institute can receive by e-mail a digital copy of an article, fragment or chapter of a book from the STL fund or other libraries (from the electronic collection). STL provides students with educational materials in the required number of copies. You can also order a book from other libraries, get remote access to information resources, both STL and other libraries (https://www.library.kpi.ua/). Thus, starting from the first day of study at Igor Sikorsky Kyiv Polytechnic Institute, 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/). KPI has his own publishing house Politechnika http://politechnika.kpi.ua/, which provides printing and reproduction of textbooks, manuals, and other methodological literature authored by the university academic staff. Also, the university has several printing centers in educational buildings, where students, if necessary, have the opportunity to make copies of printed educational materials in the disciplines of this educational program. While discussing this topic with students – it has been mentioned that they are satisfied with quality and quantity of educational material and easiness of its use. No problems with availability of material have been mentioned. **Recommendations:** - none.	fulfilled
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:** The necessary level of professionalism of teachers of the OP is ensured during the competitive selection in accordance with the Procedures for competitive selection or selection by competition when filling vacant positions of scientific and pedagogical	fulfilled

	workers and concluding labour agreements (contracts) with them (https://document.kpi.ua/2021_HY-201, https://osvita.kpi.ua/competition). The competitive selection is organized by the expert qualification commission of the Department of Quality of the Educational Process, which considers the compliance of teachers with the qualification criteria for applicants for positions: higher education, scientific degree in the field of knowledge (according to the educational components provided by the teacher), the corresponding minimum experience of scientific and pedagogical activity, fluency in the state language (SAR, pg. 28). The candidate's pedagogical training is assessed on the basis of an open lecture or a practical session. The candidate's level of professionalism is confirmed by documents on advanced training, internships, a list of patents, scientific and educational works over the past five years. **Recommendations:** - none.	
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:** For the entire cycle of the study program, the University provides a sufficient number of scientific and pedagogical staff members with appropriate qualifications for teaching disciplines according to the curriculum. This is ensured by planning and accounting for the educational workload of the staff (SAR, pg. 28). There are standards for the maximal and minimal educational workload for full-time workers. The workload is approved in the individual work plans of academic staff members, taking into account the specificities of each activity. Individual plans are drawn up by all academic staff members (full-time, part-time, hourly workers). 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 (form K-4 B, K) (https://osvita.kpi.ua/node/3). **Recommendations:** - none.	fulfilled
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 teaching load 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	fulfilled

	Order No. NU/14/2022 dated January 20, 2022) (https://osvita.kpi.ua/node/31). The maximal teaching load for one full-time academic staff member cannot exceed 600 hours per academic year. The minimal teaching load for full-time academic staff, as a rule, is: assistant - 550 hours; teacher, senior teacher - 500 hours; associate professor - 450 hours; professor, doctor of sciences - 400 hours (SAR, pg. 29). According to the information from the Annex 3 – VS, the positions 6, 7 and 8 are not complete, having a workload less than 1 (BN: 0.7; 0.25 and 0.35). According to the discussions with the representatives of the KPI, this application meets the requirements of the labour legislation of Ukraine. It does not prohibit the work of employees of state enterprises (including in the position of a teacher at our university) according to the main place of work in part of the position - less than the full load (less than 1) - these are points 6, 7, 8. Also, there are currently no restrictions on working in a position with employment of more than 1. The restrictions were removed by Resolution of the Cabinet of Ministers of Ukraine dated November 22, 2022 № 1306 (https://zakon.rada.gov.ua/laws/show/1306-2022-%D0%BF#Text). However, when concluding an employment contract for part-time work (that is, outside of the main job), the employee must establish a work schedule that is outside of working hours at the main place of work. And on a monthly basis, it is necessary to reflect the execution of this work schedule in the time sheet. **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:** The educational process in accordance with the study programme is carried out by academic staff members who work full-time, part-time and hourly. 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 (form K-4 B, K) (https://osvita.kpi.ua/node/3). According to the information from Annex 4 – VS: Total no. of teaching staff.: 30 of which 4 teachers whose scientific subject differs from the subject of the educational program are not taken into account in the synthesis. Namely: Lyudmila Ignatova (positions 16) – History Subjects; Yuliya Serebryakova (positions 18) – Business Law; Iryna Zenina (positions 21) – Basics of a healthy lifestyle; Arseniy Shpak (positions 23) – Chemistry. Total no. of teaching staff.: 26 (100%) of which: Prof.: 5 (19,2%); Assoc.: 12 (46,1%); Lect.: 7 (27,0%); Asist.: 2 (7,7%).	fulfilled

	No. of tenured teaching staff in the Igor Sikorsky Kyiv Polytechnic Institute: 30 (100%) of which: Prof.: 5 (16,7%); Assoc.: 14 (46,7%); Lect.: 9 (30%); Asist.: 2 (6,6%). No. of associated teaching staff (AT+HP): 7 (100%) of which: Prof.: 2 (28,6%); Assoc.: 1 (14,2%); Lect.: 2 (28,6%); Asist.: 2 (28,6%). No. of pensioners (retired): 12 (40%). No. of tenured teaching staff in the Department of Aircraft Control Systems of the Educational and Scientific Institute of Aerospace Technologies: 15 (100%) of which: Prof.: 4 (26,7%); Assoc.: 6 (40%); Lect.: 3 (20%); Asist.: 2 (13,3%). No. of associated teaching staff (AT+HP): 7 (100%) of which: Prof.: 2 (28,6%); Assoc.: 1 (14,2%); Lect.: 2 (28,6%); Asist.: 2 (28,6%). No. of pensioners (retired): 9 (60%). Recommendations: - none.	
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: To ensure the educational process under the programme, the number of vacancies is calculated based on the available contingent of students. At the same time, calculations of student contingent at the department are carried out in accordance with the "Procedure for calculating the estimated contingent of the department" (https://osvita.kpi.ua/node/15). According to SAR, pg. 28: in 2022-2023 academic year, the total number of rates is 9.28. The number of full-time employees is 7.1 (77%). 4 professors, 9 associate professors, 5 senior teachers, 2 assistants work at the department. According to the information from Annex 3 – VS: Total pos.: 12,33 (100%) of which: BN: 9,9 (76,7%); HP: 0,2 (3,3%); AT: 2,23 (20%). 12,33 (100%) of which: Prof.: 2,25 (18,2%); Assoc.: 6,85 (55,5%); Lect.: 2,48 (20,2%); Asist.: 0,75 (6,1%). Total no. of pos. occupied by Prof. + Assoc. prof. = 2,25 + 6,15 = 8,4 (68,1%). Total no. of pos. occupied by tenured teaching staff in the Department of Aircraft Control Systems of the Educational and Scientific Institute of Aerospace Technologies: 8,73 (100%) of which: Prof.: 2,35 (26,9%); Assoc.: 4,45 (51%); Lect.: 1,18 (13,5%); Asist.: 0,75 (8,6%). Total no. of pos. occupied by associated teaching staff (AT+HP): 2,43 (100%) of which: Prof.: 0,35 (14,4%); Assoc.: 0,5 (20,6%); Lect.: 0,83 (34,1%); Asist.: 0,75 (30,9%). Total no. of pos. occupied by pensioners (retired): 5,95 (48,2%). Recommendations:	fulfilled

	- 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: Equality of labor rights of citizens of Ukraine and non-discrimination in the field of labor is enshrined in the Labor Code of Ukraine (https://zakon.rada.gov.ua/laws/show/322-08#Tex). Any discrimination in the field of labor is prohibited, in particular, violation of the principle of equal rights and opportunities, and direct or indirect limitation of the rights of employees based on age. According to the information from Annexes 3, 4 – VS, from a total of 30 teaching staff, the number of those of age 65 and over is 9 (30%). Together, they occupy (4,55/12,33)*100=36,9% positions. Academic staff, according to the professional orientation of the department, consists mainly of experienced teachers, and according to the KPI development strategy for the period 2020-2025 (https://kpi.ua/files/2020-2025-strategy_en.pdf), the task is the rejuvenation of scientific educational staff at all university departments while maintaining a high scientific and pedagogical level (pg. 19). Recommendations: - in order to preserve the scientific potential of the department and to preserve succession at the department, draw up a plan to recruit younger teachers, to increase the number of classes conducted by teachers classified as young teachers and to attract new full-time persons for the evaluated program.	fulfilled
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 Igor Sikorsky Kyiv Polytechnic Institute (https://kpi.ua/regulations), 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). The procedure of filling vacant positions of the academic staff is regulated by the "Procedure for competitive selection or election by competition for filling vacant positions of academic staff and concluding contracts with them" (https://osvita.kpi.ua/sites/default/files/downloads/Pologennia_ped_navantagennia_2022.pdf). According to the information from Annexes 4 – VS, from a total of 30 teaching staff: - 6 doctors of science (20%); - 8 candidates of techinal science (26,6%); - 2 with a master's qualification in Avionics (6,6%).	fulfilled

	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: According to "The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/174) syllabi are reviewed and updated annually in order to take into account wishes and comments received from applicants (based on course evaluation results) and from other stakeholders as a result of monitoring and periodic review of educational programs. The syllabus is approved by the department in agreement with the methodical commission of the ER IAT (SAR, pg. 56). Most teachers of the department have professional training in the subjects they teach. On the basis of their own professional and pedagogical experience, they created didactic materials that correspond to the programmes (syllabi) of the disciplines. These didactic materials are posted on the website of the department (https://skla.kpi.ua/) and are placed in the ELAKPI (Electronic Archive of Igor Sikorsky Kyiv Polytechnic Institute) https://ela.kpi.ua/. Evan though its in Ukrainian, you can find literature from 1955, and the newest mentioned source is dated 2006. An example of this discipline is Technical mechanics, Part 1: ЗО-17.1 Технічна механіка. Частина 1.pdf - Google Диск. Recommendations: - reviewing lists of recommended literature for some disciplines (outdated examples from as early as 1955, Russian sources, and a small amount of modern international sources); - consider ensuring the appropriate coverage of the topics in the curriculum and syllabuses with recent bibliographic.	fulfilled
9.	The teachers who occupy positions of assistant should have certified pedagogical training. Findings from the Self-Evaluation Report/ Visit: The mandatory availability of a certificate of pedagogical education is not provided for by regulatory documents of Ukraine. The necessary level of professionalism of the academic staff is ensured by the competitive selection, which is regulated by the Law “On Higher Education”, the Order of the Ministry of Education and Science of Ukraine #1005 from 05.10.2015, “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). According to the information from Annexes 3 – VS, two teachers are assistants of the department. They have the specialization Aircraft control systems, master’s degree in Avionics. Recommendations:	fulfilled

	- 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. The presence of such a 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). Specialists from partner enterprises work as part-time teachers at the department. Thus, laboratory work on the discipline "Laser gyroscopes" in the specialized laboratory of the department is conducted by the senior engineer of SE SI "Arsenal" Bondarenko E.A., laboratory work on the discipline "Complexes of integrated avionics" in the laboratory of SE "Antonov" is conducted by the deputy chief designer of SE "Antonov" » Kursganskyi O.Yu., all classes in the discipline "Information technologies of aerospace systems" in the computer class are conducted by A.V. Khizhnyak, a senior researcher at the Center for Remote Sensing of the Earth of the National Academy of Sciences of Ukraine (SAR, pg. 32). **Recommendations:** - none.	fulfilled
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 university provides an opportunity for academic staff to improve their pedagogical skills through advanced training courses on the development of new technologies offered by the university's Institute of Postgraduate Education (http://ipo.kpi.ua/povyshenie_kvalif/pidvish-kvalif-spivrob-kpi-108). This possibility 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). For academic staff and other participants in the educational process, there is an opportunity to complete a scientific internship, participate in joint projects, conduct scientific research, and improve qualifications with a scientific component (discussions at the evaluation visit). **Recommendations:** - none.	fulfilled
12.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:**	Not the case

	Recommendations:	
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 are the head of the educational laboratory, 2 leading engineers, an engineer of the 1st category, an engineer, a technician of the 1st category and a training master. Basically, this number of auxiliary staff members is sufficient to ensure providing practical classes from the programme curriculum. Recommendations: - none.	fulfilled
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: The educational program does not have special admission conditions compared to other programs at the university. Admission to the educational program takes place according to the university-wide admission rules https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf, which are usually approved more than six months before the start of applications by applicants (SAR, pg. 42). However, in 2022, after the introduction of martial law by the Order of the Ministry of Education and Science of Ukraine No. 392 of April 27, 2022 (https://zakon.rada.gov.ua/laws/show/z0487-22#Text), the admission conditions were cancelled, and the Procedure for admission to higher education in 2022 has been put into effect special Procedure for admission to higher education in 2022. Full information about the admission company is posted on the main website of the university https://pk.kpi.ua/, and is also specified on the website of the faculty https://iat.kpi.ua/bahelor/. Recommendations: - none.	fulfilled

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:** The Rules of admission to Igor Sikorsky KPI (https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf), which regulate all aspects of the entrance campaign for the bachelor's educational level, are provided at the university. The rules of admission to KPI this year were approved at the meeting of the Academic Council (https://pk.kpi.ua/, https://pk.kpi.ua/official-documents/, https://skla.kpi.ua/going_to_university/going_to_university_1/). According to these rules, admission to the evaluated educational programme is carried out (SAR, pg. 42). **Recommendations:** - none.	fulfilled
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:** In 2022, entrants were accepted according to the results of the National Multi-Subject Test passed in 2022 or the External Independent Assessment for 2019-2021 (https://pk.kpi.ua/wpcontent/uploads/official-documents/rules.pdf). To be admitted to the competitive selection, all entrants must have a Certificate of complete general secondary education or an equivalent document certified by the Ministry of Education and Science of Ukraine. In previous years, when determining the competitive score, along with the scores of the External Independent Assessment, scores from the Certificate of Complete General Secondary Education were taken into account (SAR, pg. 43). **Recommendations:** - none.	fulfilled
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:** The evaluation system takes into account all types of educational activities in accordance with the syllabus of the discipline. Knowledge as a result of theoretical training, skills and experience as a result of practical training, competence as a result of individual work and final evaluation have their component points in the rating evaluation system. The absence of an assessment in any component does not allow the applicant to receive a semester certification in the discipline (SAR, pg. 46, 47). Every year, 71-90% of the number of students enrolled in the educational programme successfully complete the summer session after the first year of study. The adequacy of admission conditions is also confirmed by the rector's incoming knowledge	fulfilled

	control of the first-year students, which is annually conducted by the Institute of Monitoring the Quality of Education (https://kpi.ua/eqmi, https://kpi.ua/monitoring-about). **Recommendations:** - none.	
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. **Findings from the Self-Evaluation Report/ Visit:** Together with the educational program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) and the curriculum plan is developed in accordance with it and working curricula (https://skla.kpi.ua/organization-training-bachelors/, SAR, pg. 8). The working curriculum plan is drawn up every year for each course and details the types of educational activities. In accordance with working study plans, syllabi of disciplines are developed. In the personal offices of the "Electronic Campus" system (https://ecampus.kpi.ua/home) individual study plans of students are placed. The study program is presented in the form of the next documents: 1. educational and professional program, that includes: Profile of the educational program; List of components of the educational component of the educational and scientific program; Structural and logical scheme of the educational program; Form of final examination of applicants for higher education; Matrix of correspondence of program competencies to components of the educational program; Matrix for providing program learning outcomes with relevant components of the educational program (Annex 2 – VS, Ukrainian and English); 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 БКЛ-173.1-2022.ФН-1_НПЛ_en.pdf - Google Drive; also, curriculums (2022, 2021, 2019) are presented in Annexes to the Self-Assesment Report of the study programme Control Systems of Flight Vehicles and Complexes Engineering;	partially fulfilled

	3. Syllabuses of the disciplines; the syllabuses are located in the department web-site under the link, https://skla.kpi.ua/organization-training-bachelors/; It should be noted that some syllabuses are only in Ukrainian or/and have different names (e.g.: Economics and management of enterprise, in Curriculum, Economics and organizarion of production, on site, Pre-diploma practice, Labor safety and civil security, Basics of algorithmization and programming, Software for digital systems. Part 1); some are incomplete (e.g. Higher Mathematics Part 1); some cannot be read (e.g. Automatic Control Theory. Part 2, Information and Measuring Devices. Part 1, 2). 4. Catalogs of the Elective educational components (2 positions) on university level (https://skla.kpi.ua/organization-training-bachelors/) and the Elective educational components (14 positions) on the faculty level (https://skla.kpi.ua/organization-training-bachelors/); It should be noted that, for many syllabuses from the U-catalogue, the English versions are in development. In the same time, some of the elective disciplines from F-catalogue are missing, so it is not clear what other disciplines students can select (e.g.: codes PV-1, PV-3, PV-4, PV-7 etc.). The program corresponds to the sixth level of education of the National Qualifications Framework (https://mon.gov.ua/storage/app/media/nrk/2021/11.10/Zvit.pro.samosertyfikatsiyu.NRK-dodatok.1-10.11.pdf). It should be noted that, 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 consistent information about the syllabuses via the web-site of the institution; - consider providing clear and consistent information about the syllabuses of all elective educational components, that can be selected by students of the study programme; - 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: The project team includes professors and associate professors, doctors and candidates of sciences with extensive pedagogical and scientific experience, including the head of the Scientific and Methodological Commission of Ukraine in specialty 173	fulfilled

	"Avionics". The curriculum plan and syllabi of the disciplines (https://skla.kpi.ua/organization-training-bachelors/) guide educational activities and the application of teaching methods to achieve program results. All teaching and support staff have more than 10 years of experience at the university. Their qualifications provide support for the educational process and communication with students, teachers, parents and university management. Among teachers use discussion, heuristic, research, game, simulation methods, as well as the method of modeling, brainstorming as the main methods of teaching; it is indicated in the syllabi (https://skla.kpi.ua/scientific-and-technical-activities-departments/, SAR, pg. 31). Teachers improve their qualifications at least once every five years. According to the legislation of Ukraine, in 5 years, the NPP must complete advanced training courses totalling 5 credits (180 hours). This possibility is regulated by the "Regulations on improving the qualifications of pedagogical and scientific-pedagogical staff" (Order No. 7/134 of 03.08.2020 on the approval of "Regulations on improving the qualifications of pedagogical and scientific-pedagogical staff") (https://osvita.kpi.ua/node/714). The professional development plan is approved annually by the Scientific Council of the university. Two teachers of the department (O.V. Zbrutskyi and M.G. Chernyak) are laureates of the State Prize of Ukraine in the field of science and technology (SAR, pg. 30). Training is carried out in the form of lectures, seminars, practical classes, laboratory classes, and individual classes. When self studying, students can have consultations with lecturers (discussions with the students and teaching staff). **Recommendations:** - none.	
3.	The study programme curriculum is approved at institutional level. **Findings from the Self-Evaluation Report/ Visit:** The curriculum of the programme is adopted by the Academic Council of Igor Sikorsky Kyiv Polytechnic Institute. **Recommendations:** - for a better transparency, consider placing the approved (scanned copies with the signatures and stamps) curriculums on the official web-site of the NTU KPI.	fulfilled
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:** The curriculum and syllabuses of disciplines are drawn up in accordance with the educational program, respectively, time for lectures, practical, laboratory and self-study. Section 6 of the educational program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf, Annex 2 –	fulfilled

	VS) contains a table in which each result of the program is matched to the discipline of the curriculum. According to this table, the syllabi of the disciplines are compiled. This ensures the achievement of learning outcomes. **Recommendations:** - none.	
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 students includes courses of general training as: Physics, Higher mathematics, Descriptive Geometry, Engineering and Computer Graphics, Informatics, History Subjects 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 "Fundamentals of Aviation and Cosmonautics", which interests and motivates students to study engineering disciplines in the field of aircraft control systems. In addition, teachers of fundamental disciplines emphasize and pay more attention to the study of those sections that are later necessary for the study of special disciplines. The university also offers adaptation 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.	fulfilled
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:** The legislation of Ukraine establishes a fixed duration of study at the bachelor's level, which is 3 years and 10 months. The total number of weeks for the classes is equal to 18 for all semesters, except the 8th. 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 ECTS credits (240 credits). The educational program and curriculum ensure its compliance. **Recommendations:** - none.	fulfilled
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:**	partially fulfilled

According to point 1.3 of 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. The realism and balance of the OPP and the training curriculum create conditions for the all-round harmonious development of the applicants. Applicants are trained according to individual study plans (https://osvita.kpi.ua/node/117), which are based on the results of the applicant's personal choice of disciplines from the F-Catalogs of optional disciplines (https://osvita.kpi.ua/node/185, SAR, pg. 56).

Curriculum has 25% (60 ECTS) of the elective components that divided into 2 elective disciplines (4 ECTS in total) in the field of general training cycle and 14 elective disciplines (56 ECTS credits in total) of vocational training cycle, that corresponds to the requirements of Ukrainian legalisation in the field of higher Education. Students choose these disciplines in the catalogues of optional disciplines in the personal office of the "Electronic Campus" system.

In addition to the specified mandatory number of optional subjects, the student can study additional subjects at his own request. All selected disciplines, together with regulatory ones, are recorded in the student's individual study plan.

Students are free to choose elective disciplines, however the usually turn to senior students for recommendations on that topic. They mostly choose disciplines, recommended by senior students, and with time they find their selection appropriate. Doesn't sound like a very good idea, to follow the track of the elder students, but if all parties are happy with that – should not be a huge problem.

It should be noted that:

- some of the elective disciplines from F-catalogue are missing, so it is not clear what other disciplines students can select; in general, in F-catalogue, there are 14 elective components, but 8 courses have no alternative (PV-01, PV-03, PV-04, PV-07, PV-08, PV-09, PV-10, PV-11);
- the analysis of the titles and the content of provided syllabuses shown that content of many elective courses are the same; for example: for the elective component PV-05 (F-catalogue): “Computer Design Avionics System”, or “Integrated Computer Design Technologies”, the topics are quite similar (LabView environment); for the elective component PV-06 (F-catalogues), student can select one of the proposed courses: “Modern Gyroscopes”, or “Mechanical Gyroscopes of Navigation Systems” or “Mathematical Methods in Gyroscopes Theory” with quite similar name and topics; for the elective component PV-14 (F-catalogues), student can select one of the proposed courses: “Air and Space Aircraft Systems”, or “On-Board Equipment of Aircraft and Satellites”, with quite similar topics.

Recommendations:

- for the existing F-catalogue, the list of all elective courses should be added;
- consider removing duplicated disciplines/contents from the F-catalogue of elective disciplines and extend the list of the elective courses;

	- on the other hand, we recommend analysing a different approach regarding the elective components, as follow: open more elective courses (i.e., 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: The requirements for the structure, content and design of curricula are determined by order No. HOH/47/2022 dated 07.02.2022, about the organization and planning of the educational process for the 2022-2023 academic year (https://document.kpi.ua/2022_HOH-47). According to the the Ukrainian legalisation in the field of the higher education, the study programme “Control Systems of Flight Vehicles and Complexes Engineering” curriculum consist of: - Normativ educational componenets, divided in two categories: General training cycle and Vocational training cycle; - Elective educational components, divided in two categories: Elective educational components from University cataloque and Elective educational components from Faculty cataloque. The content of the discipline allows their 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.	fulfilled
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 Igor Sikorsky KPI and is provided through practical, seminar and laboratory classes (http://osvita.kpi.ua/node/184). The curriculum includes 180 hours of pre-diploma practice, which takes place at partner enterprises, which are also the main employers, as well as 1,602 (50.3%) hours of laboratory and practical classes. During the development and updating of the educational programme, the opinion expressed by employers during its evaluation is taken into account. The result of cooperation with stakeholders was the including of the following proposals in the OP: to deepen knowledge and practical skills in programming microcontrollers (considered in the learning outcomes of RN13, RN30), circuit engineering of analog electronics (considered in the learning outcomes of RN12); to gain practical experience of research and testing of inertial	fulfilled

	sensors of avionics systems using modern laboratory equipment (taken into account in the learning outcomes of PH17, PH28); to apply widely special software and modern information technologies (ANSYS, SolidWorks, Matlab, Simulink) for the analysis of structures and dynamics of avionics systems (taken into account in the learning outcomes of RN14, RN16, RN21, RN29); to attract specialists (former graduates of the Department) working at enterprises in their specialty to manage the practice from the enterprise (SAR, pg. 4). Employers are quite satisfied with the level of competencies of the student. Employers vision is so that the practical skills are something that is worth working on more. Employers mention that after graduation it takes from one to three years for a person to become more or less independent in his job (a approach to what can be called an „independent employee”). Recommendations: - 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 bachelor's study program requires a total of 240 ECTS credits, equivalent to 7200 hours of training. 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). 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, designed to align with the educational program's structural and logical scheme and ensuring that the learning outcomes for disciplines are met (БКЛ-173.1-2022.ФН-1_НПЛ_en.pdf - Google Drive, Annex 1 – VS). The share of students' independent work hours in relation to the total number of hours is on average 55%, which amounts to 4014 hours. The number of classroom hours gradually decreases from 26.5 hours (1st year of training) to 23 hours (4th year of training). Elective courses make up at least 25% of the total number of ECTS credits, which creates conditions for the realization of students' personal creative potential (SAR, pg. 9). Recommendations: - none.	fulfilled
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 “Control systems of flight and complexes engineering” is conducted in the field of 173 “Avionics” and has fundamental and professional-oriented core disciplines (Annex 1 – VS).	fulfilled

	In order to avoid overlapping and duplication of the content of the disciplines, regular methodical seminars are held at the Department of Aircraft control systems, where both the structural and logical scheme of teaching, and the methodology and content of teaching individual disciplines are considered (https://skla.kpi.ua/). 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: The syllabuses of the study programme “Control systems of flight vehicles and complexes engineering” are located on the web-site of the Department of aircraft control systems (https://skla.kpi.ua/organization-training-bachelors/). Each syllabus contains of the next parts: Description of the educational discipline, its purpose, subject of study and learning outcomes; Purpose and tasks of the academic discipline; Pre-requisites and post-requisites of the discipline (place in the structural and logical scheme of training according to the relevant educational program); Content of the academic discipline; Educational materials and resources; Methods of mastering an educational discipline (educational component); Independent work of a student/graduate student; Policy of academic discipline (educational component); Types of control and rating system for evaluating learning outcomes; Additional information on the discipline (educational component). It should be noted that: - in general, in F-catalogue, there are 14 elective components, but 8 courses have no alternative (PV-01, PV-03, PV-04, PV-07, PV-08, PV-09, PV-10, PV-11); so it is not clear what other disciplines students can select; - there are some syllabuses in which, the number of hour allocated for each topics is missing; examples: History of science and technology; Physics. Part 2; Materials and technologies of instrument construction; Laser gyroscopes; Modern gyroscopes; Executive devices of avionics systems etc.; - at the end of the syllabuses placed on the web-site (https://skla.kpi.ua/organization-training-bachelors/), is mentioned that these were adopted by the Department of Education and Agreed by the Methodical Commission; however there are not signed by the course, seminar / other applicative activity holder and by the head of department. Recommendations: - for the existing F-catalogue, the list of all elective courses should be added; - consider the optimization of syllabus structure for the orientation of their content on students (e.g., requirements for students) and formal validation of each course / discipline.	partially fulfilled

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:** Syllabi indicate the topics of classroom sessions, types of individual tasks, recommended literature for mastering the discipline, describe the rating system for evaluating students' task completion, and teaching and learning policies for the discipline (SAR, pg. 10). The rating system for evaluating each discipline, is compiled in its syllabus in such a way that it is possible to receive gained points for all learning outcomes of the discipline. Tasks submitted for semester control contain a practical and theoretical part and cover the content of the entire discipline (https://skla.kpi.ua/organization-training-bachelors/). **Recommendations:** - none.	fulfilled
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 point 1.3 of 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 (SAR, pg. 56). Applicants are trained according to individual study plans (https://osvita.kpi.ua/node/117). Individual tasks may include: writing a separate essay on topics assigned for independent study (usually in the early years of study); for example, in the course "Fundamentals of Navigation," topics such as "Comparison of Global Satellite Navigation Systems" and "Prospective Sensors for Inertial Navigation Systems" were given, while in the course "Fundamentals of Radar," topics such as "Radar Control Systems for Spacecraft" and "Radar Equipment for Military Aircraft" were given. Other tasks include, for example, from the discipline "Electronics and basics of circuit engineering" - performing calculations to gain practical experience in determining the characteristics of various electrical circuits (transistor amplifiers, circuits on operational amplifiers, etc.); works on graphic design, for example, from the optional discipline "Computer Design of Avionics Systems", which require the assembly of virtual instrument panels; as well as homework from the discipline "Fundamentals of Algorithmization and Programming", which require students to write program codes for typical tasks on the topic of aircraft control (SAR, pg. 9). The curriculum includes two course projects and two course works. In total, the curriculum provides 4014 hours (55%) for independent work of students. **Recommendations:**	fulfilled

	- before the beginning of the semester, consider updating the course works syllabuses and add information about topics of the course works; so, students can select the topics that are in the area of their interest.	
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 (https://skla.kpi.ua/organization-training-bachelors/) correspond to the Bachelor's field and study programme. **Recommendations:** - none.	fulfilled
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 the educational process schedule of Igor Sikorsky Kyiv Polytechnic Institute (https://kpi.ua/year, https://kpi.ua/files/calendar_2022-2023.png), the Bachelor's degree program takes 4 academic years to complete. An academic year consists of two semesters, each lasting for 18 weeks (except 8th) for the contact hours (lectures, practices, laboratory works) and independent students work, and 2 exam session. During the session, at least 3 days are planned for each exam, including 1 day for taking the exam and at least 2 days for preparation. In addition, 8th semester has 5 weeks of Pre-diploma practice. There are at least 2 weeks of holidays scheduled between the autumn and spring semesters. The student's weekly workload for all types of educational activities does not exceed 50 hours per week (10 hours per day during working days). According to the curriculum, depending on the course, students of the educational program have between 23 to 27 hours of classroom instruction per week. **Recommendations:** - none.	fulfilled
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 the curriculum, the educational program (https://osvita.kpi.ua/sites/default/files/opfiles/173_ONPM_SKLAK_2022.pdf, Annex 2 – VS, Annex S4 - Structural and logical scheme of the educational program) provides general volume of 240 ECTS credits of academic disciplines, 30 ECTS in each semester, including electives (Annex S3 - Credits). In case of transfer of academic difference, the maximum number of credits should not exceed 37 credits per semester and 45 credits per academic year (https://osvita.kpi.ua/node/178).	fulfilled

	Recommendations: - none.	
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. All disciplines of the students' choice are accompanied by a final (semester) control (https://osvita.kpi.ua/sites/default/files/opfiles/173_ONPM_SKLAK_2022.pdf), on which the student receives a final grade for the discipline on a 100-point scale. The form of semester control – credit or exam – is determined by the curriculum. The final (semester) control is carried out in the terms established by the schedule of the educational process of the university (https://kpi.ua/year). Credits of optional disciplines supplement credits of normative disciplines of the corresponding semester up to 30 credits. Recommendations: - consider adding to the curricula of free elective disciplines (with extra credits to the 30 compulsory of the semester).	fulfilled
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: The ratio between theoretical and practical training meets the requirements of the Ukrainian legalisation in the field of higher education and the specialty standard 173 "Avionics". According to the curriculum, out of 3186 hours of classroom classes, 982 hours are allocated to practical classes, and 620 hours are to laboratory work. In addition, students complete two course projects (90 hours) and two term papers (60 hours). As such the course to applications ratio is: 1434/(982+620+90+60) = 0,82 (according to ARACIS methodology). Recommendations: - usually, the students in the first and second years of study require more direct communication with the academic staff; so, it is recommended to analyse the possibility to increase the contact hours in that time.	fulfilled
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: All disciplines of the program are accompanied by a final semester control (https://osvita.kpi.ua/sites/default/files/opfiles/173_ONPM_SKLAK_2022.pdf), on which the student receives a final grade for	partially fulfilled

	the discipline on a hundred-point scale. During the entire period of study, the student studies 61 disciplines and takes 22 exams and 39 credits. The difference between an exam and a credit is that the exam is given in a two-week period of the session, which is not included in the 18 weeks of the semester. The assessment is given at the last lesson of the semester. No more than 3 exams per semester are allowed (https://document.kpi.ua/files/2020_7-124.pdf , https://osvita.kpi.ua/node/39, SAR, pg. 45). As such the exams to credits ratio is: 22/61*100=36%. **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).	
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 practice is organized in accordance with "Regulations on the practice of students of higher educational institutions of Ukraine" No. 93 of April 8, 1993 (https://kpi.ua/document_practice). According to the curriculum, the study programme “Control systems of flight vehicles and complexes engineering” in NTU KPI has one practice (pre-diploma) in 8th semester, with duration of 5 weeks and 6 ECTS study credits. In addition, practical and laboratory classes of some disciplines of junior courses are also held at partner enterprises on the partners' modern equipment. 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 the introduction in the curriculum of practice / internship in enterprise, for a total of at least 6 weeks (with 30 hours/week workload).	partially fulfilled
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:** Internship contracts are concluded with partner enterprises (https://osvita.kpi.ua/node/42, https://skla.kpi.ua/education/organization-practitioners-bachelors/).	fulfilled

	These enterprises have a large production and research base, every year providing the necessary number of places for the practice of students of the educational program. In general, the specified enterprises have all the necessary resources and use them to achieve the goals of the practice (https://osvita.kpi.ua/node/17). Applicants hold their practice at leading enterprises in the field of development and production of aircraft and their systems, in particular: State-owned enterprise of special instrument construction "Arsenal", SE "State Kyiv Design Bureau "Luch", State enterprise "Antonov", PJSC "Progresstech Ukraine", etc. (https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/). Each student is assigned with a manager at the enterprise where the practice takes place, as well as a manager from among the teachers of the department. During the practice, each student fills out a practice diary, which displays the tasks completed by him and the assessment of the representative of the company where the practice takes place regarding its results and the degree of the student's mastery of the relevant competencies. 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: The practice is organized in accordance with "Regulations on the practice of students of higher educational institutions of Ukraine" No. 93 of April 8, 1993 (https://kpi.ua/document_practice). According to the curriculum, the study programme “Control systems of flight vehicles and complexes engineering” in NTU KPI has one practice (pre-diploma) in 8th semester, with duration of 5 weeks and 6 ECTS study credits. Practice syllabi are oriented for students to acquire practical skills that will allow them to get a job on the labor market after graduation. For example, according to SAR, pg. 17, last year, 18 students completed pre-diploma practice at the department, of which 14 worked at partner enterprises. According to the results of the defense, 100% of students received positive marks. It should be noted that, on the web site: https://skla.kpi.ua/organization-training-bachelors/, where the syllabuses are uploaded, for the Pre-diploma practice and Diploma work there are no English versions of the contents. Recommendations: - consider the introduction in the curriculum of practice / internship in enterprise, for a total of at least 6 weeks (with 30 hours/week workload); - publish the English version of the syllabuses for all the components of practice.	fulfilled

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:** The graduation examination is carried out in the form of a public defense of the qualification work (diploma thesis or diploma project). The qualification work should involve the solution of a complex specialized task or a practical problem of avionics, which requires the application of theories and methods of engineering sciences and is characterized by the complexity and uncertainty of conditions (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf). The learning outcomes provided by diploma design and certified by the final certification are indicated in the tables of sections 5 and 6 of the educational programme. Pursuant to the order "On measures to organize and conduct the educational process during the legal regime of martial law" № NU/55/2022 of March 22, 2022, at the request of the Department of Education, the form of attestation of applicants of the 4th year of the bachelor's level of higher education 2021-2022 was replaced, namely the replacement of the implementation and defense of diploma projects with the completion of a comprehensive certification exam. 18 bachelor's degree holders successfully passed the comprehensive certification exam and received a bachelor's diploma of graduation from the National Technical University of Ukraine "Ihor Sikorskyi Kyiv Polytechnic Institute" in the educational and professional program "Aircraft Control Systems and Complexes" specialty 173 "Avionics" (SAR, pg. 17). In 2022, 100% (18 out of 18) graduates successfully passed the graduation certificate. Annually, this indicator is at least 90% (SAR, pg. 45). **Recommendations:** - none.	fulfilled
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 Regulation on the examination board and certification of higher education applicants at Igor Sikorsky Kyiv Polytechnic Institute / 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. The list of topics for diploma projects (diploma theses) consists of topics proposed by the graduation department, supervisors, practice supervisors from practice bases, stakeholders and is approved at the beginning of the academic year at a department meeting, and is posted on the department's website. Students can choose the topic of their diploma project (theses) from the proposed list, which also includes topics proposed by partner enterprises.	fulfilled

	According to SAR, pg. 41, employers take part in the development of curricula and educational programs, provide their production and laboratory facilities for conducting scientific research of graduate students. The practice of completing diploma theses and projects on assignments from enterprises is established. Meeting with representatives of employers and industry stakeholders proved the facts that there are some topics that were proposed by the industry. **Recommendations:** - none.	
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 sections 2 and 9 of the Regulation on the organization of the educational process (https://osvita.kpi.ua/node/39) and in the Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/sites/default/files/downloads/Regulation%20educational%20programs.pdf, https://osvita.kpi.ua/node/137). Over the past five years, the program has been updated four times. However, those changes are implemented only for the next study cycle, so it means, study program remains unchanged for one study cycle in general. In the process of program revising consultations are held with all stakeholders - employers, teachers and students. The update history can be found at the link (https://osvita.kpi.ua/173_OPPB_SKLAK). **Recommendations:** - none.	fulfilled
27.	*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.1.3 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:** The project group that developed the program includes representatives of the academic sector (4 people), a representative of industry and a graduate of the program. During development, the wishes of students and industry representatives are taken	fulfilled

	into account. For example: the result of cooperation with stakeholders was the including of the following proposals in the OP: to deepen knowledge and practical skills in programming microcontrollers (considered in the learning outcomes of RN13, RN30), circuit engineering of analog electronics (considered in the learning outcomes of RN12); to gain practical experience of research and testing of inertial sensors of avionics systems using modern laboratory equipment (taken into account in the learning outcomes of PH17, PH28); to apply widely special software and modern information technologies (ANSYS, SolidWorks, Matlab, Simulink) for the analysis of structures and dynamics of avionics systems (taken into account in the learning outcomes of RN14, RN16, RN21, RN29); to attract specialists (former graduates of the Department) working at enterprises in their specialty to manage the practice from the enterprise (SAR, pg. 4). From students perspective, employers are also in a close contact with teaching staff/leadership and present their vision in a continuous manner. Recommendations: - consider establishing a more systematic and procedural approach to the consultation of the stakeholders and the analysis and use of their feedback, including the documentation.	
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 interests and proposals of the academic community in the formation of the goals and program results of training are taken into account by including the following PRN in the EP: adapt to changes in the technologies of professional activity, predict their impact on the final result; to understand the state and prospects of development of the subject area; to critically understand the main theories, principles, methods and concepts in professional activity. This was the result of cooperation and communication with the Institute of Space Research of the National Academy of Sciences of Ukraine and the DKA of Ukraine, the Center for Aerospace Earth Probing of the Institute of Geology of the National Academy of Sciences of Ukraine, with the faculties and departments of the National Academy of Sciences named after M. E. Zhukovsky "Kharkiv Aviation Institute", National Aviation University, Dnipro National University named after Oles Honchar, Technical University of Berlin, Warsaw University of Technology, Georgian Aviation University, Vilnius Technical University named after Gedeminas, Brno Technical University (Czech Republic), Middle Eastern Technical University (Turkey); participation in the projects of European programs "TEMPUS" CRIST "Reform of educational programs in the field of space technologies", NETCENG "New model of the third level of engineering education in accordance with the Bologna process" and ERASMUS - ACTIVE "Atlantic-Caucasian initiative of technical universities for quality education", EWENT "Eastern - Western network of higher technical education".	fulfilled

	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 program, monitoring of employment etc. (SAR, pg. 58). **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 the results of each round of comprehensive monitoring for each specialty of the university, an index of the quality of specialist training is determined, the components of which are the following: a) the result of the rector's control of students' residual knowledge; b) index of diploma theses quality; c) index of the quality of specialist training based on the results of sociological surveys of the labour market; d) accumulative index of the quality of specialist training based on the results of previous rounds. Monitoring indicators are determined based on the methodology (https://kpi.ua/files/monitoring/5-13.pdf). **Recommendations:** - none.	fulfilled
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 focus of the didactic process on fulfilling the missions, goals and achieving the results of the program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) is clearly traced in its structural and logical scheme. Based on it, a curriculum is drawn up, which provides an appropriate sequence of teaching to implement connections between disciplines. In the syllabus of each discipline (https://skla.kpi.ua/organization-training-bachelors/) 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.	fulfilled

	Recommendations: - none.	
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 structural and logical scheme of the educational program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) and in the syllabuses of the disciplines ensures accumulation and development of knowledge and skills (https://skla.kpi.ua/organization-training-bachelors/). For example, in the discipline Theory of automatic control. Part 1. General course (2nd year, spring semester) students learn to analyze and synthesize linear deterministic one-dimensional systems. In the discipline Theory of automatic control. Part 2. Fundamentals of modern automatic control (3rd year, fall semester) students learn to analyze and synthesize nonlinear, stochastic, and multidimensional systems. Based on the acquired knowledge and skills in the discipline Basics of the structure of control systems of aerial vehicles and satellites (4th year, autumn semester), students learn to synthesize and analyze aircraft control systems, which are complex multidimensional systems that contain significant nonlinearities and operate at stochastic disturbances. **Recommendations:** - none.	fulfilled
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:** Evaluation of students takes place in accordance with the provision on the system of evaluation of learning outcomes at Igor Sikorskyi Polytechnic Institute (https://osvita.kpi.ua/index.php/node/37). According to it, a rating evaluation system is compiled, which is a component of each syllabus in the discipline (https://skla.kpi.ua/organization-training-bachelors/). The rating system of evaluation is brought to the students' attention at the first lesson. In educational disciplines of EP according to clause 5.2 of the Regulation on the organization of the educational process in Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/39, https://document.kpi.ua/files/2020_7-124.pdf) the following main types of control measures are carrying out: current, calendar, rector's and final (semester control and certification) control. The content and forms of conducting each of the specified types of control are determined by the Regulation on current, calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/32 , https://document.kpi.ua/files/2020_7-137.pdf). The current monitoring of educational components involves obtaining points for doing individual tasks and tests according to the working curriculum, for performances at practical or seminar classes, reports and defense of computer workshops and	fulfilled

	laboratory works, etc. Based on the results of current control, the teacher can determine the current level of knowledge and skills mastered by the learner (including independently), defined in the syllabus of the discipline, and make certain corrections in the teaching process. Calendar control is carried out for each academic discipline (educational component), as a rule, on the 7-8th weeks and 14-15th weeks of each semester of study of the students and is implemented by determining the level of compliance of the applicant's current achievements (rating) with the criteria established and defined in the RSA. According to the results of the calendar controls, the presence of general or individual problems of the applicants regarding the study of the discipline is determined. The results of calendar controls are discussed at department meetings and relevant decisions are made (https://skla.kpi.ua/kafedra-skla/dokumentoobig-kafedry/). The final (semester) control is the assessment of the degree of achievement by the student of the planned program learning results from a certain educational component. The results of semester's inspections are discussed at department meetings, based on the results of which proposals are made regarding the need to make changes to the teaching of educational components (https://skla.kpi.ua/kafedra-skla/dokumentoobig-kafedry/). Such three-level control of success allows the authorities to adjust the process during training to improve the results from both the teachers and the students. **Recommendations:** - none.	
4.	The achievement of the learning outcomes of the disciplines is adequately assessed. **Findings from the Self-Evaluation Report/ Visit:** Teachers strictly follow the provisions of Igor Sikorskyi Kyiv Polytechnic Institute about the system for evaluating learning results (https://osvita.kpi.ua/index.php/node/37) and about the current calendar and semester control of learning results (https://osvita.kpi.ua/index.php/node/32). In these regualtions are claimed: the purpose, main tasks, principles and mechanisms of implementation of the comprehensive assessment of the training of higher education applicants are determined; the monitoring process and basic control measures are regulated to determine the level of competences, knowledge, skills acquired by higher education graduates, their compliance with the requirements of educational programs at a certain level of higher education; the procedure for liquidation of academic debts is determined. In the Regulation on the system of evaluation of learning results in Igor Sikorskyi KPI is mentioned that the algorithms for forming the evaluation of the academic discipline for credit and exam cases are uniform for the entire university and provide for the use of a 100-point scale. Point assessment of all types of work is provided, in accordance with the curriculum.	fulfilled

	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. **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:** During the teaching of disciplines, attention is paid to the place of application of relevant knowledge both in industry and in the disciplines of master's training. In this way, the development of knowledge and skills in the master's degree is announced, and admission to the master's degree is promoted. Students receive consultations both according to the schedule and individually at any convenient time using all available means of communication (SAR, pg. 21). Teachers give students advice and consultations, also regarding their further education and career (https://robota.kpi.ua/). The Club on control systems of unmanned aerial vehicles, is organized by the department (https://iat.kpi.ua/category/student/circle/bpla-kpi/) which encourages students to solve more complex practical tasks and continuing education. 1st-year students are offered adaptation courses in fundamental disciplines and remedial courses of the Educational and Scientific Center of the Institute for Monitoring the Quality of Education (https://kpi.ua/adapt). Teachers conduct additional consultations in their disciplines (https://drive.google.com/file/d/1wvkJu-oJgUOMoD_xgtoIVSX6a1AcKGCP/view). The vast majority of graduates of the educational program (75-100%) enter the master's program. **Recommendations:** - none.	fulfilled
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:**	fulfilled

	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). According to the Annexes 4, 5 – VS, the number of teaching staff with activities to the evaluated study programme is 30. Considering the total number of the students enrolled in the 2022-2023 academic year, results: 30/95=0,31. Considering the total number of the students enrolled in the 2023-2024 academic year, results: 30/102=0,29. 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 / Regulations on the Organization of the Educational Process at Igor Sikorsky KPI (https://osvita.kpi.ua/index.php/node/39) and order No. HOH/47/2022 dated 02.07.2022 "On the organization and planning of the educational process for the 2022-2023 academic year" (https://document.kpi.ua/2022_HOH-47): - lectures - 50-100 people; - group classes - 20-30 people. - practical classes - 15-25 people; - laboratory classes - 10-15 people. The schedule is made according to the capabilities of the auditorium fund (https://schedule.kpi.ua/). Recommendations: - none.	fulfilled
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 of classes is developed by the methodologist of the educational and scientific institute and is controlled centrally in the university control room in accordance with the rules that contribute to the normal educational process (https://schedule.kpi.ua/). For example, no more than eight hours of classes per day are allowed. Gaps between classes are not allowed. Practical and laboratory classes are held after lectures. According to the work plan, no more than 28 hours of classes are allowed per week (no more than 30 hours in the first year). The recommended division between classroom classes	fulfilled

	and students' independent work is 50% by 50% (https://drive.google.com/file/d/1MvBc4mG85_nc3ALLvRHljolGibgJdZ9E/view). It is allowed to increase the classroom load up to 60% for fundamental disciplines. In the conditions of the need for remote learning in a mixed form, lectures are scheduled for separate days. In this way, laboratory and practical exercises can be conducted in laboratories, and lectures can be conducted remotely. Recommendations: - none.	
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: Grades are posted in information on the electronic campus (https://ecampus.kpi.ua/), where they are stored and available to the student in his personal office throughout the study period, as well as in paper information. 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://osvita.kpi.ua/index.php/node/122, Annex S2 – Diploma). In the case of premature completion of studies, the student is issued an academic certificate with all received grades and results, which is regulated by the "Procedure for Accompanying Documents on Higher Education", which was put into effect by Order No. HOH/108/2021 dated 12.05.2021 "On Accompanying Documents on Higher Education" (SAR, pg. 47). Recommendations: - none.	fulfilled
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". 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. For students who have difficulties in completing the educational program, state regulations (Law of Ukraine "On Higher Education", Article 46) and "Regulations on Expulsion, Interruption of Education of Students of Higher Education at Igor Sikorsky	fulfilled

	KPI (https://osvita.kpi.ua/index.php/node/178) it is provided to receive an academic leave - a break in studies, during which the student does not expell from the university, but also does not participate the educational process. The duration of the academic leave is usually one year (SAR, pg. 38). 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 an evaluation for maintaining the accreditation. The educational program is accredited by the Ministry of Education and Science of Ukraine. At the time of writing the Self-assesment report, the study programme Control systems of flight vehicles and complexes engineering worked within the framework of the license granted by the Ministry of Education and Science of Ukraine on 30.04.13, valid until 01.07.2023 (Certificate of accreditation of the specialty series ND № 1192565). Currently, according to the information from Annex S1 – Certificates, the educational programme operates within the framework of the license issued by the National Agency for Quality Assurance of Education (Certificate № 5255, date of issue – 06/28/2023, validity period - 5 years until 07/01/2028). 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. 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" No. 93 of April 8, 1993 (https://kpi.ua/document_practice). The practice of the applicants is carried out at the leading enterprises in the field of development and production of aircraft and their systems, in particular: State-owned enterprise of special instrument construction "Arsenal", SE "State Kyiv Design Bureau "Luch", State enterprise "Antonov", etc.	fulfilled

	(https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/, SAR, pg. 39, 40). Contracts on internships have been concluded with enterprises (https://skla.kpi.ua/education/organization-practitioners-bachelors/, https://dnvr.kpi.ua/wp-content/uploads/2021/07/%D0%94%D0%B5%D1%80%D0%B6%D0%9A%D0%9A%D0%91-%D0%9B%D1%83%D1%87.pdf, https://dnvr.kpi.ua/wp-content/uploads/2022/08/%D0%9A%D0%9F-%D0%A1%D0%9F%D0%91-%D0%90%D1%80%D1%81%D0%B5%D0%BD%D0%B0%D0%BB.pdf, https://dnvr.kpi.ua/wp-content/uploads/2021/03/%D0%A2%D0%9E%D0%92-%D0%A0%D0%90%D0%94%D0%86%D0%9E%D0%9D%D0%86%D0%9A%D0%A1.pdf, https://drive.google.com/file/d/1GJNeFwxYZpdNDWXRYUGCDJYePRzqgs1l/view, https://drive.google.com/file/d/1GVAqaBQckowpzJiEgrLXpG3L_s7S8FiK/view). These enterprises have a large production and research base, providing each year the necessary number of places for the practice of students of the educational program. Enterprises provide practice management by highly qualified specialists (one of the minutes of department meetings No. 12 dated July 13, 2022). In general, the specified enterprises have all the necessary resources and use them to achieve the goals of the practice (https://osvita.kpi.ua/node/17). Recommendations: - consider publishing the list of the companies that are ready to host the students for the practice with contact details (with the consent of the companies).	
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: The Department of Aircraft Control Systems actively involves employers in the organization and implementation of the educational process, using their practical experience and scientific potential for participation in the educational process, joint implementation of scientific and research works, implementation of enterprise developments in the educational process, organization of internships for scientific and pedagogical workers, performing internship of students of higher education (SAR, pg. 40). There is a cooperation program with leading enterprises of the industry SE "State Kyiv Design Bureau "Luch", SE "Antonov", Institute of Space Research of the National Academy of Sciences of Ukraine, "Arsenal" state enterprise of special instrument construction, etc. (Contracts No. 25, 41, 52 dated 1.10.2020, No. 6 dated 1.11.2020). (https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/) With the participation of these enterprises, educational and scientific laboratories are organized and operate, in which students of higher education conduct their scientific research. The educational and scientific center of the company "Firefly Aerospace"	fulfilled

	and the public association "Noosphere Association" was created. The center creates additional conditions for expanding the material base. Equipment and software were provided by partner companies to equip the center. Employers take part in the development of curricula and educational programs, provide their production and laboratory facilities for conducting scientific research of graduate students. The practice of completing diploma theses and projects on assignments from enterprises is established. Also, the assessment of the educational needs of employers is carried out by the Educational and Scientific Center of Applied Sociology "Sotsioplus" (https://document.kpi.ua/2021_HOH-209). 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: Issues of partnership and conclusion of agreements with other higher educational institutions from abroad and academic mobility of applicants belong to the field of activity of the educational and methodological department of the University (https://okop.naiau.kiev.ua/l%D1%96ve-menyu/akadem%D1%96chna-mob%D1%96ln%D1%96st.html). The department of academic mobility of Igor Sikorsky KPI (https://mobilnist.kpi.ua/, https://osvita.kpi.ua/node/124) is responsible for information support and documentation in matters of academic exchange of students and teachers, namely: informing and consulting; program coordination; development of cooperation with Ukrainian and foreign universities; organization of information events aimed at popularizing programs (SAR, pg. 41, 42). Partnerships with foreign educational institutions contributed to the participation of teachers and students in European projects: programs TEMPUS-NETCENG, ERASMUS, etc. Academic mobility of the Academic Staff is realized through internships and teaching (Prof. O.V. Zbrutskyi, Assoc. V.V. Burnashev, Yu.V. Bobkov) at foreign universities (Technical University of Berlin, Vilnius Gediminas Technical University, University of the Basque Country, etc.). Lectures for students of the program from partner universities were given by prof. D. Eskin (Brunel University London), Dr. M. Pranskevicius (Vilnius Gediminas Technical University), Dr. A. Kornienko (Ecole Centrale de Lyon). Many students of the program have taken advantage of mobility programs for internships at foreign universities (Warsaw University of Technology, Trent University, Central School of Lyon, Technical University of Berlin, etc.). Recommendations: - none.	fulfilled
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:	fulfilled

	- 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. **Findings from the Self-Evaluation Report/ Visit:** In 2022, 100% (18 out of 18) graduates successfully passed the graduation certification. Annually, this indicator is at least 90% (SAR, pg. 45). More than 75% of graduates annually enter the Master Degree program in the year of graduation (SAR, pg. 60). 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 employment activities are regulated by Order No. 7/153 of August 26, 2020 "On the Approval of the Regulation on Assistance to the Employment of Graduates of Higher Education and Graduates of Igor Sikorskyi Kyiv Polytechnic Institute". To help with career guidance and graduates employment, 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/). **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. **Findings from the Self-Evaluation Report/ Visit:** The University has its internal mechanisms for monitoring the success of students regarding: studying results for the years of study; dropout level; credits are accumulated by students when transferring from one course to another; time to graduation. All grades are given in the "Electronic Campus" system (https://ecampus.kpi.ua/) which automatically calculates the success rates. In addition, the educational and scientific institute of aerospace technologies reports on the semester controls results (SAR, pg. 22, 23). The report contains the number of students who completed the semester control; the number of students who successfully passed the semester control; the total number of students at the beginning of the semester; the number of expelled students; distribution of students according to the received grades. Report data are accumulated, analyzed and discussed at the meetings of the Scientific Council of the NN IAT and the Department of Aircraft Control Systems (e.g., the	fulfilled

	protocol of the Department meeting No. 7 dated January 12, 2022, https://drive.google.com/file/d/1NLBPADvxgbdA-HflQ7OGPLrWoyBlvjOL/view) . The monitoring results show a proper distribution of the number of students according to the received grades, as well as a decrease in the number of the expelled students. This indicates the effectiveness of the educational work. 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 research center of applied sociology "Socioplus" (https://kpi.ua/socioplus) conducts annual surveys of employers and graduates regarding the employment of graduates of Igor Sikorskyi Kyiv Polytechnic Institute. Based on the survey results, a detailed report is made up (SAR, pg. 59, 60). However, according to Ukrainian law, graduates are not required to provide detailed information about their employment. 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. **Recommendations:** - none.	fulfilled
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:** The leaders of the department and its staff are in contact with the main employers and the graduates. These contacts indicate that within two years more than 90% of graduates who do not continue their studying are employed at the level of their professional qualification. **Recommendations:** - none.	fulfilled
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.	fulfilled

	Findings from the Self-Evaluation Report/ Visit: The data regarding the number of bachelors graduated from the educational programme Control systems of flight vehicles and complexes enegneering, which continued their education under master's degree programme are the following: - 2022: 88.9% (16 out of 18) of graduates entered the Master Degree program; - 2021: 77.2% (17 out of 22) of graduates entered the Master Degree program. Enrollment results are displayed in the "Electronic Campus" system (https://ecampus.kpi.ua/). **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. **Findings from the Self-Evaluation Report/ Visit:** The university has a career development center (https://robota.kpi.ua/), which takes care of graduate employment issues. Results are monitored according to the surveys held by the Socioplus Research Center of Applied Sociology (https://kpi.ua/socioplus, SAR, pg. 58, 59). In addition, the leaders of the department and its staff are in constant contact with the main employers and graduates. The programme is annually discussed with stakeholders regarding the quality of student training. Stakeholders express positive assessments recorded by their official reviews implemented in the educational process (https://drive.google.com/file/d/1upTM6JJrTVVZhxEaDEeJyRRg-PIAA2P5/view, https://drive.google.com/file/d/1usAX2KIpdQawg7J7w7ftPXJEi_xuWVbn/view https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/#pll_switcher), and their wishes are. 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/). **Recommendations:** - consider developing more effective procedures for monitoring the employment.	partially fulfilled
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, pg. 14: graduates can hold positions as professionals in accordance with the current edition of the National Classifier of Ukraine DK 003:2010 (https://zakon.rada.gov.ua/rada/show/va327609-10#Text): professional in management and	fulfilled

	maintenance of systems, application programmer, designer, technical professional. Graduates of the program currently work at leading enterprises in the industry in engineering and managerial positions (https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/). Most of the graduates of the programme are employed at the leading partner enterprises. These enterprises are leaders in the field of the development and production of aircraft and their systems. They are: Arsenal Special Device Production State Enterprise, SE "State Kyiv Design Bureau "Luch", State Enterprise "Antonov", State Space Agency of Ukraine, Space Research Institute of NASU etc. (https://skla.kpi.ua/%d0%bf%d0%b0%d1%80%d1%82%d0%bd%d0%b5%d1%80%d0%b8/#pll_switcher). Their products are supplied to the customers from many countries and confirm their high characteristics for combat operation. The demand and successful employment of graduates at these enterprises indicate the value of the obtained qualification, the relevance of the goals and the results of the program to the needs of the labor market. **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:** Each semester, the "Electronic Campus" university system (https://ecampus.kpi.ua/) conducts a survey of students regarding their satisfaction with teachers. Students actively express their level of satisfaction with the educational process, student services and infrastructure in the Telegram channels "Good KPI Mafia" (@kpimafia777) and "Bad KPI Mafia"(@kpimafia666, SAR, pg. 54, 59). With their help, the university leading staff constantly monitors the opinion of students and responds to complaints. The Educational and Scientific Institute of Aerospace Technologies also has its own telegram channel. If a student is dissatisfied with the educational process, he can express his opinion in the specified telegram channels. Students are encouraged to share their opinion on all topics that are related to the educational process, their welfare etc. They are able to share their thoughts via mentioned telegramm channels and other means, but they also can come directly to teaching staff and express themselves. **Recommendations:** - none.	fulfilled
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).	fulfilled

	Findings from the Self-Evaluation Report/ Visit: The mentioned Telegram channels "Good KPI Mafia" (@kpimafia777) and "Bad KPI Mafia" (@kpimafia666) are available for all students around the clock. It gives the opportunity to cover the opinion of the wide range of students. In addition, group curators and a person responsible for educational work are appointed by the department (SAR, pg. 58, 59). They monitor the specified resources and also personally communicate with students regarding problem issues. The issues that do not require official decisions are resolved immediately. Monitoring of students' opinions is regularly conducted by the Socioplus Research Center of Applied Sociology (https://kpi.ua/socioplus). Acute issues of student life as well as the monitoring results of the specified electronic resources are considered at the meetings of the Academic Council of the NN IAT and the department. Recommendations: - none.	
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: 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 program, monitoring of employment, etc. In general, up to 40-50% of students studying in the educational program participate the surveys; some surveys can involve all the students. Surveys are anonymous, which ensures impartiality and anonymity (SAR, pg. 58, 59). In addition, the level of student satisfaction with the didactic process more than 50% is evidenced by the study of the opinions of the department's telegram channel “KPI Avionics”. In order to create a positive learning/development environment at the university and at the department, educational and support staff of the department is appointed. Its task is to help students in solving their problems, using special premises and opportunities of the Scientific and Technical Library named after G.I. Denisenko of Igor Sikorsky Kyiv Polytechnic Institute (https://www.library.kpi.ua/), as well as the possibilities of the Electronic Archive of scientific and educational materials of Igor Sikorsky Kyiv Polytechnic Institute ELAKPI (https://ela.kpi.ua/). Recommendations: - none.	fulfilled
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:	fulfilled

	The "Regulations on the Organization of Inclusive Education at Igor Sikorsky Kyiv Polytechnic Institute” is implemented at the university (http://osvita.kpi.ua/node/172). The formation of learning outcomes including cross-cutting skills is 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/index.php/node/37), as well as the current calendar and semester control of studying results (https://osvita.kpi.ua/index.php/node/32). Students who have problems can undergo additional training at the adaptation and remedial courses of the Educational and Scientific Center of the Institute for Monitoring the Quality of Education (https://kpi.ua/adapt), teachers conduct consultations remotely 24/7. Selected teaching methods and tools are reflected in the syllabi of the educational components. For example, Professor Zbrutsky O.V. and associate professor Burnashev V.V. use the results of their own scientific research, which are presented in their monographs (SAR, pg. 54). **Recommendations:** - none.	
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 to align with the educational program's structural and logical scheme, ensuring that the learning outcomes for disciplines are met (SAR, pg. 3, 11, Regulation on the assessment system of learning outcomes at Igor Sikorsky Kyiv Polytechnic Institute, https://osvita.kpi.ua/node/37). As a result of mutual interest in learning outcomes, the teacher and student are partners during their formation. The teachers explain the importance of the results, and also go to the meeting to solve the difficulties in the students' studies, conducting additional consultations in all possible ways. Curators provide assistance to students in relations with teachers and in other matters. Each student group has 2 curators: a teacher of the department and a senior student. In the "Electronic campus" system, in the "Teacher through the eyes of students" module, according to the specified criteria, students are surveyed about the evaluation of the work of teachers (https://dnvr.kpi.ua/2022/02/02/%F0%9F%93%8A-%D0%B4%D0%BE%D1%81%D1%82%D1%83%D0%BF-%D0%B4%D0%BE-%D0%BC%D0%BE%D0%B4%D1%83%D0%BB%D1%8E-%D0%BE%D0%BF%D0%B8%D1%82%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F-%D0%B2%D0%B8%D0%BA%D0%BB%D0%B0/). A student can appeal the results of his attestation in accordance with the "Regulations on appeals at Igor Sikorsky Kyiv Polytechnic Institute", which was put into effect by order No. HOH/228/2022 dated 07/21/2022 (https://osvita.kpi.ua/node/182) and Regulations on resolving conflict situations in Igor Sikorsky Kyiv Polytechnic Institute (https://document.kpi.ua/2020_7-	fulfilled

	170). In addition, the University has started the practice of discussing issues of improving the educational process using individual student pages on the Sikorsky Distance Learning Platform (https://www.sikorsky-distance.org/). **Recommendations:** - none.	
3.	The teaching-learning process considers both face-to-face didactic activities and individual study. **Findings from the Self-Evaluation Report/ Visit:** The recommended distribution between classroom classes and students' independent work is 50% by 50%. It is allowed to increase the classroom load up to 60% for fundamental disciplines. 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 (approved by order No. 7/177 dated 01.10.2020) (https://osvita.kpi.ua/node/179). According to the curriculum plan of the program (https://drive.google.com/file/d/1MvBc4mG85_nc3ALLvRHljolGibgJdZ9E/view, Annex 1 – VS) the total number of hours for preparation is 7200. 4014 hours are referred to self-directed work of students, i.e. individual study (SAR, pg. 9). **Recommendations:** - none.	fulfilled
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:** In the conditions of distance learning, teachers use various means of organizing communication and video conferences: Zoom, Skype, Webex, Discord, e-mail, messengers, etc. The courses are hosted on the distance learning platform Sikorsky distance and in the Moodle environment. Video projectors are used in classes. Teachers also use the results of their own scientific research, materials and presentations at scientific and technical conferences and video films (https://skla.kpi.ua/%d0%ba%d0%b0%d1%84%d0%b5%d0%b4%d1%80%d0%b0-%d1%81%d0%ba%d0%bb%d0%b0/). All methodical materials are placed in the Electronic Campus (SAR, pg. 47), as well as in distance courses, and are sent to students' electronic addresses, placed in the telegram channels of the disciplines, upon request. 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.	fulfilled

	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: Teachers use discussion, heuristic, research, game, simulation methods, as well as the modeling method, brainstorming as the main teaching methods indicated in the syllabi (SAR, pg. 31, 32, https://skla.kpi.ua/organization-training-bachelors/). In the distance learning environment, teachers conduct virtual laboratory work (https://drive.google.com/file/d/1_Vy673AZsLFvOPwCNCMJWqAxS8DJlPUx/view); Example: Virtual laboratory work from the credit module "Information and measurement devices. Part 2", teacher, associate professor M.G. Chernyak. (https://www.youtube.com/embed/i6QcDbtPfHk). The need for flexible use of teaching methods in distance learning is discussed at the department's methodological seminars (https://drive.google.com/file/d/1wGnBVHFNa7Q2Ejn655ZK8jUkZ2-FI1Gp/view). Recommendations: - none.	fulfilled
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: It is assumed that the results of study during academic mobility are recognized by the university (SAR, pg. 41). Recognition is carried out in accordance with the regulations on recognition of the results of preliminary training at Igor Sikorskyi Kyiv Polytechnic Institute (https://document.kpi.ua/files/2020_7-157.pdf). 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). Also, according to the Regulations on recognition of the results of study acquired in non-formal/informal education at Igor Sikorskyi Kyiv Polytechnic Institute (approved by the order dated 01.10.2020 No. 7/177) (https://osvita.kpi.ua/node/179), the studying results obtained by the student within the framework of non-formal /informal education are recognized. The results can be recognized as part of academic mobility in accordance with the "Regulations on academic mobility of Igor Sikorskyi Kyiv Polytechnic Institute" (https://osvita.kpi.ua/node/124). Recommendations: - none.	fulfilled
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:	fulfilled

	Teachers conduct consultations both on the schedule and at time approved by mutual agreement using all available means of communication, and text messages, e-mail and instant messengers help to keep in touch 24 hours a day (SAR, pg. 21). Officially appointed group 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" (http://osvita.kpi.ua/node/173). Leaders of circles, such as the circle for creating drones and drone racing (https://iat.kpi.ua/category/student/circle/bpla-kpi/), also interact closely with students. Teachers have additional contacts with students within the framework of guiding students' scientific activities. **Recommendations:** - none.	
	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:** Educational programme has a scientific plan (https://drive.google.com/file/d/1wOfJfa4lBxhYgxEYlXZg7enzKq8l7cjL/view) approved at the meeting of the Department of Aircraft Control Systems which corresponds to the plan of strategic development of Igor Sikorsky Kyiv Polytechnic Institute (SAR, pg. 27). **Recommendations:** - consider providing information on research activities (on web site), both in Ukrainian and English languages.	fulfilled
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:** The topics of scientific research are correlated from the directions of scientific research of the department's teachers (https://drive.google.com/file/d/1sHJuG0C1EuddXGbjOiqRCsE8iq8RYK1s/view, SAR, pg. 27). The terms of scientific topics execution are reflected in the plan of scientific activity of the department (https://drive.google.com/file/d/1wOfJfa4lBxhYgxEYlXZg7enzKq8l7cjL/view). They are discussed with stakeholders and correspond to the field of aircraft navigation and control systems which is the main direction of the department's work (https://drive.google.com/file/d/1yjLZ80wvDLY7GTFJdocBloShlBjO87xX/view). Bachelors choose topics for diploma projects from the list of topics for bachelors' diploma projects (https://drive.google.com/file/d/1wpqncZZ1Wnb7cAlzCfBWQkjtFCdfX-AX/view).	fulfilled

	Recommendations: - consider providing information on research activities (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: The university is a state educational institution; 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 (SAR, pg. 27). Recommendations: - none.	fulfilled
2.	The research disposes of sufficient logistic resources in order to meet the proposed goals. Findings from the Self-Evaluation Report/ Visit: The department has the Laboratory of Navigational Instruments and the Laboratory of Aircraft Control Systems, which have special stands for the study of instruments and control systems, modern computers and other necessary equipment. The Education and Research Institute of Aerospace Technologies includes two scientific institutes: the Interdisciplinary Research Center "RYTM" and the Education and Scientific Center of Space Engineering and Technologies which have premises and equipment used for research in the department's scientific plan (SAR, pg. 36). To carry out scientific research, the students have at their disposal the Center for collective use of scientific equipment of Igor Sikorsky Kyiv Polytechnic Institute (https://iff.kpi.ua/stuktura/tsentr-kolektyvnoho-korystuvannia-naukovym-obladnanniam), computer class in room 301 (19 computers) organized with the assistance of the TEMPUS program (video https://skla.kpi.ua/%d0%ba%d0%b0%d1%84%d0%b5%d0%b4%d1%80%d0%b0-%d1%81%d0%ba%d0%bb%d0%b0/), as well as samples of aviation equipment and on-board equipment located in the all-institute stand hall. Applicants can also conduct scientific experiments in laboratories using the equipment of stakeholders. Recommendations: - drawing up a 5-year modernization plan so that the laboratories are in line with new technologies.	fulfilled
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 workers and students of the educational programme. According to the information from Annexes 3 and 4 – VS, there are: 6 doctors of science; 8 candidates of techinal science; 2 with a master's qualification in Avionics.	fulfilled

	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 teachers of the program regularly publish the results of their research (SAR, pg. 56). Their topics correspond to the field of disciplines delivered by the teachers (https://drive.google.com/file/d/1tywqpo-WVDVrdtnN6jup6OPplEtlSfO5/view). The university conducts an annual self-analysis of the departments which reflects all the achievements of each teacher over 5 years. The report shows that over the past 5 years, the staff of the department has 72 scientific articles in periodicals recognized by the Ministry of Education and Science of Ukraine, 23 articles cited in Scopus and Web of Science, 6 monographs, etc. The total number of publications for 5 years is 175 (https://drive.google.com/file/d/1vtTbQI1NoLvLi_t1_KSG_WScT92p_tC8/view). Recommendations: - consider increasing the visibility of the published research (higher ranked journals and conferences).	fulfilled
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). The list of publications can be found at the links (https://drive.google.com/file/d/1tywqpo-WVDVrdtnN6jup6OPplEtlSfO5/view). On average, each teacher has more than two publications per year. Recommendations: - none.	fulfilled
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: Two annual student conferences are held at the department, one of which has an international status (SAR, pg. 36, 37): International conference of students and young scientists "Intelligence, Integration, Reliability" (https://drive.google.com/file/d/1utFPstySDog2KgA2n851rkqXe7OUO-r5/view).	fulfilled

	In co-authorship with teachers, Professional Study Program students have articles in the category B professional journal "Mechanics of Gyroscopic Systems" (http://mgsys.kpi.ua/issue/archive) and the specialized journal "Information Systems, Mechanics and Control" (http://ismc.kpi.ua/), and also they take part in other conferences. One of the incentives to the scientific activity of the students of the program is the additional points for publications while entering the Master degree program. Participation in conferences and publication in department journals is free for students and teachers. The University provides preferential lending for higher education in accordance with Order No. 7-155 dated August 27, 2020 "On preferential lending for higher education at Igor Sikorsky Kyiv polytechnic Institute" (https://document.kpi.ua/files/2020_7-155.pdf). **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:** The department publishes two scientific journals that have an ISSN, are cited in the Index Copernicus and are recognized by the Ministry of Education and Science of Ukraine as specialized for the defense of PhD theses and doctors of science (SAR, pg. 27, 28): - Mechanics of gyroscopic systems (http://mgsys.kpi.ua/); - Information systems, mechanics and management (http://ismc.kpi.ua/). Two student scientific conferences are held every year: - international conference of students and young scientists "Intelligence, Integration, Reliability" (https://drive.google.com/file/d/1utFPstySDog2KgA2n851rkqXe7OUO-r5/view); - scientific and practical conference of students and young scientists "Aircraft control systems" (https://drive.google.com/file/d/1v5mSHPQUx2pD-GX48Z9BTC48gLKUlbmB/view). A scientific seminar is held every month at the department (https://skla.kpi.ua/scientific-seminar-department/), to which seekers of all levels are invited. **Recommendations:** - none.	fulfilled
5.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:**	Not the case

	Recommendations:	
	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: Implementation of the procedures of internal quality assurance of education in higher education institutions is carried out in accordance with the Regulation on the system of internal quality assurance of higher education at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/121, SAR, pg. 53). 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/). Recommendations: - none.	fulfilled
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: In addition to the dedicated regulation (https://osvita.kpi.ua/2020_7-165), the policy and strategies for quality assurance, are indicated in the syllabus of each discipline (https://skla.kpi.ua/organization-training-bachelors/). The quality of teaching and the achievement of learning outcomes are considered at the department's methodological seminars (https://skla.kpi.ua/methodological-seminar-of-the-department/, SAR, pg. 51).	fulfilled

	The monitoring results are taken into account in the educational activities of the department, in the syllabi and the catalog of selective disciplines. The results of mutual attendance of classes by teachers are considered at the department. Surveys of students' opinions about the quality and possible ways of improving the educational process are conducted every year. Thus, every member of the department, including students, participates in quality control. Recommendations: - none.	
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: Every year, the university and each of its divisions conduct a self-analysis of activities (internal accreditation) (https://document.kpi.ua/2021_HOH-216). The department annually conducts a self-analysis (https://document.kpi.ua/taxonomy/term/508) and its results are discussed at the methodical commission of the ER IAT (SAR, pg. 51). The generalized results of the self-analysis of the departments are discussed at the meeting of the Academic Council of the university (protocols No. 6, 8 for 2021). Based on the results of the discussion, managerial decisions regarding structural changes at the university can be made. Recommendations: - prepare and publish annually the quality assessment report for each study programme.	fulfilled
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: The study program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) clearly states the learning outcomes subjected to quality control, types of semester control, and final certification. It implements quality improvement measures based on the review of the above-mentioned reports and suggestions of stakeholders approval by the Scientific and Methodological Commission of the university. 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), which includes the following departments (SAR, pg. 48): - contingent accounting and statistics department; - accreditation and licensing department; - department of attestation of scientific and pedagogical staff; - department of technical means of education;	fulfilled

	- center for planning personnel of the educational process. Recommendations: - prepare and publish annually the quality assessment report for each study programme.	
	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). Recommendations: - none.	fulfilled
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. Over the past five years, the program has been updated four times. The update history can be found at the link (https://osvita.kpi.ua/173_OPPB_SKLAK). In the process of revising the program, consultations are held with all stakeholders - employers, teachers and students (SAR, pg. 49). The approved changes are reflected in the relevant structural elements (curriculum, matrices, syllabi of educational components, practice program). Recommendations: - none.	fulfilled
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: Representatives of domestic basic enterprises of the industry, such as State Enterprise "Luch", State Enterprise "Arsenal", State Enterprise "Antonov" were involved in the discussion of the Professional Study Programme. The result of the discussion was the identification of key competencies that ensure the effective work of graduates at enterprises, their competitiveness in their fields	fulfilled

	of activity, and the ability of graduates to creatively solve problems in the field of avionics at the engineering positions. These results are reflected in the letters of the employers posted on the website of the department: State Enterprise "Luch", State Enterprise "Arsenal". Students' satisfaction with the training at the Professional Study Programme and their suggestions were taken into account by surveying Professional Study Programme graduates working by specialty at leading enterprises in the industry and discussing with them the main provisions of the Professional Study Programme. As a result, those program competencies and learning outcomes that are the most important for performing the duties of specialists in avionics and aircraft control systems were clarified. The results of monitoring students' opinions regarding the didactic process were taken into account based on the results of surveys (https://dnvr.kpi.ua/2021/03/20/%F0%9F%93%AF-%D1%80%D0%B5%D0%B7%D1%83%D0%BB%D1%8C%D1%82%D0%B0%D1%82%D0%B8-%D1%89%D0%BE%D1%80%D1%96%D1%87%D0%BD%D0%BE%D0%B3%D0%BE-%D0%BE%D0%BF%D0%B8%D1%82%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F-%D1%81/) conducted by the Educational and Scientific Center of Applied Sociology "Socioplus" (https://fsp.kpi.ua/ua/about/pidrozdili/socioplus/). **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) departments annually prepare a self-analysis report, which indicates the results of the self-analysis, as well inconsistencies in self-assessment criteria. **Recommendations:** - prepare and publish annually the quality assessment report for each study programme (including for the evaluated programme).	partially fulfilled
	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:** All disciplines of the program are accompanied by a final semester control (https://osvita.kpi.ua/sites/default/files/opfiles/173_ONPM_SKLAK_2022.pdf), during which the student receives a final grade	fulfilled

	for the discipline on a one-point scale (SAR, pg. 45, 46). 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). In "Regulations on the organization of the educational process at Igor Sikorsky Kyiv Polytechnic Institute” (https://kpi.ua/en/regulations, https://osvita.kpi.ua/node/39, https://document.kpi.ua/files/2020_7-124.pdf) the following main types of control measures: current, calendar, rector's and final (semester control and certification) control are provided. 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). The procedure for attestation of higher education applicants is determined by the "Regulations on the examination commission and certification of higher education applicants at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/sites/default/files/downloads/Regulations_EC_certification.pdf , https://osvita.kpi.ua/node/35). 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). **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 point 4 "Regulations on current, calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute" (https://document.kpi.ua/files/2020_7-137.pdf, https://osvita.kpi.ua/index.php/node/32) the exam is taken by the examiner. In the event of a conflict situation between the applicant(s) and the examiner prior to the semester control, upon a substantiated application by the applicant (collective application of the applicants), the dean of the faculty / director of the education and research institute creates a commission to conduct the planned semester control event (SAR, pg. 21, 22). Forms of semester control (oral, written, combined, testing or defense of a course project/work, practice report), evaluation methods, a list of topics and questions submitted for semester control, evaluation criteria are determined by the syllabus (work program) of the academic discipline (educational component) and encourage critical thinking, creativity, teamwork, practical research. Exam sets are individual and include both theoretical questions and practical tasks. **Recommendations:** - none.	fulfilled

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:** The forms of the current and final control are indicated in the given 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 is 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 (https://skla.kpi.ua/organization-training-bachelors/). At the first lesson the teacher introduces to the applicants the types of control measures and evaluation criteria presented in the form of a rating system of evaluation (RSO). RSO is developed in accordance with the Regulation on the system of evaluation of learning results at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/37, SAR, pg. 22). **Recommendations:** - none.	fulfilled
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 set out according to the educational standard (Standard of higher education in the specialty 173 "Avionics" for the first (bachelor's) level of higher education, https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/03/173-avionika-bakalavr-VO-zatv.stand.01.11.pdf) and the educational programme, https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf). The specified criteria are adequate, as they allow checking the actual level of knowledge of applicants for each educational component (SAR, pg. 7). **Recommendations:** - none.	fulfilled
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	fulfilled

	evaluation of learning results at Igor SikorskyKyiv Polytechnic Institute (https://osvita.kpi.ua/node/37). The lower limit of positive evaluation of each control measure (question, task) is at least 60% of the points determined for this control measure (question, task), and a negative result is estimated at 0 points. Evaluation of the course project (course work) has two components: - the initial stage characterizes the quality of the explanatory note, compliance with the established schedule of the course project (course work), modernity and justification of the decisions made, the correctness of the application of analysis and calculation methods, the quality of design, compliance with the requirements of normative documents, quality of graphic material and compliance with standards, etc. The recommended size of the starting component is 40-60 points; - the main stage, characterizes the quality of the defense of the course project (course work): the quality of the report, the degree of mastery of the material, the degree of substantiation of the decisions made, the ability to defend one's opinion, the answers to the questions of the members of the commission for the semester control, etc. The course work is a separate educational component and a separate syllabus with its rating system is drawn up for it. For subjects that include laboratory work and/or projects, evaluation methods and criteria included in the syllabus contain detailed information on student evaluation in various types of activities: lectures/laboratory work/projects (for example, percentage of final grade, minimum performance standards, SAR, pg. 15). 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). Accordingly, the "Regulations on the system of evaluation of learning results at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/node/37) assessment of practice has two components: - the first one is intended for evaluation by the head of practice from the practice base of the applicant's activity during practice; - the second is for evaluation of the defense of practice results by the committee of the department. The internship manager from the enterprise must provide feedback on the applicant's work at the enterprise and recommend an evaluation for the internship. Also, each student keeps a practice diary during the internship, which includes information regarding both the research and calculations carried out, and the comments and recommendations of the practice supervisor from the company. His/her assessment affects the final result of the work defense. For example, last year, 18 students completed pre-diploma practice at	fulfilled

	the department, of which 14 worked at partner enterprises. According to the results of the defense, 100% of students received positive marks (SAR, pg. 17). **Recommendations:** - none.	
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 "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) the following types of control to ensure an even load of the student and the time necessary for preparation are provided: 1) current control is carried out during the semester in order to provide feedback between teachers and students during the learning process and to check the level of theoretical and practical training of students at each stage of studying the academic discipline (educational component). The results of current control are regularly entered by the teacher in the "Current control" module of the Electronic Campus ((https://ecampus.kpi.ua/). 2) calendar control is carried out in order to monitor the fulfillment of individual study plans in accordance with the schedule of the educational process. Calendar control is carried out for each academic discipline (educational component), as a rule, on weeks 7-8 and 14-15 of each semester, and is implemented by determining the level of compliance of the applicant's current achievements (rating) with the criteria established and defined in the RSO. The results of the control are entered by the teacher in the "Calendar control" module of the Electronic Campus (https://ecampus.kpi.ua/). 3) Semester control is carried out to establish the level of achievement by the student of program learning outcomes in the academic discipline (educational component), as a rule, for the semester. Semester control is carried out in accordance with the curriculum in the form of a test or exam in the terms established by the schedule of the educational process (https://kpi.ua/year). Exams are held during the exam session, which usually lasts two weeks. 4) Attestation of applicants is carried out in accordance with 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) the duration of which is usually two weeks according to the schedule of the educational process (https://kpi.ua/year). The recommended distribution between classroom and self-directed work is 50% by 50%. It is possible to increase the classroom load up to 60% for fundamental disciplines. An individual time is allocated for conducting the semester assessment in the form of an exam, which is outside of the 18 weeks of the academic semester. For each credit or exam, time is allocated for independent preparation (for a credit - 6 hours, for an	fulfilled

	exam - 30 hours). Each discipline at the end of the semester has a final control procedure. There can be no more than three exams. Between each pair of exams, students have at least two days to prepare. Credits are given on the last day of the semester. There can be no more than two credits in one academic day (SAR, pg. 16). **Recommendations:** - none.	
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:** The appealing of the procedure for conducting control measures and their results takes place in accordance with Section 9 "Regulations on the current calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute" (https://document.kpi.ua/files/2020_7-137.pdf). In the case the applicant does not agree with the assessment based on the results of the control, he has the right to file an appeal on the day of the results announcement of the corresponding control. The procedure is defined by the "Regulations on appeals at Igor Sikorsky Kyiv polytechnic Institute" (https://osvita.kpi.ua/node/182 , https://document.kpi.ua/2021_HOH-128). On the basis of a motivated claim of the applicant of higher education, the director of the institute/dean of the faculty, in accordance with the Regulations on the resolution of conflict situations at Igor Sikorsky Kyiv Polytechnic Institute (https://document.kpi.ua/files/2020_7-170.pdf, SAR, pg. 21), creates a Commission for resolving conflict situations, which may include: the dean of the faculty, the deputy dean, the head of the department, a representative of the primary trade union organization of the faculty, head of the student council, head of the professional bureau of the faculty. The results of the Commission's review of the conflict situation are approved collegially by voting. **Recommendations:** - none.	fulfilled
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:** The procedure for retaking control measures is determined by Section 8 "Regulations on the current calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute" (https://document.kpi.ua/files/2020_7-137.pdf) and "Regulations on providing additional educational services to students of higher education at Igor Sikorsky Kyiv Polytechnic Institute» (https://osvita.kpi.ua/node/177). In order to eliminate academic debt, the applicant is given no more than two attempts for each semester control event. Liquidation of academic debt is carried out after the end of the examination session in the terms established by the order of the University (additional session) and is carried out within a week after the end of the examination session. The assessment	fulfilled

	received by the applicant during the liquidation of academic debt is final. At the second retake of the exam (credit), the applicant may be accepted by a commission created by the director of the institute/dean of the faculty. The possibility of retaking the semester control in order to increase the positive grade in a certain academic discipline (but not more than three during the entire period of study at a certain level of higher education) is possible next semester after its study and it is an additional educational service (SAR, pg. 21). 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). If the applicant has objective reasons, including medical indications, he can be provided with an individual study schedule, which is drawn up by order of the dean of the faculty/director of the education and research institute and provides for the establishment of the terms and pace of mastering educational disciplines (educational components) for the individual applicant which are different from the schedule of the educational process approved by the University. Academic debt can be carried over to the next semester and added to the student's individual plan. At the same time, the number of credits of transferred disciplines should not exceed 7 credits. Recommendations: - none.	
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 the Standard of higher education in specialty 173 "Avionics" for the first (bachelor) level of higher education (https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2020/03/173-avionika-bakalavr-VO-zatv.stand.01.11.pdf) and the educational program (https://osvita.kpi.ua/sites/default/files/opfiles/173_OPPB_SKLAK_2022.pdf) training ends with certification that is carried out in the form of a public defense of a qualification work (thesis or thesis project, SAR, pg. 24, 44). The qualification work should involve the solution of a complex specialized problem or a practical problem of avionics, which requires the application of theories and methods of engineering sciences and is characterized by complexity and uncertainty of conditions. The topics of the works can also be proposed by stakeholders. The qualifying work should not contain academic plagiarism or fabrication. The University has implemented policies, standards and procedures for compliance with academic integrity (https://kpi.ua/academic-integrity). The main technological solution used as a tool to combat violations of academic integrity is specialized software for checking academic texts to identify matches/similarities using the Ukrainian service from Unicheck (https://kpi.ua/unicheck). The tool is	fulfilled

	aimed at checking theses, qualification papers, monographs, scientific articles, etc. The person from the department checks the electronic versions of attestation works of applicants using the Unicheck system. The similarity report is provided to the applicant and the supervisor for review and signature. If it is necessary, the scientific supervisor gives additional written explanations regarding the existing comments. If the work is accepted for defense, the academic plagiarism screening process is considered complete. All theses are uploaded to the electronic archive of scientific and educational materials of Igor Sikorsky Kyiv Polytechnic Institute - 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). The topics of qualification works can be proposed by stakeholders with the necessary justification of the feasibility of its development and the possibility of implementation. Consultants from stakeholder enterprises, in cooperation with which the relevant activity was carried out, may be specified in the task for the diploma project/work. In case of protection of qualification work, letters of order of enterprises for the performance of qualification work may be provided. The defense of qualification works is carried out publicly with the involvement of all interested persons, including representatives of scientific institutions and industrial enterprises (SAR, pg. 6, 11, 44). In exceptional circumstances, the possibility of defending the diploma project remotely is provided. Recommendations: - none.	fulfilled
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	partially fulfilled

	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). In addition, there is an annual assessment of teachers' compliance with point 38 of the Licensing Conditions for Educational Activities (http://diit.edu.ua/upload/files/shares/9_Documents/licensing/litsenzionnyye_usloviya.pdf), which specifies 20 criteria that a teacher must meet. To ensure the motivation of NPPs to improve the efficiency and effectiveness of their professional activities, to maintain the quality of the educational process according to the educational program, the annual evaluation of NPPs' activities is carried out by their rating (SAR, pg. 29, 30). The rating of the NPP is carried out according to the point system, in accordance with the standards for the evaluation of the activity of the NPP determined and approved by the University according to the results of the academic year and is regulated by the Regulation on the rating of scientific and pedagogical workers of Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/node/30). Regulations on the rating of scientific and pedagogical staff of Igor Sikorsky Kyiv polytechnic Institute and the norms of point-based evaluation of the activities of scientific and pedagogical staff (https://document.kpi.ua/2021_HOH-315). **Recommendations:** - consider the implementation of a teaching staff peer-review process.	
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:** In the "Electronic campus" system (https://ecampus.kpi.ua/) in the student's personal office, an annual survey "Teacher through the eyes of students" which fully meets the requirements of this item is conducted. Answers are filled in by students from their personal electronic account, which excludes external influence. All answers are confidential. The results of the survey are known to the teacher and management only in the form of an average grade (SAR, pg. 58). Students also have the opportunity to express their opinions in the informal Telegram channels "Good KPI" and "Bad KPI" (SAR, pg. 59). Students actively take part in the teaching staff evaluation. In some cases they can express themselves to teaching staff with regards to their concerns. Teaching staff in its turn, is reacting in such adequate manner, that it doesn't influence the teacher-student relationship, and moreover, helps to improve it. **Recommendations:** - none.	fulfilled
3.	The academic staff carries out self-evaluation and he/she is also evaluated by the head of the department.	fulfilled

	Findings from the Self-Evaluation Report/ Visit: According to the Regulation on the rating of academic staff of Igor Sikorsky KPI (https://osvita.kpi.ua/node/30), heads of departments, professors, associate professors, senior lecturers, lecturers, assistants must be subject to rating evaluation. Every year, each teacher draws up an individual work plan (SAR, pg. 29). Each semester, the results of the implementation of the plan items are filled out. The plan is checked and evaluated by the head of the department. At the end of the academic year, staff reports on the implementation of the individual plan. The results of the reporting are taken into account when the person is elected to the position. Self-assessment by teachers is also carried out in the form of filling out a rating in the "Electronic Campus" system (https://ecampus.kpi.ua/). The rating of each teacher is available to the head of the department. **Recommendations:** - none.	
	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:** 40% of students with the highest ratings receive scholarships, 25% of them are appointed the increased scholarships. The best of them receive special scholarships: scholarships of the President of Ukraine, the Cabinet of Ministers of Ukraine, the Verkhovna Rada of Ukraine, scholarships named after I. Kurchatov, scholarships of the rector of NTUU "KPI", social scholarships of the Verkhovna Rada and the Cabinet of Ministers of Ukraine, and faculty scholarships of famous scientists (discussions at the evaluation visit). For students who have difficulties in completing the educational program, state regulations (Law of Ukraine "On Higher Education", Article 46) and "Regulations on Expulsion, Interruption of Education of Students of Higher Education at Igor Sikorsky Kyiv Polytechnic Institute (https://osvita.kpi.ua/index.php/node/178) is scheduled to receive an academic leave - a break in studies, during which the student is not counted from the university, but also does not participate in the educational process. The duration of the academic leave is usually one year (SAR, pg. 38). In addition, the "Regulations on current, calendar and semester control of study results at Igor Sikorsky Kyiv Polytechnic Institute" (https://osvita.kpi.ua/index.php/node/32) and the rector's orders provide for the possibility of forming an individual study schedule for students who have objective circumstances that make it difficult to fulfill the schedule of the educational process in a timely manner (this updated provision not yet approved). Students who were expelled from the university before completing their studies in a certain educational program have the right to be reinstated regardless of the reason for the expulsion and the duration of the interruption in studies in accordance with the "Regulations on Expulsion, Interruption of Education, Renewal and Transfer of Graduates of Higher Education to Igor Sikorsky	fulfilled

	Kyiv Polytechnic Institute " (https://osvita.kpi.ua/index.php/node/178). 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, SAR, pg. 38). 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 (https://mobilnist.kpi.ua/) is responsible for information support and documentation in matters of academic exchange of students and teachers, namely (SAR, pg. 7, 41): - informing and consulting; - program coordination; - development of cooperation with Ukrainian and foreign universities; - organization of information events aimed at popularizing programs. Academic mobility (https://mobilnist.kpi.ua/) is carried out in accordance with the regulations developed at the university (https://osvita.kpi.ua/node/124). The recognition of the obtained learning results during mobility takes place in accordance with the provisions on recognition at Igor Sikorsky KPI of the results of preliminary training (https://document.kpi.ua/files/2020_7-157.pdf, https://osvita.kpi.ua/sites/default/files/downloads/Regulation_acad_mobility.pdf). Recommendations: - none.	fulfilled
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. Findings from the Self-Evaluation Report/ Visit: There are various sports facilities for students and teachers, the main one of which is the Center for Physical Education and Sports KPI Campus (http://sport.kpi.ua), where there are more than 20 different sports sections (SAR, pg. 39, 40, 54). Also, student dormitories received equipped sports halls, reading rooms, rooms with table tennis. There are two football fields, a basketball court, a tennis court, training grounds, and a swimming pool. There are also summer and winter health camps for students: the Mayak health complex on the Black Sea coast, the Globus mountain sports and health camp in the Carpathians, the Polytechnic student health camp, and the Sosnovy health camp in Kiev region.	fulfilled

	There is an Art Center of KPI named after Igor Sikorsky. This is the place for rehearsals of the choir, the bandurists' chapel and the theater club. In addition, the Art Center organizes and hosts meetings and lectures with prominent engineers, foreign teachers and celebrities. An open laboratory of Lampa electronics has also been created on the territory of the university, visiting and using the equipment is free. The laboratory works in the areas of education and prototyping. The equipment allows applicants of higher education to study all areas of modern electronics using online courses and video lectures. It is also possible to use lab devices to create prototypes of your own designs. 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 from other cities have the opportunity to settle in the university's dormitories - in total, there are 20 dormitories on the territory of the university, in which more than 13 thousand students live (more than 60% of the university's students). **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:** 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 http://osvita.kpi.ua/node/173, as well as each group has the senior student curator (SAR, pg. 37). Each teacher conducts consultations according to the schedule and additional ones agreed with the students (SAR, pg. 23). Due to consultations via messengers and video communication tools, teachers are available almost at any time. In addition, the department has a teacher responsible for educational work. He coordinates the work of curators and helps to solve students' questions concerning the management of the unit and the university. Consulting on career development is also provided by the University's Career Development Center (https://robota.kpi.ua/), which holds job fairs and other information events on employment (SAR, pg. 23). Support for students in the educational process is also provided by the KPI library, which is an intellectual, communication, innovative and open platform, which is a reliable 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/). **Recommendations:** - none.	fulfilled

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 (SAR, pg. 31). **Recommendations:** - none.	fulfilled
	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:** The "Electronic campus" system operates at the university (https://ecampus.kpi.ua/), it contains and automatically processes all information related to the organization of the educational process at the university and its divisions (SAR, pg. 47). This system includes information from the personnel department of teachers and students, from educational plans and the electronic document management system of "Megapolis" University. It supports all types of control of the results of study, teacher evaluations, student surveys, contains the workload and duties of teachers, methodical materials for disciplines, and more. Users of the system are students, teachers, support staff, heads of departments and the university. **Recommendations:** - none.	fulfilled
	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:** 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. The address of the OPP web page is published on the official website of the university (https://skla.kpi.ua/). Information about the OPP and other regulatory and organizational materials are posted on the Internet on the department's website in public access: https://skla.kpi.ua/organization-training-bachelors/ and the "Electronic campus" system (https://ecampus.kpi.ua/).	fulfilled

	The information are partially available in English. **Recommendations:** - ensuring the translation of all public interests content in English language.	
2.	The graduates receive, free of charge, the Diploma Supplement, which contains all the information provided by the regulations in force. **Findings from the Self-Evaluation Report/ Visit:** For the cost of the printed form, graduates receive 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 S2 - Diploma). **Recommendations:** - provide the original version of scholarship documents to graduates without any costs.	partially fulfilled
	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/). External verification of education quality assurance is carried out by checking the educational program, curriculum and on the basis of self-assessment information. It provides the assessment of all aspects of the implementation of the Professional Study Programme, including the verification of pre-diploma practice at enterprises and scientific institutions. The results of the external evaluation are analyzed at the meetings of the department and the Academic Council of the Institute and the University and are taken into account when updating the the Professional Study Programme. At the time of writing the Self-assesment report, the study programme Control systems of flight vehicles and complexes engineering worked within the framework of the license granted by the Ministry of Education and Science of Ukraine on 30.04.13, valid until 01.07.2023 (Certificate of accreditation of the specialty series ND № 1192565). Currently, according to the information from Annex S1 – Certificates, the educational programme operates within the framework of the license issued by the National Agency for Quality Assurance of Education (Certificate № 5255, date of issue – 06/28/2023, validity period - 5 years until 07/01/2028). **Recommendations:** - none.	fulfilled

Other observations/findings:

The evaluation of the bachelor study programme Control Systems of Flight Vehicles and Complexes Engineering, at the National Technical University of Ukraine «Igor Sikorsky Kyiv Polytechnic Institute» (KPI) was organized in blended format, according to the ARACIS methodology, in September 11 and 12, 2023.

In order to discuss the methodological aspects related to evaluating and awarding EUR-ACE label, ARACIS organized the preliminary training of the evaluation team using a virtual platform (17.07.2023).

To be accessible to the evaluation team, the Self-Assessment Report (SAR), written by the host university, together with the Annexes to the Visit Sheet (VS), the additional annexes and the video/films presenting the laboratories, were uploaded on the Google drive (https://drive.google.com/drive/folders/1aAMBx0Zv8q_F473ncRQ8SoTitFgwi7xu).

The evaluation team planned two online meeting (23.08.2023 and 05.09.2023), before the effective evaluation, to discuss the proposal for the schedule of online meetings, on-site visit and the content of the SAR and Annexes to VS.

The evaluation team and the representatives of the KPI jointly agreed the schedule for September 11 and 12, 2023 (Evaluation_visit_schedule_KPI).

Also, before the visit, the evaluation team requested additional information/documents from the host university, as follows: Annex S1 – Certificates; Annex S2 – Diploma; Annex S3 – Credits; Annex S4 - Structural and logical scheme of the educational program; Annex S5 - Framework plan of meetings with employers.

According to the agreed schedule of the visit:

- the technical meetings of the evaluation team were held using a Zoom meeting room, set by the coordinator of the evaluation team, mr. Mircea Dulau; the recordings are available in ARACIS cloud;
- the meeting of the evaluation team with the students was held using a Zoom meeting room, set by mr. Temir Kalimulin, the student member of the evaluation team; the recording is available in ARACIS cloud;
- the meetings with the representatives of the university/faculty/department, the teaching staff, the graduates, the quality assurance committee, the employers, the study programme coordinator and the team that carried out the SAR, were held using meeting rooms set by KPI; the recordings are available in ARACIS cloud;
- the on-site visit was plan for September 12; prof. Oleksandr Maistrenko, member of the evaluation team, visited the premises of the study programme (laboratories, library, dean office), while the other members of the evaluation team watched online, using audio-video transmission, set by KPI; the recordings are available in ARACIS cloud.

Topics of the online discussions and on-site visit

Meeting of the evaluation team with representatives of the university / faculty / department coordinating the study programme (recorded meetings):

- short information about the university; The NTU KPI is in the top of the technical universities in Ukraine; has 25000 students and 24 faculties;
- position of the evaluated study programme in faculty and expectations of the KPI regarding the Eur-Ace certification;
- educational activities in this academic year; this are prepared blended (face to face for laboratories and online for courses, using an electronic platform);
- establishing the number of the students in the first year of study; more than 8000 students at the KPI level in 2023-2024 academic year;
- organizing of the the finance management, at the university level; they have finance from the budget (depending of the number of students) and resulted from the researches activities (contracts);
- general information about the procedures for quality assurance, valids at the university level.

Meeting of the members of the evaluation team with teaching staff (recoded meeting)

- self-presentation of the teaching staff, including the names of the subjects taught; examples; Automatic control theory, Technical mechanics, Sensors of avionics;
- software used in teaching; examples: C++, Python, Matlab/Simulink, dedicated software;
- teaching activities; blended: laboratories – face to face and courses – online, using electronic platform for teaching, communication, uploading educational materials (E-campus);
- evaluation of the students; during the semesters and sesions are exams and credits;
- level of the competencies of the students in the first year of study;
- language of study for international students; Ukrainian to the bachelor studies and English for consultations; in this academic year there are no international students.

Meeting of the members of the evaluation team with the students (recorded meeting)

Note: members of the evaluation team joined to this meeting only at the beginning (for a short presentation), then the meeting were conducted only by Mr. Temir Kalimulin;

- opinions about existing educational/methodical material;

- opinions about the support services and facilities, provided by the university;
- opinions about the educational process/services/infrastructure and the current state of the laboratory equipment (soft-/hardware);
- process of cooperation between students and teaching staff;
- control of academic performances and options for students if they are not satisfied with the evaluation results;
- organizing of the diploma defense;
- forming of their own educational trajectory;
- acces and confidence in reading the syllabi of the disciplines;
- opinions about the independent work (self-study) hours;
- opinions about the current requests of the labor market compared to what they are being teached;
- taking part in scientific research during the educational process;
- reaction of the teaching staff to the evaluation by the students.

Meetings of the evaluation team with the study programme coordinator and the team that carried out the self-evaluation of the study program subject to evaluation.

- discussions about the content of the self-evaluation report (SAR);
- discussions about the content of the Annexes to VS; examples: Annex 3 – the workload in terms of basic norm (BN) and hourly payment (HP); Annex 4 to VS – the number of the teaching staff in terms of professors, assoc., lecturers, assistants and their competencies;
- discussions about the content of the additional annexes; example: interpretation of the Annex S5 - Framework plan of meetings with employers;
- clarifying of the final forms of the documents; examples: responsables, signatures, stamps, time terms.

Meeting of the evaluation team with graduates of the study programme (recorded meeting)

- self-presentation of the graduates, including the domain of their job; examples: graduates from 2019, 2020, 2022; workplace to Arsenal company;
- competencies acquired during the bachelor; they consider this skills very helpful on the labour market;
- the possibilities of the master studies in the domain; some of the graduates are enrolled in masters offered by KPI;
- opinions about the bachelor curriculum; this is considered balanced; some of the graduates recommend to analyse the disciplines Electronics and Programming, in order to increase the number of hours of teaching with adequate number of credits;

- discussions of the graduates about the curriculum, during bachelor studies;
- opinions of the employers about the competencies of the bachelor graduates; graduates consider that the employers are satisfy;
- academic integrity; graduates were inform about this aspect before the preparing of the diploma and in annual events;
- soft skills; graduates declare that they had project management activities;
- opinions about the equipment from labs; some of the graduates consider that the equipment from industry are more modern in many cases;
- number of hours for practice (180 hours for pre-diploma); graduates recommend increasing the number of the hours for practice.

Meeting of the evaluation team with employers' representatives (recorded meeting)

- self-presentation of the employers, including their position and the domains of the companies; examples: Arsenal company (deputy director), Kurs-Orbital company (director);
- opinions about the employees who are graduates of the evaluated study program in terms of number, competencies and positions; examples: Arsenal (approx. 10 graduates in design, navigation, production); employers seems to be satisfied by the competencies of the graduates, considering that these come with new ideas;
- necessary time for the graduates to become independent workers; depending of the type of work and the personality, the new graduates become independent in (1...3) years;
- the collaboration with the university/faculty; companies offer internships for students; companies and faculty have meetings to discuss about the curriculum content; companies send proposal for diploma projects; there are teacher who work companies; employers consider that the impact of the university on their companies is crucial;
- number of hours of practice; employers consider that 180 hours of practice are insufficient; one employer consider that an ideal situation for practice would be with 3 or 4 hours/day, along a year;
- soft skills; employers consider that the graduates have competencies for communication, but they need time to adapt.

Visiting the premises of the study programme (recorded meetings)

- specialized laboratories for the evaluated study programme with dedicated equipments; examples: quadcopters, drones, aircraft vehicles, aircraft engines, aircraft wings, Antonov aircraft and helicopter (both prepared for didactical activities), accelerometers, gyroscopes, navigation sensors, rocket modules, radiolocation devices;
- laboratories with equimpments for general training; examples: Programming (computers and adequate software, C++, Python); Electronics (supply sources, multimeters, analog and digital devices, Multisim software); Microcontrolers (arduino, data aquisition

devices); Control systems of aircraft vehicles (mathematical modeling, thermal system, Matlab/Simulink software); Materials and technologies (mechanical devices);

- during this visit, with the evaluation team members connected online, aspects related to: laboratory tasks for students, number/groups of students in the laboratories, safety, examination were discussed;
- on-site, prof. Oleksandr Maistrenko visited the dean office and verified the files of the enrolled students and the platform used for the management of the students' activities;
- on-site, prof. Oleksandr Maistrenko visited the library and collected information about the access of the students and teaching staff to the books, journals, data base, other facilities.

Meeting with the Quality Evaluation and Quality Assurance Committee (recorded meeting)

- main concerns about quality assurance in KPI; the activities are developed according to the normatives given by ministry and university;
- members present to the meeting declare that exist activities for quality assurance at the bachelor, master and doctoral levels; examples: for teaching staff there are criteria developed by the university, considering the didactical and research activities;
- evaluation of the teaching staff by the students; there are questionnaires to fill; the academics can see the results of the evaluations; annually, reports on academic staff are drawn up and analyzed;
- curriculum; students, graduates and employers can send their proposals; these are analyzed with academics in department;
- existence of the quality procedures for other servicies in university; there are concerns for the qualification level improvement; also, according to the members present, the online platform offers courses about the corruption prevent;
- presenting an example of measures which conduct to the improvement of the quality; after analysis, the course about microcontrollers was introduced; also, they are aware about the reduced number of hours of Programming and Electronics.

▶PROPOSAL OF THE EVALUATION COMMISSION

The proposal of the Commission of permanent specialized experts - Engineering Sciences II, adopted in online meeting from the date of 23.10.2023 was ***maintaining accreditation – monitoring after 2 years*** and ***awarding*** EUR-ACE certification of the bachelor's study programme CONTROL SYSTEMS OF FLIGHT VEHICLES AND COMPLEXES ENGINEERING, for the form of education full-time, with 240 of credits and tuition capacity in the first year of studies of 40 of students, according to the Extract from the minutes, the Evaluation Report of the Commission and the Evaluation Sheets, registered at ARACIS with no. 6058 from 23.10.2023.

▶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 CONTROL SYSTEMS OF FLIGHT VEHICLES AND COMPLEXES ENGINEERING 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 – *monitoring after 2 years* and *awarding* EUR-ACE label undergraduate study programme CONTROL SYSTEMS OF FLIGHT VEHICLES AND COMPLEXES ENGINEERING;
- ⇒ Bachelor field – Electronics and telecommunications & Avionics;
- ⇒ from the Faculty of Educational and Scientific Institute of Aerospace Technologies;
- ⇒ 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 40 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 26.10.2023.

Executive Office of the ARACIS Council

President	Univ. Assoc. Dr. Octavian Mădălin BUNOIU	
Vice-president	Univ. Prof. Dr. Eng. Valentin NĂVRĂPESCU	
General Secretary	Univ. Prof. Dr. Eng. Dorian COJOCARU	
Director of the External Evaluation Department	Univ. Prof. Dr. Eng. Neculai-Eugen SEGHEDIN	
Accreditation Department Director	Univ. Prof. Dr. Eng. Simona LACHE	

This notice is valid until the date of 26.10.2028 (five years from the approval ARACIS Council Meeting). 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 to the Ministry of Education in order to prepare the Government Decision and for the attention of the National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute".

Bucharest, October, 2023 *SL/CM*
UA01/ 6058 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)	17 Electronics and telecommunications / 173 Avionics – Ukraine / Electronics Engineering, Telecommunications and Information Technologies – Romania
3.	Bachelor's degree programme (title in Romanian and English)	Control Systems of Flight Vehicles and Complexes Engineering
4.	The number of enrolled students per year of study	Academic year 2022-2023: I: 24; II: 26; III: 21; IV: 24. Academic year 2023-2024: I: 39; II: 23; III: 24; IV: 16.
5.	The number of teaching staff teaching at the programme, of which holders	Total no. of teaching staff: 26 of which 19 tenured.
6.	Diploma issued	Bachelor of Avionics
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	17 Electronics and Telecommunications ISCED - 0716 Motor vehicles, ships and aircraft.
11.	The approval given to the evaluated study programme	Maintaining accreditation, Monitoring after 2 years, Awarding EURACE label
12.	Date of last ARACIS assessment	National Agency for Quality Assurance of Education: Certificate № 5255, date of issue – 06/28/2023, validity period - 5 years, until 07/01/2028.
13.	ARACIS commission of expert evaluators:	Assoc. prof. dr. eng. Mircea DULĂU – ARACIS, Romania, Prof. dr. Oleksandr MAISTRENKO – NAQA, Ukraine, Assoc. prof. dr. eng. Dan ROSENBERG – ARACIS, Romania, Marc ALOCHET – CTI, France, Temir KALIMULIN – NAQA, Ukraine
14.	Evaluation visit period	September 11 – September 12, 2023