REPORT
The Romanian Agency for Quality Assurance in Higher Education

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

Bachelor study programme

Automated and Robotic Mechanical Systems

Educational and Research Institute of Mechanical Engineering
National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute"

Bachelor's field - Applied Mechanics
Form of education – full time

13.07.2023

▸ 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 AUTOMATED AND ROBOTIC MECHANICAL SYSTEMS SYSTEMS from the Educational and Research Institute of Mechanical Engineering.

The file was registered at ARACIS with the number 2688 dated 25.04.2023.

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
	DOMAIN. 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 educational program is developed and operates in full compliance with the law of Ukraine's "On Higher Education" and meets the requirements of the speciality standard 131 "Applied Mechanics" and the approved educational program "Automated and Robotic Mechanical Systems". The generalized program and general competencies fully meet the standard. Professional competencies from 1st to 10th and learning outcomes from 1st to 17th fully meet the standard. Program results from 18th to 22nd and professional competencies from 11th to 15th deepen professional knowledge and skills in creating and operating automated mechanical systems and their components. *Law of Ukraine "On Higher Education"*http://zakon4.rada.gov.ua/laws/show/1556-18https://zakon.rada.gov.ua/laws/show/1556-18?lang=en#Text *Approved standards of higher education*https://mon.gov.ua/ua/osvita/visha-osvita/naukovo-metodichna-rada-ministerstva-osviti-i-nauki-ukrayini/zatverdzheni-standarti-vishoyi-osviti *Educational and professional bachelor's program "Automated and Robotic Mechanical Systems"* - https://osvita.kpi.ua/131_OPPB_ARMS **Recommendations:** *It's not necessary*	*Compliance*
2.	*Other requirements provided in the standards specific to the Bachelor's field/ study programme.*[1] **Findings from the Self-Evaluation Report/ Visit:** It is observed that 9 out of 24 ARACIS indicators are not compatible. The observation of KPI regarding the incompatible indicator is presented for each indicator	*Partial Compliance*

INDICATOR	ARACIS	KTI - ARMS
1. Duration of studies in the form of full-time education	4 years = 8 semester	4 years = 8 semester
2. The duration of one semester regarding the didactic activity from the education plan KPI Comment: *In accordance with the Regulation on the organization of the educational process at Igor Sikorsky KPI, the duration of training is 18 weeks.*	14 week	18 week
3. The number of hours allocated to teaching activities per week KPI Comment: *The number of hours per week is increased in semesters in some practical disciplines are taught (long laboratory work, complex projects, tests)*	26– 28	26-30
4. The number of hours of activity organized according to the educational plan for the entire cycle of undergraduate studies KPI Comment: *1 credit ECTS in Ukraine is equal 30 hours. 3780/30 = 126 credits. In Romanian scale 126*25 = 3150 hours*	3152 – 3376	3780
5. The total number of credits for required and optional subjects	240 ECTS	240 ECTS
6. Number of credits per semester	30 ECTS	30 ECTS
7. Number of subjects (required + optional) per semester (exclusive of practice, diploma project development)	4-10	8-9
8. The minimum volume of internships from which: a) The minimum volume of specialized practice b) The minimum volume of domain practice c) The minimum volume of practice for the elaboration of the diploma project KPI Comment: *All practices is focused on the completion of a diploma project, this allows to concentrate practical tasks at one enterprise, which is crucial in modern conditions and reduces formal time losses. 5-6 years ago we had 2 practices and we have plans to increase quantity and duration of practices for futher generations of students. Also our students make their course projects and course works using industrial equipment.*	240 hours 90 hours 90 hours 60 hours	180 hours 0 ore 0 ore 180hours
9. The volume of hours provided for the discipline Elaboration of the diploma project	56 hours	180 hours

a. The minimum number of credits allocated for specialized practice b. The minimum number of credits allocated for field practice 10. c. The minimum number of credits allocated to practice for the elaboration of the diploma project KPI Comment: *Concentrating all credits on pre-diploma practice helps to solve the issue of industrial training of students and cooperation with stakeholders. We consider it expedient to implement the practice after the 3rd course.*	4 ECTS 4 ECTS 2 ECTS	0 ECTS 0 ECTS 6 ECTS
11. The number of credits allocated for the discipline Elaboration of the diploma project	4 ECTS[2]	6 ECTS
12. The number of additional credits that can be granted for passing the diploma exam KPI Comment: *Final evaluating is a public defense of the graduation project, not a state exam, so no credits from prior studies can be counted by the public defence. In the educational plan students have discipline Preparing of diploma project (6 ECTS).*	10 ECTS	0 ECTS
13. The number of credits allocated to the discipline of Physical Education and Sport / GC03: Basics of a healthy Lifestyle	3-4 ECTS	3 ECTS
14. The ratio between the number of course hours and those of applied activities (seminars, laboratories, projects, internships)	Ratio 1/1, with a tolerance of ± 20%	1710/2070 = 0,83
15. The ratio of exams in total final evaluations KPI Comment: *According to the Order of Igor Sikorsky KPI and the Regulation on the organization of the educational process at Igor Sikorsky KPI, the number of exams is limited to 3 per semester based on the maximum load per student. Instead of one exam, a course project or course workis counted. There are 3 course works and 2 course projects during the study period. The total number of exams cannot exceed 20 during the study period. Other types of control (Module tests, CGW, CW, GW) are not the final assessment of the discipline. Final test is almost the same as the exam. The student receives a grade on the final test on a 100-point scale. The exam cannot be obtained automatically for work during the semester.*	min. 50%	20 Exams, 42 Final tests , 57 Module tests, 24 CGW, CG, CW0
16. Equivalence in hours of one ECTS credit (approximate) KPI Comment: *According to the regulations on higher education, one credit is equal to 30 hours.*	25 hours	30 hours
17. Number of weeks of current exam sessions KPI Comment: *The last calendar week of each semester is allocated for the Final test session for all credit modules in which Final test is provided. Than students have 2 weeks for examination session. Additionally students, who didn't pass the exam or final test during main sessions, have*	min 3 weeks/session	2 week./session

one week for re-examination by Additional session.That is, total session (Final test session + Examination session+Additional session) lasts four weeks.			
18. Number of weeks for the re-examination session		min 1 week.	min 1 week
19. Maximum number of students per course teaching series		160	75
20. Maximum number of students per IF group		30	25
21. Maximum number of students per IF group		30	
22. Maximum number of students per IF group		25	
23. Maximum number of students per subgroup for laboratory and/or project activities		15	13
24. The maximum ratio between the number of students and the number of tenured teaching staff in higher education who provide teaching activities in the program		15/1	300/43= 6,98/1

Recommendations:
The Automated and Robotic Mechanical Systems completely respect the KPI, NAQA and Ukrainian law regulations, but to assure compliance with the European and ARACIS standards are necessary changes in curricula, educational program schedule and procedures. In the case of the present quality item, compliance with 17,16,15, 12,10,8,4,3,2 indicators is required.

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 goals of the educational program are consistent with the Development Strategy of Igor Sikorsky KPI for 2020-25 and the mission of the university.The purpose of the educational program corresponds to the development strategy of Igor Sikorsky KPI for 2020-2025 regarding the formation of future society based on the concept of sustainable development.The development strategy is based on the vision – to be the world's leading research technical university, to train specialists of the highest quality, to constantly generate scientific knowledge, new technologies; as well as missions of Igor Sikorsky KPI - to contribute to the formation of the society of the future based on the concept of sustainable development.The purpose of the educational program corresponds to this class of tasks, it provides for the acquisition by the students of the first (bachelor's) level of higher education of knowledge and skills for solving problems of enterprise and business development. The goal of the educational program takes into account the focus on digitalization, the competences and content of the educational program are aimed at the development of automation tools in accordance with the "Industry 4.0" platform.

The strategy of development of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” 2020-2025 - https://osvita.kpi.ua/node/116https://kpi.ua/en/strategy
Educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” - https://osvita.kpi.ua/131_OPPB_ARMS

Recommendations:
It's not necessary

Compliance

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 declared mission and goals are clearly formulated and aimed at determining the competences of specialists. The mission and goals of the educational program are presented to all applicants and entrants and meet the requirements of the labor market and other stakeholders.The goals and results of the program are subordinated to the movement from fundamental and basic knowledge obtained at the stage of general and fundamental training to solving practical problems based on the knowledge of professional disciplines. *Regulations on the internal quality assurance system in higher education at the Igor Sikorsky KPI* - https://osvita.kpi.ua/node/121https://document.kpi.ua/files/2020_7-165.pdf *Educational and professional bachelor's program "Automated and Robotic Mechanical Systems"* - https://osvita.kpi.ua/131_OPPB_ARMS *Reviews and protocols of meetings with stakeholders* - https://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MIs **Recommendations:** *It's not necessary*	*Compliance*
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 training program fully corresponds to its goals, content and results by the object of professional activity, specialist competencies, methods and means of professional activity. *Educational and professional bachelor's program "Automated and Robotic Mechanical Systems"* - https://osvita.kpi.ua/131_OPPB_ARMS **Recommendations:** *It's not necessary*	*Compliance*
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:** There is a complete correlation between the mission, the professional profile of the graduates and the expected results. Learning outcomes (competencies, knowledge, etc.) are a detailed representation of the program's mission and goals. The professional profile of graduates and their activities form the methodological and professional basis for the acquisition of specified results during the educational process.The subject matter, content and professionalism of the diploma projects are a confirmation of the coherence between the mission, the profile and the learning outcomes. *Educational and professional bachelor's program "Automated and Robotic Mechanical Systems"* - https://osvita.kpi.ua/131_OPPB_ARMS	*Compliance*

	Archive of diploma projects - https://ela.kpi.ua/handle/123456789/205, onsite visit *Reviews and protocols of meetings with stakeholders* - https://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MIs Recommendations: *It's not necessary*	
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: Every year, the Educational and Scientific Center of Applied Sociology "Socioplus" conducts a survey of graduates and employers regardingsatisfaction with acquired competencies. Also, every semester, a survey of students is conducted regarding the quality of education in the "Electronic Campus" university system. Consultations with representatives of the scientific and industrial sector are held annually during the employment period of graduates, at the profession fair, during internships by students, the results of consultations are documented in the form of meeting minutes and letters from institutions. The department holds consultations with partner institutions twice a year according to an agreed schedule. Employers participate in open discussions of the educational program at meetings and seminars of the department (protocols No.11 dated April 15, 2020, No.12 dated 05.25.2020, No.8 dated 01.27.21, No.12 dated 05.26.21, No.6 dated 11.30.2021), at the "Career Fair", during the defense of bachelor's theses, during internships, at meetings with members of the project group. The educational program takes into account the suggestions of stakeholders. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Career fairhttps://careerfair.kpi.ua/ List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Online Meetings with students, employers and graduates	*Compliance*

	Recommendations: *It's not necessary*	
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 department has a semester plan for holding seminars, meetings and consultations with stakeholders. The department, with the participation of stakeholders from employers, developed consultation methods and established consultation deadlines: twice a year (after diploma defenses and after the first half of the year). The results of the consultations were used in the formation of diploma topics, practice topics, and correction of the content of disciplines. List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Online Meetings with employers Recommendations: *It's not necessary*	*Compliance*
7.	The educational needs established by the employers have contributed to the definition of the programme mission, aims and outcomes. Findings from the Self-Evaluation Report/ Visit: The educational needs of employers, formulated in the protocols of meetings and during practice, are taken into account when developing the educational program. Based on the results of consultations with the department's strategic partners (NIKMAS Concern, Kyiv Institute of Automation, FESTO Subsidiary, ANTONOV SE, Hydrosila-Group) certificate programs "Mechatronic and robotic systems in mechanical engineering", "Hydropneumatic automation of smart systems", "Engineering of logistics systems" were developed and approved (Order HOH_127/2021 dated 05/19/2021). Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Recommendations: *It's not necessary*	*Compliance*

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 results of the program form a system of knowledge, skills and competencies that are subject to the life cycle of objects of professional activity. The educational program is directed from general to detailed information about the principle of action of the generalized object, about the processes taking place in the object, to the construction, design and modeling of the object and its elements. At the same time, there is a study of appropriate tools, development of practical skills. The specified systematicity is confirmed by the obtained competences, the subject of course and diploma projects, the content and quality of diploma projects. The structure and content of the educational program correspond to the current standard of higher education in specialty 131 "Applied Mechanics" for the first (bachelor's) level of higher education (Order of the Ministry of Education No.865 dated 06.20.2019). Upon completion of studies, students are issued a supplement to the diploma of the European model, which indicates the knowledge and skills acquired by the student during his studies at the university. Verification of the achievement of learning results is carried out with the help of assessment forms and methods: work in laboratory and practical classes, testing, performance of individual tasks, modular control works, home control works, calculation and calculation-graphic works, course projects, final control - credit/exam. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Higher education standard for specialty 131 "Applied mechanics" for the first (bachelor's) level of higher educationhttps://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2019/06/25/131.prikladna.mekhanika-bakalavr-1.pdf Supplement to the bachelor's diplomahttps://kpi.ua/files/diploma-2017-1.pdf Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/index.php/node/35 **Recommendations:** *It's not necessary*	*Compliance*
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 are employed by profession, and receive positions of the appropriate level in the field of automated and robotic mechanical systems. This is confirmed by the distribution of students after the defense. Approximately 70% of graduates continue their master's studies in automation in various industries. The prospect of the profession is confirmed by information about career growth. Igor Sikorsky KPI for the past 5 years has been ranked first in the rankings of employers in Ukraine. Classifier of professionshttps://www.me.gov.ua/Profession/List?lang=uk-UA&id=d4162ef8-2771-4ac5-99ef-1d4b6f5336af&tag=KlasifikatorProfesii-Poshuk	*Compliance*

	Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us OrderHY/216/202dated11.10.2021"OntheimprovementoftheemploymentsystemforhighereducationacquisitionsofthelgorSikorsky KPIandthecreationofacenterforprofessionaladaptationofstudents" https://document.kpi.ua/2021_HY-216 Online Meetings with graduates Recommendations: *It's not necessary*	
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 curriculum is developed in accordance with the National (Ukrainian) Framework of Qualifications (NFQ), the National (Ukrainian) Register of Higher Education, the standard of the specialty "Applied mechanics" and complies with the principles of Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015), but is not completly designed with the ARACIS specific standards in the Bachelor's field.. Higher education standard for specialty 131 "Applied mechanics" for the first (bachelor's) level of higher educationhttps://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2019/06/25/131.prikladna.mekhanika- bakalavr-1.pdf National qualifications frameworkhttps://mon.gov.ua/ua/tag/natsionalna-ramka-kvalifikatsiyhttps://mon.gov.ua/eng/tag/natsionalna-ramka-kvalifikatsiy Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf Recommendations: *The Automated and Robotic Mechanical Systems completely respect the KPI, NAQA and National qualifications framework regulations, but to assure compliance with the European and ARACIS standards are necessary changes in curricula, educational program schedule and procedures.*	*Partial Compliance*
11.	The particular aspects of the evaluated study programme are rendered evident as compared to other study programmes provided by the institution from the same Bachelor's field. Findings from the Self-Evaluation Report/ Visit: According to Ukrainian Legislation, the difference between similar educational programs must be at least 30%. The purpose of the educational program is to train highly qualified specialists who are able to solve complex tasks and problems in the field of applied mechanics in the direction of mechanical engineering and the creation of automated mechanical systems using mechatronics, hydropneumatic automation and robotics,	*Compliance*

	to develop the latest and use existing scientific methods, technologies, devices and systems in scientific institutions and leading enterprises of the industry.Educational program's distinctiveness is reinforced by selective educational components and certificate programs. Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf **Recommendations:** ***It's not necessary***	
12.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** It's not necessary **Recommendations:** ***It's not necessary***	
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:** The policy, standards and procedures for compliance with academic integrity are defined in the following documents: Code of Honor of Igor Sikorsky KPI, developed on the basis of the experience of the best universities in the world; Regulations on the academic plagiarism prevention system at Igor Sikorsky KPI (approved by Order No.1/76, February 25, 2020); Regulations on the commission on ethics and academic integrity of Igor Sikorsky KPI; Order on holding events for the formation and development of a culture of academic integrity in Igor Sikorsky KPI (HOH/22/2021, 02/04/2021);Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPI. Observance of academic integrity is facilitated by checking all academic texts for signs of plagiarism using the Unicheck program and placing them in the Electronic Archive of scientific and educational materials of Igor Sikorsky KPI. The university has: the Committee on Ethics and Academic Integrity of the Scientific Council of Igor Sikorsky KPI, working group on academic integrity. Documents are systematized on the official website of the university.The promotion of academic integrity at the university is carried out through a number of measures:	*Compliance*

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

	• participation of institution of higher education in the Academic Integrity and Quality of Education Initiative Academic IQ project (2020-2022); • informing applicants about the Code of Honor (at the stage of signing the contract), compliance with the principles of academic ethics, increased responsibility for compliance with the rules of citation and references, including regular explanatory work of the curator, teachers; • the work of the Center for Information Support of Education and Research scientific and technical library of the university named after G.I. Denisenko, including conducting webinars, in particular, from SAIUP. The latest: "Academic integrity and preparation of educational and methodological materials" (September 15, 2021), "Integrity: values in daily actions. Works to order" (October 20, 2021). Recordings of a number of webinars are available online; • the work of the Commission of the Scientific Council on Ethics and Academic Integrity (popularization is encouraged), the working group on issues of academic integrity; • educational and scientific center of applied sociology "Socioplus" regularly conducts surveys of applicants, scientific and pedagogical staff. Applicants are informed about the policy of academic integrity and 77.8% of them noted its compliance. Code of Honor of the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" approved by the Decision of the Scientific Council of April 5, 2021 (Protocol No.4). Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/index.php/node/35 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf TheCodeofHonorofNationalTechnicalUniversityofUkraine«IgorSikorskyKyivPolytechnicInstitute»https://kpi.ua/codehttps://kpi.ua/files/honorcode_2021.pdf https://kpi.ua/en/code Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/47 Regulations on the commission on ethics and academic integrity of Igor Sikorsky KPIhttps://kpi.ua/files/etic_comission.pdf Order “On holding events for the formation and development of a culture of academic integrity at Igor Sikorsky KPI” (HOH/22/2021, 02/04/2021)https://document.kpi.ua/2021_HOH-22 Academic integrity. Legal documentshttps://kpi.ua/academic-integrity **Recommendations:** *It's not necessary*	
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:**	*Compliance*

	Observance of academic integrity, protection of copyright and inadmissibility of plagiarism, fraud and any form of discrimination are confirmed by the results of plagiarism checks of diploma projects and protection protocols. A technological tool for combating violations of academic integrity is the use of specialized software for checking academic texts for coincidence/similarity using the Unicheck system. Manuscripts of monographs, textbooks, manuals, articles, theses submitted to editorial offices, term papers/projects, and qualification papers at the stage of admission to defence are checked for plagiarism. Unicheck system checks for borrowed parts of the text, displays text matches and generates a similarity report. In case of detection of borrowings without proper registration of references, the work is returned to the author for revision. Checking for academic plagiarism of qualifying works includes 1) submission by the applicant of the final version of the bachelor's thesis to the supervisor in electronic form; 2) uploading work to the Unicheck system; 3) implementation of the work verification process, formation of a similarity report; 4) analysis of the similarity report by the scientific supervisor, a conclusion about the originality of the work. If the work is accepted for defence, the academic plagiarism screening process is considered complete. Academic texts, diploma projects and dissertations are placed in the Electronic Archive of EIAKPI for public access. Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf TheCodeofHonorofNationalTechnicalUniversityofUkraine«IgorSikorskyKyivPolytechnicInstitute»https://kpi.ua/codehttps://kpi.ua/files/honorcode_2021.pdf https://kpi.ua/en/code Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/47 Regulations on the commission on ethics and academic integrity of Igor Sikorsky KPIhttps://kpi.ua/files/etic_comission.pdf Order “On holding events for the formation and development of a culture of academic integrity at Igor Sikorsky KPI” (HOH/22/2021, 02/04/2021)https://document.kpi.ua/2021_HOH-22 Academic integrity. Legal documentshttps://kpi.ua/academic-integrity Plagiarism check service “Unicheck”https://unicheck.com/uk-ua Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 Recommendations: *It's not necessary*	
A.1.4 Public liability and responsibility[3]		
1.	The institution possesses practices for internal audit regarding the main fields of the university activity. An academic audit report reviewed by the Senate and a plan of measures to improve activity are prepared on annual basis. Findings from the Self-Evaluation Report/ Visit: According to the order in this academic year No.HOH/253/2022 dated 15.09.2022 "Conducting self-analysis of the activities of departments (internal accreditation)" and every previous year in order to implement the decision of the administrative council dated 01.09.2022 and for the purpose of internal quality assurance of higher education, determination of the compliance of university departments with the requirements of licensing conditions for conducting educational activities, criteria for external accreditation of educational programs of all levels of training of higher education applicants, a self-analysis of the activities of Igor Sikorsky KPI departments.	*Compliance*

	Order №НОН/253/2022 dated 15.09.2022 "Conducting self-analysis of the activities of departments (internal accreditation)"https://document.kpi.ua/2022_HOH-253 Decisions of the Scientific Council of Igor Sikorsky KPIhttps://rada.kpi.ua/taxonomy/term/13 Regulations on the internal quality assurance system in higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/121https://document.kpi.ua/files/2020_7-165.pdf **Recommendations:**	
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 university has "Regulations on the Organization of the Educational Process" and "Statute of KPI", which are approved by the Scientific Council of the university and correspond to current Legislation of Ukraine. Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Statute of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”https://kpi.ua/statutehttps://kpi.ua/en/statute Internal Regulationshttps://kpi.ua/admin-rulehttps://kpi.ua/en/admin-rule **Recommendations:** *It's not necessary*	*Compliance*
2.	The institution of higher education should prove that it has organised the record of the academic activity of the students in accordance with the legislation in force, by forms homologated in this respect (catalogues, summary documents, academic records, transcripts, diplomas etc.). **Findings from the Self-Evaluation Report/ Visit:** Accounting of students' educational activities at KPI takes place in the automated electronic information and telecommunication system "Electronic campus", as well as in the "Deanery" system integrated in the information and telecommunication system "Electronic campus". The website of the department presents catalogs of descriptions of educational general, normative and selective disciplines. All diploma projects are stored in the electronic archive of diploma projects. General information about students and teaching staff of the university is also available in the Unified State Electronic Database on Education, which is an automated system for collecting, registering, processing, storing and protecting information and data on education. The owner of the Unified State Electronic Database on Education is the state, the administrator is the Ministry of Education of Ukraine, and the technical administrator is the state enterprise "Inforesurs". Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 Unified state electronic database on educationhttps://info.edbo.gov.ua/	*Compliance*

	Recommendations: *It's not necessary*	
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: Currently, the educational program operates within the framework of the license granted by the Ministry of Education of Ukraine, and the next accreditation at the National Agency for Quality Assurance of Higher Education is scheduled for April 2023. Since the authority to accreditation of higher education institutions of Ukraine has been transferred from the Ministry of Education of Ukraine to the National Agency for Quality Assurance of Higher Education. National Agency for Higher Education Quality Assurance(NAQA) https://naqa.gov.ua/ https://en.naqa.gov.ua/ Recommendations: *It's not necessary*	*Compliance*
A.1.6 Financial activity		
1.	The study fees of the students are calculated in accordance with the average tuition costs per university year in the public education sector financed by the state budget in similar fields, and they are presented to students through various means of communication.[3] Findings from the Self-Evaluation Report/ Visit: The cost of the contract form of education is presented on the website of the university admissions committee. Tuition fees for students of higher education for the 2022/2023 academic year are calculated by the department of economics and finance of the university. Admissions committee of the universityhttps://pk.kpi.ua/ Department of Economics and Finance of the Universityhttps://def.kpi.ua/ Tuition fees for students of higher education for the 2022/2023 academic yearhttps://def.kpi.ua/node/1715 Meeting online with institutional representatives Recommendations: *It's not necessary*	*Compliance*
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: In Igor Sikorsky KPI students of the budgetary form of education have the opportunity to receive scholarships of three types: academic, social, and personal.Academic scholarships are awarded to students for academic success on the basis of a performance rating. Students of the first year of study receive an academic scholarship based on the entrance competitive score before the first semester control. The accrual of the academic scholarship is reviewed after each session.Social scholarships are awarded to eligible students on the basis of laws establishing state benefits and guarantees for awarding social scholarships to certain categories of students. The right to receive a social scholarship is available	*Compliance*

	to students who study full-time under the state order and who are not on academic leave.Personal scholarships are awarded to outstanding students who have excelled the most in academic and scientific work, and also study on a budget. Candidates for their receipt are determined by the scholarship commission of the university, which carries out its work on the basis of the Regulation on the organization of the work of scholarship commissions of Igor Sikorsky KPI and approved by the Scientific Council of Igor Sikorsky KPI.The university has implemented a government program of preferential lending for obtaining higher education at Igor Sikorsky KPI.The university also has Students trade union committee than is operating for support and protection of their interests. One of the services they have is the possibility of direct cash support that can be provided for the students based on their request if there is a reasonable cause. The students that pay for their education themselves (or have a legal guardian paying for it) have an option of getting “tax credit” that can go up to 10% of the amount paid for the education annually – available for official employed Ukrainians. Igor Sikorsky KPI has enough possibilities of financial assistance by the university, information about it is known to the students which are confirmed by their answers to the Google form provided for them after the meeting with the evaluation panel. *Admissions committee of the university*https://pk.kpi.ua/ *Order “On preferential lending for higher education at Igor Sikorsky KPI”*https://dnvr.kpi.ua/wp-content/uploads/2021/08/%D0%9D%D0%B0%D0%BA%D0%B0%D0%B7_%D0%BF%D1%80%D0%BE_%D0%BF%D0%BE%D1%80%D1%8F%D0%B4%D0%BE%D0%BA_%D0%BF%D1%96%D0%BB%D1%8C%D0%B3_%D0%BA%D1%80%D0%B5%D0%B4%D0%B8%D1%82%D1%83%D0%B2%D0%B0%D0%BD%D0%BD%D1%8F_2021.pdf *Resolution of the Cabinet of Ministers of Ukraine on preferential lending for higher education*https://zakon.rada.gov.ua/laws/show/673-2018-%D0%BF#Text *Students trade union committee*https://studprofkom.kpi.ua/shho-take-profkom/ *Meeting online with institutional representatives* *Meeting online with students* Recommendations: *It's not necessary*	
3.	The evaluated study programme disposes of sufficient financial resources for the proper performance of the activity. Findings from the Self-Evaluation Report/ Visit: The university is a public institution and receives funding in accordance with the law on higher education, which fully ensures the implementation of the educational program. Financial and budgetary report for 2021https://kpi.ua/index.php/2021-def Recommendations: *It's not necessary*	*Compliance*
A.2 Facilities		

	A.2.1 Availability of educational establishments	
1.	The institution of higher education disposes of own premises – at least 70% - or rented premises which are adequate for carrying out didactic activities (course and applications – seminars, laboratories, projects) during all disciplines included in the programme curriculum. **Findings from the Self-Evaluation Report/ Visit:** The university has its own premises, which are 100% suitable for conducting educational activities (course and applied - seminars, laboratories, projects) in all disciplines included in the curriculum of the program. The department is equipped with the necessary material, technical and laboratory facilities necessary for the implementation of the educational program. The area of the cathedral premises corresponds to the norms established by the Legislation of Ukraine. Onsite visit Material and technical support of Igor Sikorsky KPIhttps://www.youtube.com/watch?v=LCWjAXyO5JQ Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Licensing conditions for carrying out educational activitieshttps://zakon.rada.gov.ua/laws/show/1187-2015-%D0%BF#Text **Recommendations:** *It's not necessary*	*Compliance*
2.	The capacity of the educational facilities for the study programme subjected to evaluation should be of: minimum 1 m^2/seat, in the class rooms; minimum 1.4 m^2/seat in the seminar rooms; minimum 1.5 m^2/seat in the lecture rooms from the libraries; minimum 2.5 m^2/seat in the computer laboratories and specialty discipline laboratories which use the computer; minimum 4 m^2/seat in the laboratories of the technical, experimental, design disciplines etc. **Findings from the Self-Evaluation Report/ Visit:** The capacity of educational premises for the implementation of the educational program meets the requirements for lecture halls, laboratories and classes. Students of the department additionally have the opportunity to use the scientific and technical library named after G.I. Denisenko, which is equipped with lecture halls in sufficient quantity to carry out the educational process. At the NATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE(NAQA) level, there are a number of incompatibilities regarding the standard of equipment and surfaces, compared to the ARACIS standard. Thus NATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE(NAQA) imposes as a standard the provision of educational classrooms with multimedia equipment should be at least 25 percent of the number of classrooms., and the surface of the educational spaces for the educational process should be at least 2.4 meters squares. meters per person, taking into account no more than three exchanges of education, but not less than 2000 square meters. meters for a higher education institution and a minimum of 1,500 square meters. KPI, however, respects the standard regarding spaces at both the NATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE(NAQA) and ARACIS levels. *Onsite visit* *Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid*	*Compliance*

	mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf *Licensing conditions for carrying out educational activitieshttps://zakon.rada.gov.ua/laws/show/1187-2015-%D0%BF#Text* *Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/* Recommendations: *It's not necessary*	
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 number of seats in all educational classrooms determined by the schedule of educational classes during lectures, practical and laboratory work is not less than the number of students in streams, groups and subgroups studying in these classrooms. This is ensured by the fact that the schedule of students' classes is formed in the central control room of the university based on data on the maximum capacity of each classroom. *Onsite visit* *Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf* *University class schedulehttp://roz.kpi.ua/https://schedule.kpi.ua/* Recommendations: *It's not necessary*	*Compliance*
4.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. Findings from the Self-Evaluation Report/ Visit: It's not necessary Recommendations: *It's not necessary*	
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: The equipment of the educational premises is sufficient for the implementation of the educational program and meets the requirements for lecture halls, laboratories and classes. Onsite visit Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and	*Compliance*

	mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Recommendations: *It's not necessary*	
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: The technical equipment of the laboratories in which training is carried out in the applied disciplines of the educational program is provided with didactic equipment of leading foreign manufacturers. The department has 3 computer classes, which contain at least 13 computers, which ensures classes for one group (25 students) or for a subgroup (12-13 students) in accordance with the established norms.The university centrally provides its own departments with the necessary software (Zoom, Office 365, Google Class, etc.). A number of disciplines are based on the use of demo versions of special software (egFluidSimH, FluidSimP) or freely available software (CoDeSys). Onsite visit Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics andmechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Recommendations: *It's not necessary*	*Compliance*
3.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. Findings from the Self-Evaluation Report/ Visit: It's not necessary Recommendations: *It's not necessary*	
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: Conducting scientific research is possible both on the laboratory and technical base of the department, and in the centers of collective use, which are located in the university. The university has its own scientific premises/scientific laboratories with equipment that meets the requirements for the topics covered in the educational program "Automated and robotic mechanical systems". In addition, industrial equipment of stakeholders can be used.Such laboratories include most of the laboratories of the Applied fluid mechanics and mechatronics department,	*Compliance*

	namely: Educational and scientific laboratory of discrete control systems (300-1), Educational and scientific laboratory of electro-hydroautomatics and hydraulic drives (300-a), Educational and scientific laboratory of automated design (120-a), Educational and scientific laboratory of physically heterogeneous systems of mechatronics (299-6), Educational and scientific laboratory of electrical and electronic components of mechatronic systems (299- 7), Educational and scientific laboratory of compressor machines (05-1), Educational and scientific laboratory of hydraulic automation (06b), Educational and scientific laboratory volumetric hydraulic machines (06a), Educational and scientific laboratory of aerodynamics (08-1), Educational and scientific laboratory of modeling and design of intelligent mechanical systems of mechatronics (120-a), Educational and scientific laboratory of mechatronics (126-1). The equipment of the listed laboratories is sufficient for the study, development and research of automated mechanical systems of various purposes (from an artificial heart to an aircraft hydraulic drive, from water purification systems to machine tools and agricultural machinery). Onsite visit Meeting online with teachers Meeting online with Students Meeting online with employers Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Recommendations: *It's not necessary*	
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: The university has at its disposal its own scientific and technical library, which has its own library fund sufficient to provide the disciplines of the educational program.Students have free access to the library fund and other resources, according to the university's agreements with partner institutions and educational organizations. The general library fund (as of January 1, 2021) has 2,537,394 book and paper copies, - 33,562 electronic resources (including 6,376 electronic manuals and textbooks of KPI teachers), prepaid databases: Scopus and Web of Science; access to full texts of international journals and e-books Springer Nature Publishing House.Scientists, teachers and students of the University could use resources of scientific publishers: Research4Life, ACM Digital Library, ScienceDirect, Springer Nature, De Gruyter, and separate bases of EBSCO Health, Elsevier Health, BMJ Publishing Group. As of 2023, the library has 26 182 of registered users, 59 639 onsite and 7 225 094 virtual visitors. The library occupies separate building on the campus of the KPI. Library is equipped with computers with free Internet access, Wi-Fi on its premises, has study halls, student spaces, cultural and educational centre and centre for education and research support. The library also provides consultation services available both off and online. Free access to the library and its different facilities are confirmed through annual survey of students.	*Compliance*

	The Igor Sikorsky KPI Scientific and Technical Library is a communicative, innovative and open platform, it is a reliable partner of university and professional community in educational and scientific environment development. It has enough space for student's activities and is equipped with sufficient library stock. Onsite visit Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Survey on the quality of educational process through the eyes of the students during 2021-2022 study year http://socioplus.kpi.ua/wp-content/uploads/2022/12/zvit-vsi-op-2021-2022-2.pdf Recommendations: *It's not necessary*	
2.	Own library stock, consisting in ~~Romanian~~ 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 university has its own scientific and technical library, which has its own library fund of domestic and foreign scientific and technical literature, which fully covers the subjects of the disciplines of the educational program. More than 50% of mandatory literature are publications of well-known publishing houses over the last 10 years.In particular, the library presents scientific and scientific-educational works of department teachers. Online activity imposes that every teacher has online course support. According to its director Oksana Brui, the ARMS educational program has enough literature to completely cover the main themes of educational disciplines under the curriculum. The library has a number of specialized thematic editions available in paper and digital forms, which were published during last 10 years consisting of books, textbooks and monographs in Ukrainian (33 titles), English (5 titles), Russian (13 titles). Onsite visit Scientific and technical library of the university https://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 Recommendations: *It's not necessary*	*Compliance*
3.	The library stock should contain enough copies to cover the needs of all the students from the evaluated study programme. Findings from the Self-Evaluation Report/ Visit: The library fund of the university library has a sufficient number of copies and electronic information resources to meet the needs of all students of the educational program "Automated and robotic mechanical systems". Additional resources are provided by the methodological office of the department. All necessary literature for conducting the educational process is available in printed and electronic forms, which was confirmed by the director of KPI library Oksana Brui. The library also provides a number of services that allows you lending needed books if they are not available in the KPI library itself. Users can order printed editions from the Ukrainian libraries funds through the interlibrary subscription. The Scientific Periodicals of Ukraine project is a national technological platform based on Open Journal Systems (OJS), which is developed on the	*Compliance*

	basis of a voluntary mutually beneficial partnership of publishers, scientific libraries and information centres of Ukraine. RapidILL is a fast worldwide interlibrary loan tailored for article and book chapter requests that Igor Sikorsky KPI now uses. Evaluation panel concurs that library stock has a sufficient number of copies (in physical and digital form) to fully satisfy the needs of all students from ARMS study program. Onsite visit Meetings online with students Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 **Recommendations:** ***It's not necessary***	
4.	There is a sufficient number of subscriptions to ~~Romanian~~ 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 library fund of the library has subscriptions to specialized Ukrainian and foreign publications.Among them is the scientific and technical magazine "Mechanics and Advanced Technologies" published by the university in the field of mechanical engineering and applied mechanics.Although the majority of periodical journals have an online version, KPI library do have some paper style subscriptions. Taking into account many digital databases, online resources of scientific publishers and libraries that are available for the library users, ARMS study program has enough publications and periodicals which corresponds to the mission and aims undertaken by the study program. After speaking with the director of KPI library Oksana Brui evaluation team can verify that a sufficient number of subscriptions of Ukrainian and foreign periodicals that comply to the education results defined in the educational program are accessible to the studentsand teachers alike. Onsite visit Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ **Recommendations:** ***It's not necessary***	*Compliance*
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:** *It is not the case* **Recommendations:** ***It's not necessary***	

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:** The units of the university have sufficient resources for duplicating methodical educational materials, including electronic copies, a sufficient number of copies necessary to ensure the educational process, which makes them available to students in a sufficient number of copies. The site of Department of fluid mechanics and mechanics has a direct link to the corresponding section of the repository, where textbooks, workshops information, materials for lecture courses, programs of disciplines are freely available. The authors of all this didactic material are scientific and pedagogical workers of the department. All educational materials are presented in full-text versions and have unrestricted access.The university has its own publishing house "Polytechnic" to meet the needs of teachers and students of the university in printed products.It is situated on the campus territory, and serves not only as a publishing house, but as a bookshop, which make it easy to find for both students and teachers. Igor Sikorsky KPI has technical and financial ability to provide its students with sufficient number of copies for their study and didactic materials. Onsite visit Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 University Publishing House “Polytechnica”https://politechnika.kpi.ua/ Department of fluid mechanics and mechanics repository https://ela.kpi.ua/handle/123456789/206 **Recommendations:** *It's not necessary*	*Compliance*
7.	*Other requirements provided in the standards specific to the Bachelor’s field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** **Recommendations:**	
	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:** Academic staff from the educational program are hired in accordance with the hiring criteria, namely the Procedure for conducting competitive selection or selection by competition when filling vacant positions of scientific and pedagogical workers and concluding employment contracts with them.Teachers are selected on a competitive basis in accordance with Ukrainian Legislation. The procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts	*Compliance*

	with themhttps://osvita.kpi.ua/competitionhttps://document.kpi.ua/files/2020_7-65.pdf Statute of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”https://kpi.ua/statutehttps://kpi.ua/en/statute Recommendations: *It's not necessary*	
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: The number of scientific and teaching staff is regulated by the Regulations on the organization of the educational process at the university. The number and training of scientific and teaching staff involved in the implementation of the professional component of the educational program is presented on the website of the department.The level of training of teachers is ensured by mandatory rating and professional development, which are regulated by relevant documents. Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Regulations on the rating of scientific and pedagogical workers of Igor Sikorsky KPIhttps://osvita.kpi.ua/node/30 Regulations on improving the qualifications of pedagogical and scientific-pedagogical workershttps://osvita.kpi.ua/node/714 Annexe 4 Recommendations: *It's not necessary*	*Compliance*
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: According to the current legislation, licensing conditions and the staff list of the university, an additional workload of hourly paid or part-time teachers is possible, which in total cannot exceed 50% of the teacher's annual workload. From the Annexe 4 just a single teacher has hourly paid DudaTetiana – 0,02 at University of Le Mans, France. Annexe 4 Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Licensing conditions for carrying out educational activitieshttps://zakon.rada.gov.ua/laws/show/1187-2015-%D0%BF#Text Staff list of the university for 2022https://kpi.ua/2022-stafflist	*Compliance*

	Recommendations: *It's not necessary*	
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 number of full-time teachers in an educational institution is determined in accordance with the legal provisions applicable to higher technical educational institutions. According to the regular schedule, the department has 42 full-time employees and 1 person at hourly paid - Gryshko Igor. The total number of tenure teachers is 16,55 and from this only 0,31 is on hourly paid. Annexe 4 Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Staff list of the university for 2022https://kpi.ua/2022-stafflist Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Recommendations: *It's not necessary*	*Compliance*
5.	At least 70% of the total jobs of the study program are assigned to tenure teachers in the higher education institution, according to the legal provisions – with basic workload or reserved position, and at least 25% of them are covered by university professors and associate professors. Findings from the Self-Evaluation Report/ Visit: 16,21 job which is 16,21/16,55= **97,95%** are reserved for full-time teachers at the university. According to the teaching staff of the department, this indicator is **95%**. From among the teaching staff 8 are lecturer (3,99), 8 professors (3,4), 1 senior teacher (0,2) and 28 associate professors (9,00) – **74,68%** have certificates of associate professor or professor. Annexe 4 Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Recommendations: *It's not necessary*	*Compliance*

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:** Appointed teachers who have retired due to the age limit or for other reasons and are involved in the implementation of the educational program, work as associate academic staff with a workload of no more than 1.0 rates.The involvement of retired teachers in the educational process is regulated by the Regulations on the organization of the educational process. The department employs 8 teachers of retirement age (KovalevVasyl, Mozharovska Tamara, NoskoSerhii, Nyezhentsev Oleksiy, Turyk Volodymyr, Uzunov Oleksandr, Yakhno Oleg, Zakhovaiko Oleksandr) but they are full-time employed. Annexe 4 Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf **Recommendations:** *It is recommended to encourage the employment of young specialists to ensure the sustainability of the program.*	*Compliance*
7.	The tenure teachers have the scientific title of PhD and they comply with at least one of the following conditions: they hold a Bachelor's diploma in the field of the taught disciplines; they are PhD supervisors in the field of the taught disciplines; the theme of their PhD thesis is in the field of the taught disciplines.The other teachers should have the initial training and skills in the field of the taught discipline. **Findings from the Self-Evaluation Report/ Visit:** All teachers have a scientific title notlower than a PhD (Ph.D. or Doctor) and meet at least one of the listed conditions. Annexe 3 Annexe 4 Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Table of quality indicators of the teaching staff of the department of Fluid Mechanics and Mechatronicshttps://pgm.kpi.ua/downloads/bakalavry/2022/Tabl-jakosti.pdf **Recommendations:** *It's not necessary*	*Compliance*
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:**	*Compliance*

	The teachers of the program have prepared the courses and didactic materials necessary for the educational process, which fully cover the issues and ensure the mastery of the relevant discipline, in accordance with the syllabus of the subject (program). The functionality of laboratory equipment is checked during the month preceding the educational process. The teachers in the syllabuses annually update the list of literary sources, practical tasks, content in accordance with the results of surveys and suggestions of stakeholders. All teachers periodically undergo pedagogical qualification improvement.The relevance of teachers' training to the discipline is evidenced by their scientific dissertations, research and publication topics, and internship topics. Improvement of pedagogical qualifications of teachers is carried out at the Institute of postgraduate education of the university. The teaching materials of the courses are placed by the teachers of the department on the electronic resource of the university "Electronic Campus" and the distance learning platform "Sikorsky Distance". Annexe 4 Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/174 Institute of postgraduate education of the universityhttp://ipo.kpi.ua/ Distance learning platform “Sikorsky Distance”https://www.sikorsky-distance.org/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	
9.	The teachers who occupy positions of assistant should have certified pedagogical training. Findings from the Self-Evaluation Report/ Visit: To the ARMS program, do not teach assistant professors. The teachers of the KPI, who hold the positions of assistants and have a master's degree, have completed courses in the pedagogy of a higher school and have the right to teach technical disciplines in an educational institution of the 3rd level. Also, teachers who studied at a postgraduate school had during their studies a number of disciplines in higher school pedagogy and have a corresponding diploma, which can be considered equivalent to a certificate of pedagogical education in the specified direction. In addition, all teachers of the university have the opportunity to improve their pedagogical qualifications at the Institute of postgraduate education of the university. Annexe 3 Institute of postgraduate education of the universityhttp://ipo.kpi.ua/ Recommendations: *It's not necessary*	*Compliance*

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:** For this programme is not the case. Two associate professors work at the department, whose main place of work is an administrative position at the same Igor Sikorsky KPI (Natalia Seminska - vice-rector, IhorHrishko - director of the Institute of mechanical engineering). Their teaching activities are coordinated with the university management.There are currently no other associate teachers at the department. **Recommendations:** *It's not necessary*	*Compliance*
11.	The institution provides to the academic staff opportunities to improve their teaching skills and the skills of using the new technologies for teaching purpose. **Findings from the Self-Evaluation Report/ Visit:** The teachers of the programe are obliged to undergo professional development at least once every 5 years, which is regulated by the Procedure for professional development of pedagogical and scientific-pedagogical employees of Igor Sikorsky KPI. The university provides an opportunity to improve qualifications both in the structural units of the university and under agreements with third-party organizations. Advanced training services at the university are provided by the Institute of postgraduate education. The professional development plan is approved annually by the Scientific Council of the university. Regulations on improving the qualifications of pedagogical and scientific-pedagogical workershttps://osvita.kpi.ua/node/714 Institute of postgraduate education of the universityhttp://ipo.kpi.ua/ Decisions of the Scientific Council of Igor Sikorsky KPIhttps://rada.kpi.ua/taxonomy/term/13 **Recommendations:** *It's not necessary*	*Compliance*
12.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** It's not necessary **Recommendations:** *It's not necessary*	
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:**	*Compliance*

	Seven employees of the auxiliary staff work at the Applied fluid mechanics and mechatronics department, including the head of laboratories, engineers, teaching masters and others. (Ivan IvanovychZilinskyi, Volodymyr AnatoliyovychKryvak, Liudmila Ivanovna Timoşenko, Dyachenko Nataliya Mykolayivna, Belchanska Oksana Valeriivna, YuryIvanovichShirokostup, OlenaYuryivnaKubrytska). Post-graduate students of the department are involved in the number of auxiliary staff. Auxiliary personnel ensure the modernization of didactic and scientific laboratory equipment, performance checks at the beginning of the educational process, current maintenance of didactic stands, equipment adjustment, participation in laboratory work and other types of work provided for in their job instructions. Meeting online with teachers Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad **Recommendations:** *It's not necessary*	
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:** University applies a transparent policy of recruitment and admission of students, which is publicly announced in January of each year, but no later than six months before applicants submit an application for admission.Information about educational programs, admission rules, employment prospects, study features are provided during the "Open door days" of faculties, institutes and departments, which take place according to the established schedule, during tours of applicants to the university, on the official websites of the university, faculties and institutes, departments. The rules for admission to KPI were approved at the meeting of the Scientific Council on 12/13/2022 (protocol No.10).The information provided to entrants and the procedure for its publication are regulated by the Rules of admission to study for higher education at Igor Sikorsky KPI in 2022 (with changes). Due to special circumstances in connection with the martial law, in 2023 rules of admission were published in April 2023. They contain the terms of acceptance of applications and documents of applicants, the procedure for determining the competitive score, information on the appeal procedures and so on. The rules are clear and understandable, they do not contain discriminatory regulations, are defined by the peculiarities of obtaining specific qualifications and are published on the official website. Site of the admission office of the Igor Sikorsky KPI contains accurate information about faculties, educational programs, schedule of documents submission, and another important points. The university ensures availability of compulsory data and promotes correct information. Site of the admission office is easy to navigate, the amount of information made public is sufficient and understandable for applicants. Admissions committee of the universityhttps://pk.kpi.ua/	*Compliance*

	OrderoftheMinistryofEducation“Onapprovalofconditionsforadmissiontohighereducationin2022”https://mon.gov.ua/storage/app/media/vishcha-osvita/vstup-2022/11/30/Nakaz.MON-1098.Umovy.pryyomu.VO.2022.pdf The procedure for admission to higher education in 2022 of the Ministry of Educationhttps://mon.gov.ua/storage/app/media/vishcha-osvita/vstup-2022/05.05.2022/Poryadok.pryyomu.VO.392-400.05.05.2022.pdf Rules for admission to higher education at Igor Sikorsky KPI in 2022https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf Recommendations: *It's not necessary*	
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: Recruitment of students to the educational program is carried out on the basis of general university admission rules based on the results of independent external evaluation of graduates of gymnasiums, schools, and lyceums.Independent assessment for admission to the specialty "Applied mechanics" takes place in three disciplines: mathematics and the ukrainian language are mandatory, the third discipline is chosen by the applicant from among those proposed by the Ministry of Education, for example, physics, English. Admissions committee of the universityhttps://pk.kpi.ua/ Rules for admission to higher education at Igor Sikorsky KPI in 2022https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf Recommendations: *It's not necessary*	*Compliance*
3.	The admission is based exclusively on the academic skills of the candidate and no discriminatory criterion is applied. Signing-up for the entrance examination is based only on the baccalaureate degree or other documents of equivalent studies. Findings from the Self-Evaluation Report/ Visit: The recruitment of students is carried out on the basis of the general university admission rules for higher education, which are based on the results of an external independent evaluation conducted by the Ukrainian center for the evaluation of the quality of education. This center is a state institution that carries out external independent evaluation of learning results obtained at a certain educational level and conducts monitoring studies of the quality of education and ensures transparency of selection for training and the absence of any discriminatory criteria. Admissions committee of the universityhttps://pk.kpi.ua/ Rules for admission to higher education at Igor Sikorsky KPI in 2022https://pk.kpi.ua/wp-content/uploads/official-documents/rules.pdf Ukrainian Center for Evaluation of the Quality of Education (External Independent Evaluation)https://testportal.gov.ua/ Recommendations: *It's not necessary*	*Compliance*

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 percentage of first-year students successfully complete the 1st year of study according to the educational program, which is confirmed by orders on transfer to the 2nd year and examination data of the 1st and 2nd sessions, which is presented in the electronic system of the university "Electronic Campus". Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home **Recommendations:** *It's not necessary*	*Compliance*
5.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** It's not necessary **Recommendations:** *It's not necessary*	
	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:** The study program of the educational program is presented in the form of a package of documents: Regulations on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPI; Educational and professional program; Curriculum; Working curriculum; Syllabi; Regulations on the exercise of the right to free choice of academic disciplines by higher education applicants of Igor Sikorsky KPI; Regulations on the dual form of obtaining higher education at Igor Sikorsky KPI; Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPI; Regulations on the individual study plan of a student of Igor Sikorsky KPI; Regulations on academic mobility of Igor Sikorsky KPI (item 7 Procedure for drawing up an individual study plan). Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky	*Compliance*

	KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Regulations on the right to free choice of disciplines by applicants for higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/185https://document.kpi.ua/files/2020_7-136.pdf RegulationsonthedualformofobtaininghighereducationatIgorSikorskyKPIhttps://osvita.kpi.ua/node/168 https://document.kpi.ua/files/2020_7-164.pdf Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HY-268.pdf Regulations on individual learning plan of an applicant for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/117 Regulation on academic mobility at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/124https://document.kpi.ua/files/2021_HOH-303.pdf Recommendations: *It's not necessary*	
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 conditions for scientific and pedagogical workers are set out in the Procedure for competitive selection or selection by competition when filling vacant positions of scientific and pedagogical workers and concluding employment contracts with them. The educational program is developed by the delivery team, taking into account the teaching methods and educational activities designed in such a way as to ensure the achievement of the program results. Teaching methods and educational activities (according to the volume of credits and arrangement of credit modules) are organized according to the structural and logical scheme of the educational program in such a way as to ensure the achievement of the planned results of the program. To take into account the specifics of the program, independent work and the share of laboratory work increase as you approach diploma design.	*Compliance*

	The procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts with themhttps://osvita.kpi.ua/competitionhttps://document.kpi.ua/files/2020_7-65.pdf Recommendations: *It's not necessary*	
3.	The study programme curriculum is approved at institutional level. Findings from the Self-Evaluation Report/ Visit: The educational plan of the educational program is approved by the Scientific Council at the university level, the methodical committee of the faculty and at the meetings of the department and is presented in the Regulation on the organization of the educational process at Igor Sikorsky KPI. Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Recommendations: *It's not necessary*	*Compliance*
4.	The programme curriculum is designed so that the corroborated learning outcomes declared for all the disciplines to ensure the achievement of the programme outcomes. Findings from the Self-Evaluation Report/ Visit: The curriculum of the program is developed in accordance with the structural and logical scheme presented in the educational program in a way that confirms the learning outcomes declared for all disciplines. The list of study components and their amount in ECTS credits of the study program fully corresponds to the list of study disciplines and their amount in ECTS credits in the curriculum.Every semester, at the meetings of the department, the results of the session are discussed and checked in order to identify the results of the educational program and make the necessary changes and additions. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Recommendations: *It's not necessary*	*Compliance*
5.	Based on the content of the fundamental disciplines, the curriculum for the 1st year of study is conceived so that to help and motivate the students for the study of the engineering sciences.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: The content of the fundamental disciplines provided by the curriculum for the 1st year of study (mathematics, physics, materials science, computer science, chemistry, etc.) is coordinated with the practical tasks of using the acquired knowledge in engineering, which is confirmed by the content of the syllabi of the relevant disciplines. Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	
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 curriculum is structured in such a way as to allow graduation within the period (4 years of undergraduate studies) normally assigned to this study cycle. The Legislation of Ukraine does not provide for undergraduate studies during a certain other period of time. Law of Ukraine “On Higher Education”http://zakon4.rada.gov.ua/laws/show/1556-18https://zakon.rada.gov.ua/laws/show/1556-18?lang=en#Text Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Recommendations:	*Compliance*

	It is recommended to allow the application of the European procedures regarding the mobility of students and the mutual recognition of diplomas to adapt the specific periods of the training curriculum to the ARACIS standards.	
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: Applicants of higher education of educational program exercise the right to choose educational components in accordance with the Regulation on the organization of the educational process in Igor Sikorsky KPI, Regulation on the realization of the right to free choice of academic disciplines by students of higher education.The educational components selection procedure includes the following steps. The educational program project group forms a catalog of selective educational components for educational program based on the proposals of scientific and pedagogical staff, acquirers, and stakeholders. Proposals of stakeholders regarding expansion of the list of selective disciplines in the direction of using the latest technology were taken into account by the project group, namely, the “Proportional hydraulic” was proposed by the educational component, the representative of the stakeholders provided a proposal for the educational component "Peculiarities of the design of automated mechanical systems". Energy efficiency assessment sections have been added to individual selective disciplines. In 2021/2022 in accordance with the proposals of the educational program, the catalogue was expanded to 15 positions, the list of elective disciplines was differentiated to the educational program.The catalogue is approved by the Scientific Council of Institute of mechanical engineering and the methodical council of Igor Sikorsky KPI. The catalog of selective educational components with a description of annotations, syllabi of selective educational components are posted on the department's website. Applicants familiarize themselves with the selection procedure, deadlines, and the catalog of selective educational components. The procedure for the selection of academic disciplines precedes the familiarization with the order, terms, features of proposed disciplines. The choice of disciplines by students of the first (bachelor) educational level is carried out at the beginning of the spring semester (selected disciplines will be studied in the next academic year). The selection is made using the catalog and syllabi of selective educational components in the Electronic Campus system. In the electronic cabinet, the applicant chooses the educational components and confirms his choice. Scientific and pedagogical staff, group curator, educational program guarantor provides consulting support. In the event that the acquirer could not, for a valid reason, choose educational component on time or made a mistake, he can write a statement to dean's office to register for the study of the disciplines chosen by him, by submitting the relevant documents.Formation of the individual educational trajectory in Igor Sikorsky KPI is carried out taking into account abilities, interests and motivations of students and it is implemented through individual curricula based on the Regulation on the realization of the right to free choice of academic disciplines by students of higher education. Catalogs of optional disciplines are formed considering the results of related student’s surveys, wishes of employers and other stakeholders. Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-	*Compliance*

	components/optional-professional-component-s Regulations on the right to free choice of disciplines by applicants for higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/185https://document.kpi.ua/files/2020_7-136.pdf RegulationsonthedualformofobtainginghighereducationatIgorSikorskyKPIhttps://osvita.kpi.ua/node/168 , https://document.kpi.ua/files/2020_7-164.pdf Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HY-268.pdf Regulations on individual learning plan of an applicant for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/117 Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPIhttps://osvita.kpi.ua/node/184 Recommendations: *It is recommended to adapt the curriculum so that there are facultative disciplines and not facultative activities, according to ARACIS standards.*	
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 standardsspecific to the Bachelor's field/ study programme. Findings from the Self-Evaluation Report/ Visit: The curriculum of the program consists of fundamental, sectoral, special and additional disciplines, grouped into mandatory, selective and optional disciplines in accordance with the regulatory requirements established at the national level and standards specific to the bachelor's field (curriculum).The disciplines are grouped differently compared to the ARACIS standards, there being no division between field and specialization disciplines. The percentage of compulsory subjects is, relative to the number of credits, 180 ECTS, and the optional ones 60 ECTS, which makes the percentage of compulsory subjects 180/240 = 75%. Within the fundamental disciplines are inserted disciplines which, according to the ARACIS standards, fall under complementary disciplines (Basics of a Healthy Lifestyle, Foreign Language. Part 1, Foreign Language. Part 2, Introduction to Philosophy, Business Law, Economics and Production Organization, Labor Safety and Civil Defence, Foreign Language for Professional Purposes. Part 1, Foreign Language for Professional Purposes. Part 2) or non-existent disciplines within the ARACIS norms (Ukraine in the Context of the Historical Development of Europe, Ukrainian language for Professional Purposes – the equivalent of the national language). There are no facultative disciplines. **KPI Comment:** *Optional disciplines, such as scientific work in student workshops, classes in sports sections, participation in research projects (Lampa, etc.), participation in the Summer School "Mechatronics in Mechanical Engineering" are not regulated in the curriculum, but have an*	*Partial Compliance*

Type of discipline	ARACIS standard	KPI
Obligatory	Maximum 90 %	75 %
Optional	Minimum 10%	25%
Facultative	Minim 10%	0%

appropriate volume in credits. For example, Summer School is 3-4 credits, work in a students workshop for 4 semesters (minimum 3 hours per week) 6 credits. Classes in sports sections (more than 30 sections) are also added. Thus, we have a certain volume of optional classes, not specified in the curriculum. Students have right to attend any optional subjects of the curriculum for free, but only the subjects falling within the scope of 240 credits will be indicated in the diploma.

Disciplinetypes	ARACIS %	KPI %
Fundamental	Minimum 17 %	41,31%
Domain	Minimum 31 %	15,87%
Speciality	Minimum 25 %	22,22%
Complementary	Maximum 8 %	20,6%
TOTAL		100 %

The KPI have not discipline classification in fundamental, domain, speciality and complementary. To evaluate the equivalence, the percentage was estimated following similar discipline or near similar to the ARACIS standard.

Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum

Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”
http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf

Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf

Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf

Recommendations:

The ARMS respects the NAQA standards but does not respect the ARACIS standards related to the percent of the fundamental, domain, speciality, and complementary or facultative disciplines.

The KPI, NAQA and Ukranian regulation does not have such classification as ARACIS has.

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 program's curriculum is designed to meet employers' educational needs, including acquiring practical knowledge and skills. The syllabi of professional disciplines provide for an increased share of laboratory work using industrial equipment, and the subject of course projects and independent work is agreed with the representatives of stakeholders, which is confirmed by the meetings. Also, during their studies, students undergo internships at industrial enterprises of the country. Performance of laboratory work, course and diploma projects is coordinated with representatives of stakeholders and is carried out on the modern material and technical base of the department, which is constantly updated.

Compliance

Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-

	information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf RegulationsonthedualformofobtainginghighereducationatIgorSikorskyKPIhttps://osvita.kpi.ua/node/168, https://document.kpi.ua/files/2020_7-164.pdf Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPIhttps://osvita.kpi.ua/node/184 Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI On-line meeting with employers Recommendations: *It's not necessary*	
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: Disciplines included in the curriculum of the program (by the volume of credits and ordering of credit modules) are organized according to the structural and logical scheme of the educational program, in such a way as to ensure the achievement of the planned results of the program, presented in a logical sequence and weighted by ECTS educational credits. The educational program is designed taking into account the student load of 30 ECTS and no more than 8 disciplines per semester or 60 ECTS per year. Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Recommendations: *It's not necessary*	*Compliance*
11.	The higher education institution disposes of internal mechanisms for the harmonization of the discipline contents and avoidance of their overlapping. Findings from the Self-Evaluation Report/ Visit: The educational and methodological commission of the university is responsible for checking the content of educational programs and the disciplines included in them, thereby preventing their overlapping and ensuring the harmonization of the content of the disciplines. Methodical control over the content of educational disciplines at the level of faculties and graduating departments has also been implemented: • Regulations on the organization of the educational process at Igor Sikorsky KPI;	*Compliance*

	• Regulations on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPI; • The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) in Igor Sikorsky KPI. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HY-268.pdf **Recommendations:** *It's not necessary*	
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:** Curriculum disciplines have syllabi, which present the purpose, the main thematic content, the distribution of the number of hours, seminars, the rating system for evaluating the success of students and other activities by topic, a minimal bibliography, regulated and adequate examination methods.Syllabi are approved at the department meeting and signed by the course lecturer and the head of the department. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HY-268.pdf **Recommendations:** *It's not necessary*	*Compliance*
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:**	*Compliance*

	Each syllabus has a section on the method of mastering the discipline, which prescribes the best way to master the declared learning outcomes. The syllabi of educational disciplines ensure consistency between the declared learning outcomes provided by the discipline, its content and the modality of evaluating the learning outcomes obtained by the student in the form of a rating system of evaluation in the syllabi of the disciplines. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 Recommendations: *It's not necessary*	
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: Formal and informal education resultscan be used in the syllabi of disciplines. A course taken by students outside the university on various educational platforms (Prometeus, Coursera, etc.) can be counted as part of the discipline. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	*Compliance*
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: The nomenclature of disciplines contained in the curriculum and the content of such disciplines specified in the syllabi correspond to theNATIONAL AGENCY FOR HIGHER EDUCATION QUALITY ASSURANCE(NAQA)bachelor's direction "Automated and robotic mechanical	*Partial Compliance*

	systems" and the educational and professional program. Curriculum disciplines cover the entire cycle of objects of professional direction from development, operation, design, maintenance and repair to modernization and research of automated and robotic mechanical systems.The nomenclature of the ARACIS disciplines for the field of Mechatronics and Robotics does not match the nomenclature of the ARMS program. At the subject level, equivalents can be identified, especially for the fundamental disciplines. With regard to the framing of the disciplines, these are oriented more towards the fundamental disciplines, the number of disciplines equivalent at the subject level to those of the field and specialty being below the limits of the ARACIS standard. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Order on the educational and scientific interfaculty center of dual education "Progrestech-Ukraine" Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HY-268.pdf Recommendations: *The ARMS respects the NAQA standards but does not respect the ARACIS standards related to the nomenclature of the disciplines contained in the programme curriculum - https://www.aracis.ro/wp-content/uploads/2023/03/11.-Vol-2-Standarde-ARACIS-Comisia-10-si-11-Stiinte-ingineresti-actualiz-in-28.02.2023.pdf*	
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: The academic year consists of two semesters of 18 weeks each, with 28-30 academic hours per week, depending on the course and semester of study, which are regulated by the Regulations on the organization of the educational process at KPI. During the academic year, a minimum of 8 weeks of vacation is provided, different from ARACIS standard. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS	*Partial Compliance*

	Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Recommendations: *The ARMS respects the NAQA standards but does not respect the ARACIS standards related to the academic year structured on two semesters of 14 weeks on average, with 22-28 classes/week. It is recommended to reduce the number of semester weeks from 18 to 14 and decrease the number of classes/week from 28-30 to 22-28,*	
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: Each semester has 30 ECTS study credits for compulsory subjects (including those that the student chooses from the category optional disciplines) regardless of the form of study, which is reflected in the individual study plan of each student and which is located in the operating system of evaluational office in the electronic system "Electronic Campus" and in printed form (at the department and with the student). Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Regulations on individual learning plan of an applicant for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/117 Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	*Compliance*
18.	The optional disciplines, irrespective of the study semester in which they are provided in the programme curriculum, complete with an examination, and the credit points which are granted are in addition to the 30 credit points of the respective semester. Findings from the Self-Evaluation Report/ Visit:	*Compliance*

	Elective subjects, regardless of the academic semester the program's curriculum provides them, are completed with credit, and the credits received by the student are credited only to the corresponding semester. Students can study subjects at their own expense over the standard number of 240 ECTS, which can be added to the individual study plan. If the student has academic debt, he can make it up the next semester, which is included in the student's study plan. From the elective discipline, students must receive mandatory 60 ECTS to complete 240 ECS. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor's educational programhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-planyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general-information/educational-program-and-curriculum/curriculum *Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf* Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Regulations on the right to free choice of disciplines by applicants for higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/185https://document.kpi.ua/files/2020_7-136.pdf Regulations on individual learning plan of an applicant for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/117 Recommendations: *It's not necessary*	
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 lecture hours and hours of applied didactic activity - seminars, laboratories, projects, practice - corresponds to the standard of specialty 131 "Applied Mechanics", which is reflected in the curricula and is 50/50.The total hours are 3780, 1710 courses, 1368 practice(seminars), 702 labs = 1710/(1368+702)=1710/2070= 0,83 Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS *Curriculum of the bachelor’s educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program-* Workingcurriculumoftheeducationalandprofessionalbachelor'sprogram“AutomatedandRoboticMechanicalSystems”http://Appliedfluidmechanicsandmechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Higher education standard for specialty 131 "Applied mechanics" for the first (bachelor's) level of higher	*Compliance*

	educationhttps://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2019/06/25/131.prikladna.mekhanika-bakalavr-1.pdf Recommendations: *It's not necessary*	
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: For each discipline of the educational program, there is a mandatory semester certification, which can be presented in the form of exams or tests. In accordance with the Regulation on the organization of the educational process, the curriculum provides for 3 exams per semester and tests for all other credit modules. The total number of credit modules does not exceed 10, and the total number of credits per semester does not exceed 30 ECTS.In total are 20 exams, 42 Final test, 57 Module test , 24 CGW,CVV, GW Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS *Curriculum of the bachelor's educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program-* *Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf* Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Provisions on the system of evaluation of learning results in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/37https://document.kpi.ua/files/2020_1-273.pdf Recommendations: *It's not necessary*	*Compliance*
21.	The programme curriculum provides 2-3 weeks of practice per year as of the second year of study, and for the preparation of the graduation thesis in the last year of study. Findings from the Self-Evaluation Report/ Visit: The curriculum of the program provides5 weeks of practice during the study period, which are concentrated in the last semester. The current acquisition of practical skills in the 2nd and 3rd courses is ensured by the use of industrial equipment (provided by stakeholders) in the educational laboratories of the department.According to ARACIS standards, the practice is related to the field, specialization and practice for preparing the diploma thesis. KTI does not have such a division, the total number of hours being below the minimum value of 240 hours of practice. Previously, ARMS had practice in the third year, but it changed the practical activity in recent years by moving it to the last semester. Online Meetings with employers Online Meetings with graduates	*Partial Compliance*

	Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS *Curriculum of the bachelor's educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program-* *Working curriculum of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf* *Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf* Recommendations: ***It is recommended to start the practical stage from the second or third year, divide the practical training into domain and speciality practical stages, and increase the total hours to a minimum of 240.***	
22.	Forthepracticeperiods, thehighereducationinstitutionhasconcludedcollaborationagreements, 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: For practice periods, the university concluded cooperation agreements, contracts with practice units of other enterprises, which provide for: place and period of practice, method of organization and management, responsible operating system of evaluations from the educational institution and practice unit, etc.The basic places of practice are the following enterprises: SE "Antonov", PrJSC "Pharmak", DE "Hanza Flex", LLC "Hydropres", LLC "Progrestech". Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPIhttps://osvita.kpi.ua/node/184 MethodologicalrecommandationsonissuesoforganizationofstudentspracticeandpreparationofworkprogramsofpracticeatIgorSikorskyKPIhttps://kpi.ua/practical_training_period On line meeting with employers. Recommendations: *It's not necessary*	*Compliance*
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 syllabi of the practice credit module have been properly prepared, focused on the acquisition of practical skills by students, which will allow them, after graduation, to ensure the possibility of employment in the labour market. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/fundamental-componentshttp://Applied fluid mechanics and	

	mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s *Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI https://osvita.kpi.ua/node/18470.* Methodological recommendations on issues of organization of students' practice and preparation of work programs of practice at Igor Sikorsky KPI *https://kpi.ua/practical_training_period* Recommendations: *It's not necessary*	
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: Graduation certification is not conducted in the form of an exam, but in the form of a public defense of a diploma project, which fully certifies the assimilation of learning outcomes, meets the qualification requirements (curriculum and educational program). Attestation of applicants can be carried out only in the form of public defense of qualifying work, as such a norm is specified in the Standard of Higher Education of the Ministry of Education and Science of Ukraine, specialty 131 Applied Mechanics.The topic of the diploma project is formed taking into account the wishes and needs of employers and industrial partners of the department. KPI Comment: *The standard of higher school in Ukraine provides the possibility for a student taking a state exam or a public defense of a diploma project. According to our experience, given the applied nature of the educational program, public defense of the diploma project, with the participation of the examination committee and representatives of stakeholders, is more appropriate.* Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/index.php/node/35 *Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf* Standard of Higher Education of the Ministry of Education and Science of Ukraine, speciality 131 Applied Mechanics https://mon.gov.ua/storage/app/media/vishcha-osvita/zatverdzeni%20standarty/2019/06/25/131.prikladna.mekhanika-bakalavr-1.pdf Recommendations: *Adding a written or oral examination regarding the domain and speciality learning outcomes is recommended.*	*Partial Compliance*
25.	Thethemesforthepreparationofthefinalpaper (graduationtheses) containsubjectsproposed by/ developed in collaboration with the industry. Findings from the Self-Evaluation Report/ Visit: The topics for the preparation of the final thesis (diploma project) are formulated in cooperation with representatives of stakeholders from industry and are presented on the website of the department. Topics of diploma projects must be approved at the department meeting. Students have the right to independently choose the topic of the diploma project from the pre-presented list of topics. The number of diploma project topics is greater than the number of students.	*Compliance*

	Online meetings with employers Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/index.php/node/35 Regulations on the Organization of the Educational Process at Igor Sikorsky KPI *https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf* **Recommendations:** ***It's not necessary***	
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:** Education for 4 years takes place according to one curriculum. All possible changes to the curriculum apply exclusively to the following groups. The structure of the curriculum remains unchanged during one study cycle; the curriculum can be changed only from the 1st year of the next academic cycle. Currently, the department offers 4 different curricula for 4 courses. Regulations on the Organization of the Educational Process at Igor Sikorsky KPI *https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf* Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf **Recommendations:** ***It's not necessary***	*Compliance*
27.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. **Findings from the Self-Evaluation Report/ Visit:** It's not necessary **Recommendations:** ***It's not necessary***	
	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:**	*Compliance*

	Meetings and surveys of students, employers and, representatives of the academic sector, industry representatives are held regarding the educational program's adequacy to the labour market's needs. An additional resource for collecting information is provided by the website of the department. Everyone can submit their suggestions and comments on the website page.YuryKravetskyi, head of Department by Antonov State Enterprise, was involved in the development of the educational program. The consultant is the deputy director for technical issues of "Kyiv Institute of Automation" HrabovskyiHeorhiy. Practice managers from enterprises (SE "Antonov", KB "Luch") are invited to the consultations. By at the suggestion of 4th-year students, in particular Ivan Kostyuchenko and DanyloCherevko, the topic of individual tasks in the module "Logical synthesis" was agreed with the development of control systems in diploma projects. A survey of students regarding the appropriateness of the disciplines of the educational program is conducted during pre-diploma practice at enterprises.The program takes into account proposals regarding the need to spread mechatronics tools to other branches of industry. Online Meetings with students Respons fromGoogle Forms of students Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Recommendations: *It's not necessary*	
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: Every year, the educational program is revised by the working group, the department and the methodical commission. The working group includes teachers, representatives of students and stakeholders (in particular, 3 doctors of science, 3 candidates of science, a student, an employer). Based on the results of meetings of the working group with employers, the interest of employers in using specific design and construction tools (SolidWorks, Catia, NX, AnSys, etc.) was revealed. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI On line meeting with employers On line meeting with students Recommendations: *It's not necessary*	*Compliance*

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:** In the first year at the university, the entrance control of knowledge is carried out. In the fourth year, the rector's output control is held. During training, current control and semester control provided by the curriculum are carried out. The control results are compared with the students' current study performance, defense results and the quality of diploma projects. Regulations on current, calendar and semester control of study results at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/32https://document.kpi.ua/files/2020_7-137.pdf The procedure for the complex monitoring of education quality by specializationshttps://kpi.ua/monitoring-lawhttps://kpi.ua/en/monitoring-law **Recommendations:** *It's not necessary*	*Compliance*
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 didactic process is organized using modern technologies and means of communication. Separate components of the educational process (credit modules, practices, laboratory classes, individual and group work, etc.) are coordinated in such a way as to ensure the fulfillment of the mission and goals and the achievement of the results of the educational program. The achievement of results is confirmed by the successful defense of diploma projects, the recommendations of the completed ones projects to be implemented, quality and content of diploma projects. Over the past 5 years, the number of diploma projects with honors is from 5 to 10%, recommended for implementation from 15 to 25%, from 8 to 15% are diplomas completed on topics proposed by stakeholders, 2 - 3 projects are carried out annually on the modernization of the laboratory base and creation of industrial and didactic equipment. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor’s educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 **Recommendations:**	*Compliance*

	It's not necessary	
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 syllabi of the disciplines present the preliminary requirements for the student to choose a certain discipline for study. Non-compliance with the prerequisites of the discipline makes it impossible for the student to study it further. Learning takes place step by step according to the accumulation system, which corresponds to the structural and logical scheme and prerequisites and post-requisites in each syllabus. Additional prerequisites for the accumulation of knowledge and skills have been created at the graduate department, for example, by profiling disciplines into separate segments of the mechanical engineering industry. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s RegulationsonthedualformofobtaininghighereducationatIgorSikorskyKPIhttps://osvita.kpi.ua/node/168 https://document.kpi.ua/files/2020_7-164.pdf Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Recommendations: *It's not necessary*	*Compliance*
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: The results of the implementation of the rating system of evaluation for individual credit modules correlate with the results of the defense of final certification papers, which confirms the adequacy of the used assessment methods and the proper deployment of the process of knowledge accumulation by students of the educational program. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Regulations on the Organization of the Educational Process at Igor Sikorsky KPI *https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf*	*Compliance*

	Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Recommendations: *It's not necessary*	
4.	The achievement of the learning outcomes of the disciplines is adequately assessed. Findings from the Self-Evaluation Report/ Visit: The use of the methodology of the rating system of knowledge evaluation, approved at the university, ensures the adequacy of the evaluation of the learning results for each credit module. The syllabi of each credit module reflect the features of the assessment of acquired knowledge and skills, by taking these features into account in the rating system. Regulations on current, calendar and semester control of study results at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/32https://document.kpi.ua/files/2020_7-137.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	*Compliance*
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: Students are involved in didactic activities and other activities (seminars, performances, competitions, industrial exhibitions, etc.), which motivates them to continue their education through lifelong learning and the desire to maintain an updated level of their knowledge in the chosen field after graduation. Students have broad range of different learning opportunities – including online learning, work-based and self-directed learning, etc. Different forms of preliminary studies, continuing and professional education can be recognized by the Igor Sikorsky KPI as a requirement for the awarding the qualification on educational program Automated and Robotic mechanical systems. According to Regulations on recognition in Igor Sikorsky KPI results of preliminary studies, students can apply for recognition of their learning outcomes gained through lifelong learning in case of changing their educational establishments, getting second educations or getting back from academic leave, etc. During the meeting with the graduates of the study program they confirmed that their student experiences (different conferences, fairs, exhibitions, Olympiads) were crucial in understanding the necessity of continuing their education through lifelong learning to maintain needed level of professional knowledge. Online meetings with graduates Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and	*Compliance*

	mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Regulations on recognition in Igor Sikorsky KPI results of preliminary studieshttps://osvita.kpi.ua/node/181https://document.kpi.ua/2020_7-157 Regulations on recognition learning outcomes acquired in non-formal/informal education at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/179 Recommendations: *It's not necessary*	
6.	The ratio between the number of teachers and the number of students enrolled in the evaluated study programme complies with the provisions of the standards specific to the Bachelor’s field of the programme. To assess the quality, it is considered that a teacher has the primary working hours in a single university. Findings from the Self-Evaluation Report/ Visit: The ratio between the number of teachers and the number of students enrolled in the evaluated educational program corresponds to the provision on the organization of the educational process at KPI – 43/(4x75)= 43/300 = 0,14 . Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf Staff list of the university for 2022https://kpi.ua/2022-stafflist Recommendations: *It's not necessary*	*Compliance*
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: Educational groups – series – maximum 75 students, groups – maximum 25 students, subgroups – maximum 13 students - are calculated in such a way as to ensure the effective deployment of the educational process, which is confirmed by the current composition and number of groups and streams (see Information and telecommunication system "Electronic campus" of groups and streams of the Applied fluid mechanics and mechatronics department). Regulations on the Organization of the Educational Process at Igor Sikorsky KPIhttps://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf	*Compliance*

	Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	
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 timetable of classes in the educational disciplines of the educational program "Automated and Robotic Mechanical Systems" is implemented in accordance with the rules of the internal regulations of KPI and actual National Agency For Higher Education Quality Assurance(NAQA) regulations and Ukrainian legislation on higher education. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor’s educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program- Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf Law of Ukraine “On Higher Education”http://zakon4.rada.gov.ua/laws/show/1556-18https://zakon.rada.gov.ua/laws/show/1556-18?lang=en#Text Recommendations: *It's not necessary*	*Compliance*
9.	The results obtained by the student during years of study are registered in the Academic Record, and they are attested based on the Diploma Supplement. Findings from the Self-Evaluation Report/ Visit: All student learning results are registered in the “Electronic Campus”, to which any student has permanent access. The results obtained by the student during the years of study are registered in the academic certificate and certified on the basis of the Supplement to the diploma. Sample of the appendix to the KPI diplomahttps://pgm.kpi.ua/downloads/bakalavry/2022/diploma-2017-1.pdf Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home *Onsite visit* Recommendations: *It's not necessary*	*Compliance*

10.	The higher education institution has regulated the procedure for the promotion of the student from one year of study into another, depending on the accumulated ECTS study credits, and the procedure of covering two years of study in a single year, in accordance with the legal regulations in force. **Findings from the Self-Evaluation Report/ Visit:** The higher educational institution established the procedure for transferring a student from one course to another, depending on accumulated ECTS study credits, in accordance with current legal norms, and **DOES NOT PROVIDE** for the procedure of covering two years of study in one year. The procedure for covering two years of study in one year **IS NOT PROVIDED** for by the law of Ukraine, “On higher education”. **KPI Comment:** *In Igor Sikorsky KPI such procedure is possible only for students which have previous educational level Junior Bachelor at least. It means such students can cover first 2 years in one year and total duration of study is 3 years. In our chair we haven’t had such type of students.* Provisions on the expulsion, interruption of studies, renewal and transfer of students of higher education in Igor Sikorsky KPI https://osvita.kpi.ua/node/178 https://document.kpi.ua/2020_HOH-39 Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf Law of Ukraine “On Higher Education”http://zakon4.rada.gov.ua/laws/show/1556-18https://zakon.rada.gov.ua/laws/show/1556-18?lang=en#Text **Recommendations:** ***Add a regulation/ procedure of covering two years of study in a single year is recommended.***	*Partial Compliance*
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:** It's not necessary **Recommendations:** ***It's not necessary***	
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:** According to Ukrainian Legislation, contracts between the university and other institutions can be signed by the head of the university. According to such agreements, the department has a sufficient number of places for students to undergo practice.	*Compliance*

	The agreements concluded by the university with state and private organizations and enterprises are sufficient for students' practice (Sigma-engineering, Concern NIKMAS, SE ANTONOV, LLC Hydraulic-line, IrkomEkt, ProgresstechUkraine, LLC Kostal Ukraine, SCB Luch, FARMAK, LLC Soft Engineering, etc.). The profile of the enterprises is adequate in terms of the content of the educational program, the period of practice, the number of students, and management.The material base of enterprises, the qualifications of specialists, and the complexity of projects are sufficient to obtain the planned results of the training program. Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI https://osvita.kpi.ua/node/18470. Methodological recommendations on issues of organization of students' practice and preparation of work programs of practice at Igor Sikorsky KPI https://kpi.ua/practical_training_period On-line meeting with employers Recommendations: *It's not necessary*	
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 has a list of strategic partners from industry, scientific institutions and private enterprises (Institute of Hydromechanics of the National Academy of Sciences, "Kyiv Institute of Automation", SE ANTONOV, etc. The department, under the guidance of its partners, conducts seminars, round tables, excursions and practices for students, meetings at the "Career Fair ". Twice a year, the teachers of the department hold consultations with partners on the relevance of the tasks of the current program, the list and content of disciplines, the topics of diploma and course projects. With the help of partners, the department updates the laboratory base (Concern NIKMAS, LLC Hydraulic- Line, Hydrosila Group, DE FESTO) . Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Career fairhttps://careerfair.kpi.ua/ On-line meeting with employers Recommendations: *It's not necessary*	*Compliance*

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:** The department has partnerships with the Technical University of Gabrovo (Bulgaria), Białystok Polytechnic (Poland), Otto-von-Guericke University of Magdeburg (Germany), University of Applied Sciences in Hof (Germany). The partnership meets the goal of achieving an international level of mobility and ensuring the results of the program. educational program was discussed with the scientific and pedagogical staff of the universities with which the department carries out scientific and technical cooperation in accordance with the current agreements. Thus, the improvement of the educational program took place thanks to the proposals of representatives of the foreign academic community. Students simultaneously study at the Joint Ukrainian-German Center of Mechanical Engineering and participate in the double degree program jointly with the Otto-von-Guericke University of Magdeburg (Germany), students participate in the Erasmus+ academic exchange program and studied for one semester at the Technical University of Applied Sciences in Hof (Germany). Teachers of the department prof. Oleksandr Uzunov and prof. Oleh Levchenko taught professional disciplines at universities in Poland and Germany. Agreements with foreign universitieshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Joint Ukrainian-German Center of Mechanical Engineeringhttps://gfm.kpi.ua/ **Recommendations:** *It's not necessary*	*Compliance*
	B.2 Learning results	
	B.2.1 Pass rate of students and graduates	
1.	For the accreditation of the study programme, the higher education institution should prove as follows: - minimum 51% of the total graduates of each series have passed the Bachelor’s degree examination; - minimum 40% of the graduates of the first series are hired with legal labour contract on positions corresponding to the specialization obtained when graduating. **Findings from the Self-Evaluation Report/ Visit:** According to the results of the defense of certification work (diploma projects) under the educational program "Automated and robotic mechanical systems", the following indicators were obtained for 5 years: from 94% to 100% of the total number of students of each graduation defended a diploma project for a bachelor's degree; 100% of each release is employable. More than 70% of graduates each year continued their studies at the master's level. All other students are employed under an employment contract for positions corresponding to the specialization of the educational program. This is confirmed by the lists of students enrolled in the master's program and the employment lists of graduates. There were no unemployed students for 5 years.	*Compliance*

	Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us Recommendations: *It's not necessary*	
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 an interactive electronic system called Campus, which registers and analyzes students' performance in relation to: • constantly - current learning results; • twice a semester calendar control; • semester study results; • study results for previous years; • dropout rate; • credits earned by students, accumulated during studies; • transfer to the next course; • time to release. Analysis of the results of each type of control is discussed at the department, faculty and university. The monitoring results confirm the effectiveness of the educational process. Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Regulations on current, calendar and semester control of study results at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/32https://document.kpi.ua/files/2020_7-137.pdf The procedure for the complex monitoring of education quality by specializationshttps://kpi.ua/monitoring-lawhttps://kpi.ua/en/monitoring-law Recommendations: *It's not necessary*	*Compliance*
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:	*Compliance*

	The university organizes a survey of graduates and employers regarding the career growth of graduates (Department of professional growth, Socio+ service). The university and the department monitor the careers of graduates according to the procedure developed for this purpose. The university annually provides a detailed report on the demand for graduates of educational programs. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	
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: All students who do not continue their studies in the master's degree are accepted for work within six months after receiving the diploma. They are accepted for positions corresponding to the qualification level of bachelor in applied mechanics. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	*Compliance*
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. Findings from the Self-Evaluation Report/ Visit: At least 70% of the graduates of the last two graduations of the "Automated and robotic mechanical systems" educational program continue their studies at the master's level. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	*Compliance*
4.	The results of the process of monitoring the graduatesemployability, the opinion of the hired graduates and employers with regard to the training during the university studies confirm the value of the obtained qualification, the adequacy of the programme aims and outcomes in relation to the needs of the labour market.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: The results of meetings with employed graduates and their managers at enterprises confirm the quality of the qualification received and the adequacy of the educational program to the needs of the market (SE ANTONOV, LLC Hydraulic Line, LLC Kostal Ukraine, etc.). Reviews of partner companies and stakeholders attest to sufficient training of specialists and an up-to-date profile of the educational program. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us On-line meeting with employers **Recommendations:** *It's not necessary*	
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:** Partner companies (SE "Antonov", SE "Festo", LLC "Progresstech", PrJSC "Pharmak") confirm the value of the qualification obtained, the adequacy of the goals and results of the program, compliance with the needs of the labour market with the evaluated training program in the employment of graduates. An additional confirmation of the relevance of the educational program is the presence of strategic partner enterprises with which cooperation has lasted for more than 10 years. Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners On-line meeting with employers **Recommendations:** *It's not necessary*	*Compliance*
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.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: Monitoring of students' opinion is carried out constantly at the level of the university, faculty and department. Surveys are conducted in order to improve the quality of the educational process and improve all areas of the university's functioning. It’s results are used during management decisions and accreditation examinations. All surveys are anonymous and the answers are confidential. On the university level the majority of surveys are conducted by educational and scientific center of applied sociology “Socioplus”. The range of their polls are quite wide - socio-political surveys, surveys on the quality of education, in the field of intellectual property and gender surveys. Their results are presented in the website of the center. There is a page on the website of the department to highlight the current opinion of students. The content of the page is reviewed at department meetings and taken into account when updating the educational program and syllabi. There is also a "Good KPI/Bad KPI" page in the Telegram channel at the university and faculty level. This is an informal channel for studying the current opinion of students, based on the results of the analysis of the opinion of students, conclusions are quickly drawn and, if necessary, the educational process is corrected. There is a student council bot for expressing student’s dissatisfactions. There is a Bot of the Department of educational work, which summarizes the opinion of students at the university level.Considering studentsanswers during the meeting of the evaluation panel with the students and taking into consideration their replies to the respective Google form, conclusion can be made that Igor Sikorsky KPI has sufficient mechanisms of sounding student’s opinions through various ways and technical means. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_HOH-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student Councilhttps://kpi.ua/web_studradahttps://kpi.ua/en/web_studrada Regulations on student self-governmenthttps://studmisto.kpi.ua/polozhennya_pro_studentske_samovryaduvannya/ Online meetings with students Responses from students on Google forms Recommendations: *It's not necessary*	
2.	The process of monitoring the opinion of the students is adequate with regard to the relevance of the collected information, rate of reply and improvement measures (identified and implemented). Findings from the Self-Evaluation Report/ Visit: Every semester there is a survey of students in the electronic campus regarding their satisfaction with the educational process. The survey covers many questions, such as the current state of education and satisfaction with all components of the educational process (Campus). In particular, the survey contains questions about the infrastructure of the university and the services provided by the university. For example, the campus has a "Teacher through the eyes of students" section, information of which is constantly processed. Student requests on the department's website are reviewed at department meetings. The results of the surveys are taken into account by the administration of the university, faculty and department within the established terms.Monitoring of students' opinions at the faculty level is ensured through the Bot of the Mechanical Engineering Institute. The response period is limited to two days. The Department of educational work of the university	*Compliance*

	provides answers to questions within one day.Students are in constant contact with curators of academic groups and student curators, such issues are resolved in order of priority.In general, up to 50% of students are active at various levels in monitoring their opinion.The monitoring process is relevant because it is analyzed every semester, and answers to current questions can be provided within the next day.The survey's results are processed in an efficient manner which allows them to be used promptly and in a way that allows them to remain their relevancy. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student and stakeholder survey form on the department's websitehttps://docs.google.com/forms/d/e/1FAIpQLSfRH-FpdWmUfIHUJxkfxMg79-cPhwkUzzLzsqnFfogMmO0u4w/viewform Recommendations: *It's not necessary*	
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: More than 70% of students after defending their bachelor's diploma continue their studies in the master's program in the field of "Automated and robotic mechanical systems", which is quite telling and speaks of high levels of efficiency of the educational process. According to the survey on the quality of educational process through the eyes of the students during 2021-2022 study year, we can see that more than 87% of respondents are satisfied with the quality of their education, more than 84% regard getting useful practical skills during their education, 75% – 79% believe that the number and quality of necessary laboratory equipment, special software and modern computers are sufficient. Such results of monitoring students' opinions are regularly analyzed at department meetings and methodical seminars. According to the analysis of this results, changes are made to the educational program and syllabi of disciplines every year. The results of students' assessment of the learning and development environment at the university are highlighted in Socio+ polls. The website of the department also has a page for open communication with students and anyone interested. This page is a means of ongoing monitoring of student opinion. The results of students' survey were generally confirmed during the meeting of the evaluation panel with the students, where they spoke of their satisfaction with the educational process, curriculum, equipment and university infrastructure. Online meetings with students Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student and stakeholder survey form on the department's websitehttps://docs.google.com/forms/d/e/1FAIpQLSfRH-FpdWmUfIHUJxkfxMg79-cPhwkUzzLzsqnFfogMmO0u4w/viewform	*Compliance*

	Survey on the quality of educational process through the eyes of the students during 2021-2022 study yearhttp://socioplus.kpi.ua/wp-content/uploads/2022/12/zvit-vsi-op-2021-2022-2.pdf Recommendations: *It's not necessary*	
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: Through student surveys, it is established that teaching methods are adequate for students to achieve learning outcomes, including transversal skills. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student and stakeholder survey form on the department's websitehttps://docs.google.com/forms/d/e/1FAIpQLSfRH-FpdWmUflHUJxkfxMg79-cPhwkUzzLzsqnFfogMmO0u4w/viewform Recommendations: *It's not necessary*	*Compliance*
2.	The teacher – student relationship is of partnership, each of them being responsible for obtaining the learning outcomes. The learning outcomes are explained and discussed with the students from the perspective of their relevance for their development. Findings from the Self-Evaluation Report/ Visit: There are two students in the educational program development group for the educational program in 2022 – 2023 study year, one current and one graduate, which helps in getting two different perspectives for the program. They participate in the discussion of the educational program, have a right to add suggestions and are direct representatives of the student body. Recommendations of students, especially of the final year, are taken into account when adjusting the content of the syllabi of disciplines. In addition, during internships and completion of course and diploma projects, students check the sufficiency of the obtained learning results for obtaining competencies and make their suggestions. Teachers, at the end of each semester, organize an informal survey regarding directions for improving the content and teaching methods of disciplines. The educational program and syllabuses are updated annually in accordance with Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPI. At the same time, the opinions of students are listened to regarding the content of the educational program, its compliance with practical needs and the prospects of shaping individual learning trajectories.The answers to the question about proposed changes to the discipline or the education programme made by students, which were received by the evaluation panel, allow to make a conclusion that only a part of student’s body ever take interest in showing their perspective on the obtaining learning outcomes. And that perspective mostly relates to changes in specific educational disciplines or their parts. So, the evaluation panel recommends to the educational institution to pursue more targeted politic of student’s involvement in discussions of educational program. For example, in a	*Compliance*

	form of students panels where the student members of the development group for the educational program can share with the others information about changes already made or in the making yet. Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student and stakeholder survey form on the department's websitehttps://docs.google.com/forms/d/e/1FAIpQLSfRH-FpdWmUflHUJxkfxMg79-cPhwkUzzLzsqnFfogMmO0u4w/viewform Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Online meetings with students Respons of the students on Google forms **Recommendations:** *It's not necessary*	
3.	The teaching-learning process considers both face-to-face didactic activities and individual study. **Findings from the Self-Evaluation Report/ Visit:** According to the curriculum, about 50% of the time is allocated for independent work of students. Another 50% falls on the didactic process and classroom types of learning.Individual training includes performance of calculation and graphic works, course projects (all on individual tasks), work in scientific groups and circles, performance of search works. Given the remote system, training takes place asynchronously through various means of communication (ZOOM, Sikorsky Distance, etc.).Students receive individual consultations and additional individual tasks, which reduce the influence of martial law circumstances on the course of the educational process. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_ОППБ_АРМС Curriculum of the bachelor’s educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program- Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulations https://osvita.kpi.ua/node/39 https://document.kpi.ua/files/2020_7-124.pdf **Recommendations:** *It's not necessary*	*Compliance*

4.	Teachers use the resources of the new technologies (e.g. email, personal webpage/e-learning platform for themes, bibliography, resources in electronic format and dialogue with the students) and auxiliary materials, from the blackboard to flipchart and video projector etc. Findings from the Self-Evaluation Report/ Visit: The university operates two interactive distance learning platforms – “Campus” and “Sikorsky Distance”. Sufficient resources for communication and discussion dialogue with students in electronic format are concentrated on these platforms. Access to literary sources is provided by the electronic catalog in the electronic library. Laboratories and classrooms of the department are equipped with auxiliary didactic tools. Teaching aids (tablets, projectors, magnetic boards and applications, simulators of devices and systems, visualization models of fluid flow in devices, etc.). Taking into account the distance form of education, virtual laboratory classes and work with simulators of technical objects acquire special importance. Material and technical support of Igor Sikorsky KPIhttps://www.youtube.com/watch?v=LCWjAXyO5JQ Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	*Compliance*
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: To form the competencies of the educational program, teachers combine various pedagogical methods. The methods used by the teacher are indicated in the syllabuses and are focused around the solution of various types of problems for the object of professional activity. For example, within the framework of the discipline "Fundamentals of hydraulic automation", the following types of training sessions are planned: lectures, laboratory-practical sessions, independent work, work on individual tasks. The methods of practical classes can be attributed to the reproductive method. Explanatory-illustrative method and informative-receptive method are typical for lectures and consultations.Performing laboratory work involves teamwork and relies on discussion and research methods. All methods applied in the discipline are grouped around: the principles of structure and principles of operation of hydropneumatic automation systems, the structure of hydraulic automation and mechatronics devices, research on the connection of characteristics with device parameters.According to the survey on the quality of educational process through the eyes of the students during 2021-2022 study year, students do note that teachers use the variety of	*Compliance*

	pedagogical methods that enhance their communication and management skills, critical thinking, ability to multitask, etc.Although not every syllabus has its methods of learning listed, some has just general information about the content of the discipline, training materials, types of control and rating system for evaluation of the learning outcomes.So the evaluation panel recommends adding a list of pedagogical methods used to every syllabus.Also during the meeting with the graduates of the study programme suggestions were made for including more group projects as a separate method of assessment to the disciplines of the curriculum. Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Material and technical support of Igor Sikorsky KPIhttps://www.youtube.com/watch?v=LCWjAXyO5JQ Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Survey on the quality of educational process through the eyes of the students during 2021-2022 study year http://socioplus.kpi.ua/wp-content/uploads/2022/12/zvit-vsi-op-2021-2022-2.pdf Recommendations: *It's not necessary*	
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: The procedures for recognizing the results of studies in other educational institutions and the procedures for completing studies are regulated by the Regulations of the Igor Sikorsky KPI, including mobility/practice of students and formal and informal education. All regulations are aimed at ensuring the full implementation of the educational program, for which the relevant procedures are provided. Recognition of learning outcomes can be based on Regulation on academic mobility at Igor Sikorsky KPI, Regulations on recognition in Igor Sikorsky KPI results of preliminary studies or Regulations on double degree programs at Igor Sikorsky KPI, depending on the types of academic mobility taken. Igor Sikorsky KPI has an Academic mobility office which has up-to-date information about different international programs, available for the students, contacts of mobility coordinators, important information for students who already partake or just planning to take part in the academic mobility programs. All this information is available online on the official site of the university. University also has the double degree program - a program of academic mobility at a certain higher education level, according to which the educational process is implemented simultaneously in University and in foreign institution of higher education according to the agreededucational program, which allows to obtain two diplomas. Recognition of the results of studies received at the Igor Sikorsky KPI is carried out by the Recognition Commission of the graduating department, with the involvement of the Program Coordinator, taking into account the Regulations on recognition of the results of studies at the KPI and documents on learning outcomes provided by partner institution each term. Educational disciplines (educational	*Compliance*

	components) studied at the partner educational establishment outside the double degree program may be included in the University diploma supplement. Regulation on academic mobility at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/124https://document.kpi.ua/files/2021_HOH-303.pdf Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI https://osvita.kpi.ua/node/184 Regulations on recognition in Igor Sikorsky KPI results of preliminary studieshttps://osvita.kpi.ua/node/181https://document.kpi.ua/2020_7-157 Regulations on double degree programs at Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HOH-199.pdf Regulations on recognition learning outcomes acquired in non-formal/informal education at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/179 All-Ukrainian Student Olympiad "Mechatronics in Mechanical Engineering"http://Applied fluid mechanics and mechatronics.kpi.ua/uk/features/2013-01-31-07-20-51/mekhanotronika-v-mashynobuduvannihttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/facultative-professional-component-s/student-olympics/item/413-vseukrajinska-studentska-olimpiada-mekhanotronika-v-mashinobuduvanni Recommendations: *It's not necessary*	
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: The teachers of the Applied fluid mechanics and mechatronics department have spare rooms (299-2, 299-3, 07-1, 132-1) available for consultations and for student work. Teachers and support staff adjust and monitor the use of the premises at the request of students. For example, the work of creative student groups and the performance of research group works. *Onsite visit* Material and technical support of Igor Sikorsky KPIhttps://www.youtube.com/watch?v=LCWjAXyO5JQ Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky	*Compliance*

	http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Recommendations: *It's not necessary*	
	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: Starting from the third year, students participate in the scientific works of the department, join scientific workshops, take part in the Summer School "Mechatronics in Mechanical Engineering", take part in the organization, conducting and competitions of the All-Ukrainian Student Olympiad "Mechatronics in Mechanical Engineering". This Olympiad has form of team competitions in four rounds with final competitions. The Applied fluid mechanics and mechatronics department is the founder of the scientific school "Hydroaeromechanics and Mechatronics", known both in Ukraine and abroad. Scientific developments of the department cover various fields from aircraft construction to ecology, from medicine to water purification. The scientific work of the department is included in the strategic plan of the university and the faculty in the direction of "Creation of highly efficient, environmentally friendly, energy- and resource-saving technologies and equipment in mechanical engineering, chemical, light, oil refining industry, building materials industry, development of object-oriented systems of structural and technological modeling and ensuring the quality and reliability of advanced technology". This school is officially registered.The scientific development plan of the department of Applied fluid mechanics and mechatronics is included in the strategic development plan of the university and the faculty. This confirms the adopted and approved development plan of the educational and scientific mechanical engineering institute. *Onsite visit* All-Ukrainian Student Olympiad "Mechatronics in Mechanical Engineering"http://Applied fluid mechanics and mechatronics.kpi.ua/uk/features/2013-01-31-07-20-51/mekhanotronika-v-mashynobuduvannihttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/facultative-professional-component-s/student-olympics/item/413-vseukrajinska-studentska-olimpiada-mekhanotronika-v-mashinobuduvanni List of the most important directions of fundamental and applied scientific researcheshttps://kpi.ua/researchhttps://kpi.ua/en/research Science Schools at Igor SikorskyKPIhttps://science.kpi.ua/sc-sch/ https://science.kpi.ua/en/sc-sch/ The strategy of development of the National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute” 2020-2025https://osvita.kpi.ua/node/116https://kpi.ua/en/strategy Recommendations: *It's not necessary*	*Compliance*
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.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: During the educational process, applicants are involved in scientific research of the department in the direction of the scientific school "Hydroaeromechanics and Mechatronics".Research is carried out on commercial and initiative topics and on the topic of research by managers, for example: Applied problems of hydroaeromechanics and mechatronics. State registration number: 0116U006237; Basis for carrying out works: 43 - own initiative; from 12- 05-2016; research topic under state order No. 2038p "Creation of highly efficient executive devices for adaptive automation systems with open architecture" (participated students: Y. Karaschuk, C. Antonov, V. Zhila, G. Sytniuk, N. Dyakonova, A. Kosmyna and E. Dudka. List of the most important directions of fundamental and applied scientific researches https://kpi.ua/researchhttps://kpi.ua/en/research Science Schools at Igor SikorskyKPI https://science.kpi.ua/sc-sch/ https://science.kpi.ua/en/sc-sch/ **Recommendations:** *It's not necessary*	
	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:** Research activity has sufficient financial resources, which are formed from state funding and orders from enterprises. In particular, the department conducts self-supporting work on certification tests of hydraulic and pneumatic components of vehicles as part of the " Nadiinist'" research center. These studies are aimed at improving efficiency and environmental friendliness of hydraulic and pneumatic devices. Research No. 2038 "Creation of highly efficient executive devices for adaptive automation systems with open architecture" was carried out by state order, which considered the creation of automated objects with a modular structure and combining physically heterogeneous devices. Centre of research and experiments“Nadiinist’”https://kpi.ua/ri_reliability https://kpi.ua/en/ri_reliabilityhttp://nvc.kpi.ua/ Science and Research Department of Igor SikorskyKPI https://science.kpi.ua/ndch/ https://science.kpi.ua/en/ndch/ **Recommendations:** *It's not necessary*	*Compliance*
2.	The research disposes of sufficient logistic resources in order to meet the proposed goals. **Findings from the Self-Evaluation Report/ Visit:** Research laboratories of the Applied fluid mechanics and mechatronics department are equipped with research stands with industrial samples provided by stakeholders for conducting research. Laboratories have sufficient material and technical resources, equipment and consumables to achieve the intended goals. For example, the laboratory of compressor machines contains 2 industrial compressors developed by the NICMAS concern, equipped with control and measuring devices and an automated system of control and registration of indicators. Material and technical support of Igor Sikorsky KPIhttps://www.youtube.com/watch?v=LCWjAXyO5JQ Material and technical support of department of Fluid Mechanics and Mechatronicshttps://Applied fluid	*Compliance*

	mechanics and mechatronics.kpi.ua/downloads/programs/lab-tabl.pdfhttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/lab.pdf Scientific and technical library of theuniversityhttps://www.library.kpi.ua/ https://www.library.kpi.ua/en/ Recommendations: *It's not necessary*	
3.	The research disposes of sufficient human resources in order to meet the proposed goals. Findings from the Self-Evaluation Report/ Visit: The research staff of the Applied fluid mechanics and mechatronics department has sufficient human resources to achieve the proposed goals. The department employs 6 doctors of technical sciences, 13 candidates of technical sciences, 6 post-graduate students, including from abroad, a group of 7 specialists of educational and support staff. Research topics and dissertation topics correspond to the directions of the scientific school "Hydroaeromechanics and Mechatronics". Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Table of quality indicators of the teaching staff of the department of Fluid Mechanics and Mechatronicshttps://pgm.kpi.ua/downloads/bakalavry/2022/Tabl-jakosti.pdf Recommendations: *It's not necessary*	*Compliance*
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: All teachers of the department conduct scientific research on the subjects of the disciplines they teach. The necessary number and specialization of publications is part of the annex to the contract when a teacher is applying for a job at a university. Every year, teachers contribute their achievements to the rating system, which determines their suitability for the position they hold. Scientific and research work is a mandatory group in the performance indicators of a teacher. The indicators include: publications in specialized scientific journals, scientific articles, reports presented at conferences, monographs, participation in seminars in Ukraine and abroad, examination of scientific works and dissertations, consultations with representatives of industry etc.A significant part of the 1,500 hours of the total workload falls on scientific activity, since the teaching workload does not exceed 600 hours per year. For exceeding the required indicators, there is a system of incentives and bonuses for articles in publications included in Scopus or WoS, for the best monographs, for the best textbooks, etc.	*Compliance*

	The procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts with themhttps://osvita.kpi.ua/competitionhttps://document.kpi.ua/files/2020_7-65.pdf Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Regulations on the rating of scientific and pedagogical workers of Igor Sikorsky KPIhttps://osvita.kpi.ua/node/30 Table of quality indicators of the teaching staff of the department of Fluid Mechanics and Mechatronicshttps://pgm.kpi.ua/downloads/bakalavry/2022/Tabl-jakosti.pdf Recommendations: *It's not necessary*	
2.	Every teacher has at least one annual publication or didactic or scientific achievement. Findings from the Self-Evaluation Report/ Visit: According to the procedure for the selection of teachers and according to the "License conditions" of conducting educational activities, each teacher of the department has more than one annual publication and didactic or scientific work. These indicators are mandatory for the competition for the position of a university teacher in accordance with the Regulations on elections. In the appendix to the teacher's contract and in the individual plans of teachers, there are mandatory indicators regarding scientific activity, which indicate the number and level of publications. The generalization of scientific indicators is reflected in the ratings of teachers, which are approved at the meetings of the department. The procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts with themhttps://osvita.kpi.ua/competitionhttps://document.kpi.ua/files/2020_7-65.pdf Teaching staff of the department of Fluid Mechanics and Mechatronicshttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/lektsii/pro-kafedru/vykladach-skladhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/about-department/vykladach-sklad Regulations on the rating of scientific and pedagogical workers of Igor Sikorsky KPIhttps://osvita.kpi.ua/node/30 Table of quality indicators of the teaching staff of the department of Fluid Mechanics and Mechatronicshttps://pgm.kpi.ua/downloads/bakalavry/2022/Tabl-jakosti.pdf Recommendations: *It's not necessary*	*Compliance*
3.	The students are supported and stimulated to carry out research activities, they are involved in research projects, and they are financially supported to participate in national and international scientific conferences / symposiums. Findings from the Self-Evaluation Report/ Visit:	*Compliance*

	Participation of students in scientific research begins from the 3rd year. Scientific reports and articles are mandatory for admission to the master's program. To attract students to research, the department has scientific student groups, a summer school for "Mechatronics in Mechanical Engineering", the all-ukrainian student olympiad "Mechatronics in mechanical engineering" (more than 20 teams from 18 universities participate), an incubator for scientists at the "Sikorsky Challenge" competition, scientific conference of young scientists. Students have the right to take part in seminars and international conferences free of charge, and to publish articles in professional journals, such as "Applied mechanics", for free. The Applied fluid mechanics and mechatronics department supports students and stimulates them in scientific activity, involves them in research projects, academic mobility with participation in foreign projects, including double graduation, supports participation in all-ukrainian and international scientific conferences. Workshops Olympiads. Projects (extracurricular process)https://kpi.ua/vorshttps://kpi.ua/en/vorshttps://dnvr.kpi.ua/2020/10/17/%F0%9F%93%9C-%D0%BA%D0%BE%D1%80%D0%BE%D1%82%D0%BA%D0%BE-%D0%BF%D1%80%D0%BE-%D0%B3%D0%BE%D0%BB%D0%BE%D0%B2%D0%BD%D0%B5-%D0%B3%D1%83%D1%80%D1%82%D0%BA%D0%B8-%D0%BA%D0%BF%D1%96-%D1%96%D0%BC-%D1%96/ Conference of young scientists at Igor Sikorsky KPIhttps://kpi.ua/young-conference All-Ukrainian Innovation Ecosystem «Sikorsky Challenge Ukraine»https://kpi.ua/sikorsky-challengehttps://www.sikorskychallenge.com/https://www.sikorskychallenge.com/english/ Recommendations: *It's not necessary*	
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 institute of mechanical engineering regularly organizes scientific seminars with teachers, scientists, students and post-graduate students (reports of graduate students and doctoral students based on theses materials, reports of stakeholders on innovative projects), conferences (international conference since 1994: "Hydroaeromechanics in engineering practice"), a conference of young scientists: Youth innovations in mechanical engineering, round tables with the participation of representatives of business and industry (Director of UNDIM V. Adamchuk, Deputy Director of "Kyiv Institute of Automation" H. Grabovskyi), research results and reports are published in collections of scientific works (Mechanics and advanced technologies, ISSN 2305-9001, e-ISSN 2409-5966, Bulletin of the national technical university "KhPI". Series: Hydraulic machines and hydraulic units ISSN 2411-3441). For example, students of N. Dyakonova, A. Kosmina carried out and published the results of research "Hydraulic drive with elastic-hydraulic liquid dosing" / O. Gubarev, O. Hanpantsurova, N. Dyakonova, A. Kosmina. // Bulletin of NTU "KhPI". Series: Hydraulic machines and hydraulic units. - Kharkiv: NTU "KhPI", 2018. - No. 46(1216). – 39-43 pp. – ISSN 2411-3441., student D. Pyltai published the results of research on the mobile hydraulic drive "Garbage cleaning mobile machine" / A. Murashchenko, D. Pyltai // Journal "Innovations of youth in mechanical engineering". – Kyiv, 2020 (ISSN 2708-3926), student E. Slupsky conducted research and published the results of "Modeling of a steam ejector of a dust preparation system / E. Slupskyi, O. Koval // Youth innovations in mechanical	*Compliance*

	engineering (Youth innovations in mechanical engineering): Collection of works of the International scientific and technical conference of young scientists and students / Y. Danylchenko – Kyiv: Igor Sikorsky KPI, 2021. – No. 3. – 460 p., – P.336-339.The department founded an Autumn school for high school students, which guides applicants to research work after entering the university. Workshops Olympiads. Projects (extracurricular process)https://kpi.ua/vorshttps://kpi.ua/en/vorshttps://dnvr.kpi.ua/2020/10/17/%F0%9F%93%9C-%D0%BA%D0%BE%D1%80%D0%BE%D1%82%D0%BA%D0%BE-%D0%BF%D1%80%D0%BE-%D0%B3%D0%BE%D0%BB%D0%BE%D0%B2%D0%BD%D0%B5-%D0%B3%D1%83%D1%80%D1%82%D0%BA%D0%B8-%D0%BA%D0%BF%D1%96-%D1%96%D0%BC-%D1%96/ Conference of young scientists at Igor Sikorsky KPIhttps://kpi.ua/young-conference All-Ukrainian Innovation Ecosystem «Sikorsky Challenge Ukraine»https://kpi.ua/sikorsky-challengehttps://www.sikorskychallenge.com/https://www.sikorskychallenge.com/english/ Recommendations: *It's not necessary*	
5.	*Other requirements provided in the standards specific to the Bachelor's field/ study program*. Findings from the Self-Evaluation Report/ Visit: It's not necessary Recommendations: *It's not necessary*	
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: The all-university system of quality assurance applies to all educational programs. The administration and teachers constantly monitor the quality of the educational process and review educational programs and syllabi annually. This is regulated by the Regulation on the organization of the educational process and the Regulation on the development, approval, monitoring and revision of educational programs. The university has a Center for ensuring the quality of education, which works in accordance with the provisions of the National Agency for the Quality of Higher Education, a department for verification and control of educational programs, which works on an integrated basis, and relevant methodical units at the faculties. At the level of the department, which coordinates training, there is a commission for evaluation and quality assurance of the educational program.There is a system and schedule for checking the quality of education (Protocol No. 5 dated September 10, 2022). The department regularly analyzes the results of the current control (2 times per semester). Students with low current indicators are identified, the reasons for slow learning are studied, and options for improving the quality of education are offered. For example, in connection with the martial	*Compliance*

	law, there is an irregular work of students. Additional lectures and consultations, an extended list of tasks for independent work are organized for them.After the end of the session, the department analyzes the results and, if necessary, adjusts the syllabi of disciplines and the topics of individual assignments.After the defense of diploma projects, the department analyzes the results and, in cooperation with stakeholders, forms directions for improving the quality of education, specifies the topics of the projects. Once a year, the results of the rating of teachers, the improvement of their qualifications and the validity of their appointment are analyzed.A study program support group is constantly working at the department. It monitors student appeals, cooperation with stakeholders, control results. The support group presents its proposals at the department meeting and brings them up for discussion. If the proposals are approved, changes are made to the educational program when it is updated. The schedule for updating educational programs is regulated by the relevant provision, which coordinates the application. Regulations on the Organization of the Educational Process at Igor Sikorsky KPI https://kpi.ua/regulationshttps://osvita.kpi.ua/node/39https://document.kpi.ua/files/2020_7-124.pdf Regulations on the internal quality assurance system in higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/121https://document.kpi.ua/files/2020_7-165.pdf Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf Recommendations: *It's not necessary*	
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: Ensuring the quality of the educational process takes place with the cooperation of students, teachers, stakeholders and the university administration, which corresponds to the policy and strategy of ensuring the quality of education at the university. Polling of students' opinion is carried out constantly through a page on the website of the department, the Campus, the Faculty's BOTs and other communication networks. Cooperation with stakeholders is regulated by the schedule approved by the department. Meetings with representatives of stakeholders and employers take place twice a year, at the end of the semester. Stakeholder representatives are invited to defend diploma projects. Teachers update subject programs based on the results of professional development and stakeholder recommendations. Operational coordination of the educational process between students and teachers is provided by group curators, an educational engineer and a deputy dean of educational work. Regulations on the internal quality assurance system in higher education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/121https://document.kpi.ua/files/2020_7-165.pdf Regulations on improving the qualifications of pedagogical and scientific-pedagogical workershttps://osvita.kpi.ua/node/714 Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI	*Compliance*

	List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Recommendations: *It's not necessary*	
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 head of the education quality assurance department, O. Zhuchenko, reports to the university's Scientific Council on the work of the quality assurance system and the results achieved. The report takes place in January or February and is based on the results provided by the participants of the educational process and units of the quality assurance system at the university. The report examines trends in the educational process, weak and positive positions in quality assurance, and the report is made public. The procedure for the complex monitoring of education quality by specializationshttps://kpi.ua/monitoring-lawhttps://kpi.ua/en/monitoring-law Decisions of the Scientific Council of Igor Sikorsky KPIhttps://rada.kpi.ua/taxonomy/term/13 Recommendations: *It's not necessary*	*Compliance*
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 university-wide system of quality assurance applies to all educational programs. The university constantly monitors the implementation of educational programs and ensures the quality of the educational process. Educational programs are reviewed and adjusted regularly, once a year.There is a system and schedule for checking the quality of education according to educational programs (Protocol No. 5 dated September 10, 2022).The department, in cooperation with the faculty, regularly analyzes the results of the current monitoring (2 times per semester). After the end of the session, the department analyzes the results and, if necessary, adjusts the syllabi of disciplines and the topics of individual assignments. After the defense of diploma projects, the department analyzes the results and, in cooperation with stakeholders and the administration of the faculty, forms directions for improving the quality of education. For example, consultations with students and stakeholders from among employers are taken into account in the annual update of the list and content of optional disciplines, which contributes to bringing the content of the educational process closer to the needs of employers and is a confirmation of the improvement of the quality of the educational process. The schedule for updating educational programs is regulated by the relevant provision. Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky	*Compliance*

	KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Recommendations: *It's not necessary*	
	C.2Procedures 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: The university has developed and applies regulations on the initiation, approval, monitoring and periodic review of educational programs. For example, the system and schedule for checking the quality of education according to educational programs were recently approved (Protocol No. 5 dated September 10, 2022). Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Department of educational process qualityhttps://kpi.ua/about-diaophttps://osvita.kpi.ua/diaop https://kpi.ua/en/about-diaop Recommendations: *It's not necessary*	*Compliance*
2.	The study programme is periodically reviewed in terms of objectives and labour market need, teaching and learning process, resources, outcomes and management system, to guarantee their continuing relevance and effectiveness. Findings from the Self-Evaluation Report/ Visit: Educational program is reviewed annually in the winter. It takes into account the results of diploma defenses, session results, practice results, employment results, student survey results, and cooperation with stakeholders. This ensures that the goals of the program are brought closer to the needs of the labor market, features of teaching, technical resources, and organization of the process. Adjusting the educational program is a tool for ensuring its relevance and effectiveness. The program was last reviewed in 2022. Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf	*Compliance*

	Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Recommendations: *It's not necessary*	
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: At the Applied fluid mechanics and mechatronics department, the process of periodic review of the curriculum takes into account cooperation with all participants in the educational process: • the interest of the representatives of the labour market in the training program and their satisfaction with the training results are presented in the protocols of the meetings of the employer enterprises and letters of orders for the employment of specialists; • the interest of stakeholders and practicing partners in the educational program and the effectiveness of student learning are confirmed by the reviews of practicing partners and stakeholders; • the results of monitoring students' opinions about the educational process. In particular, the recommendations of the Gdańsk Polytechnic, the Kyiv Institute of Automation, the State Enterprise "Antonov", the suggestions of students regarding the arrangement of laboratory and lecture classes were taken into account. According to the Monitoring the satisfaction of employers with the graduates of Igor Sikorsky KPI in 2022, the percentage of stakeholders interested in participating in the periodic review of the educational program increased from 10% in 2018 to 72.2% in 2021. At the same time student’s responses to the Google form sent to them show us that answers about proposing changes to the educational programare in general divided by three – one third points to not even having any knowledge of such a possibility, the other notes their indifference to the procedure. The last part of the answerspoints students making a suggestion about one particular educational component, that was analyzed and accepted. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI	*Compliance*

	Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-nauky http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Regulation on the development, approval, monitoring and revision of educational programs at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/137https://document.kpi.ua/files/2020_7-70.pdf Survey on the Monitoring the satisfaction of employers with the graduates of Igor Sikorsky KPI in 2022http://socioplus.kpi.ua/wp-content/uploads/2022/12/oczinky-yakosti-osvity-ochyma-robotodavcziv_2021.pdf Recommendations: *It's not necessary*	
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: University conducts an internal self-analysis of all educational programs every year. The results of the self-analysis are considered by the methodological commission of the university and approved by the Scientific Council of the university.For example, the system and schedule of conducting self-analysis according to educational programs and the procedure and indicators of self- evaluation were recently approved (Protocol No. 6 dated October 3, 2022).The self-analysis takes into account indicators of the educational process, teaching staff, material base, scientific work, methodical work, organizational work, financing, publication, work with stakeholders, etc. Law of Ukraine “On Higher Education”http://zakon4.rada.gov.ua/laws/show/1556-18https://zakon.rada.gov.ua/laws/show/1556-18?lang=en#Text Department of educational process qualityhttps://kpi.ua/about-diaophttps://osvita.kpi.ua/diaop https://kpi.ua/en/about-diaop Recommendations: *It's not necessary*	*Compliance*
	C.3 Objective and transparent procedures for the evaluation of the learning outcomes	
1.	The higher education institution has a regulation regarding the examination and grading students, which is rigorously and consistently applied. Findings from the Self-Evaluation Report/ Visit: University has a regulation approved by the Scientific Council on the system of evaluation of study results and its application. This system is a methodical basis for the development of rating systems of evaluation for each discipline and credit module, and evaluation of individual components (individual tasks, laboratory works, seminars, etc.). Some credit modules have a special structure, which is reflected in the	*Compliance*

	evaluation system, for example, the credit module of the pre-diploma practice. For such credit modules, there are additional methodological recommendations at the faculty and department level. These recommendations take into account the peculiarities of educational programs and specialties. Provisions on the system of evaluation of learning results in Igor Sikorsky KPI *https://osvita.kpi.ua/node/37* *https://document.kpi.ua/files/2020_1-273.pdf* Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/47 Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	
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: As a rule, the student is given the exam or test by a lecturer and a teacher who conducts practical or laboratory classes. The assessment methods and criteria outlined in the syllabuses are adapted to the content and direction of each discipline. For example, in the disciplines aimed at the development of control systems, a different element base and different control algorithms must be taken into account. This contributes to the creative and critical thinking of the acquirer. All exam tasks are there are operating system of evaluationnalized and include both theoretical and methodical questions, as well as an individual practical task, sometimes with its verification on the equipment. The number of tasks exceeds the number of students in the group by 2. Also, additional points are provided for the creative performance of laboratory work on the development of control systems. Provisions on the system of evaluation of learning results in Igor Sikorsky KPI https://osvita.kpi.ua/node/37 https://document.kpi.ua/files/2020_1-273.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Regulations on current, calendar and semester control of study results at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/32https://document.kpi.ua/files/2020_7-137.pdf	*Compliance*

	Recommendations: *It's not necessary*	
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: Students are evaluated according to the rating system, which is mandatory in every syllabus. The structure and content of the syllabi are regulated by the relevant provision.The teacher presents the rating system to the students in the first lesson and provides answers and comments to the students' questions throughout the semester. Re-examination of the assessment system together with students is conducted before the session. The syllabus with the evaluation system is available on information resources: on the Campus, on the website of the department. The student has access to the results of current monitoring of each discipline on the Campus, which supports the rhythm of learning.The evaluation system takes into account all types of classroom and independent classes provided by the curriculum. The evaluation system takes into account qualitative indicators of task performance, for example, a creative approach, presentation of several options, justification of the effectiveness of the decision, etc. Provisions on the system of evaluation of learning results in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/37 https://document.kpi.ua/files/2020_1-273.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/174 Recommendations: *It's not necessary*	*Compliance*
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: Adequacy and efficiency of student evaluation methods and indicators are confirmed by the results of sessions, the results of diploma project defenses, the topic of diploma projects, the quality of diploma projects, and the results of ongoing monitoring, which are presented and systematized on the Campus. Provisions on the system of evaluation of learning results in Igor Sikorsky KPI https://osvita.kpi.ua/node/37	*Compliance*

	https://document.kpi.ua/files/2020_1-273.pdf The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/174 Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf Archive of diploma projectshttps://ela.kpi.ua/handle/123456789/205 Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Recommendations: *It's not necessary*	
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: Methods and criteria for evaluating learning outcomes are included in the rating systems for evaluating disciplines in the syllabi. Evaluation systems contain detailed information on the evaluation of all types of work provided for in the curriculum, including individual tasks. For disciplines that involve laboratory and project activities, for example, the criteria of preparation, execution, creative approach and protection of results are used for crediting laboratory work. The total amount of 100% of points for the discipline is distributed among all types of work, for example, a maximum of 50% for the exam, a maximum of 15% for calculation work, a maximum of 36% for laboratory work, a maximum of 5 points for a control work, a maximum of 4 points for a thematic report. The minimum level of the final grade is 60%. The procedure for creating and approving work programs (syllabi) of educational disciplines (educational components) in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/174 Provisions on the system of evaluation of learning results in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/37https://document.kpi.ua/files/2020_1-273.pdf Syllabuses of the disciplines of the educational and professional bachelor's program “Automated and Robotic Mechanical Systems”http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational- components/fundamental-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/compulsory-professional-componentshttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/education/educational-components/optional-professional-component-s Recommendations: *It's not necessary*	*Compliance*
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.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: The pre-diploma practice diary provides an assessment of the teacher of the practice from the enterprise and his conclusions and suggestions regarding the results of the student's practice. In the process of evaluating the results of the diploma (industrial) internship, the evaluations of the internship teacher from the enterprise where the internship took place are taken into account, which is provided for in the form of the internship report and the syllabus. Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPIhttps://osvita.kpi.ua/node/184 Methodological recommendations on issues of organization of students' practice and preparation of work programs of practice at Igor Sikorsky KPI https://kpi.ua/practical_training_period Recommendations: *It's not necessary*	
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: Between each two exams, the student has at least 2 days to prepare for the exam, which is regulated by the regulation on semester control. 1 credit is allocated for each exam in the curriculum. Before the exam, the teacher conducts a consultation without fail. During the session, the student takes 3 exams. Provisions on the system of evaluation of learning results in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/37https://document.kpi.ua/files/2020_1-273.pdf Regulations on current, calendar and semester control of study results at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/32https://document.kpi.ua/files/2020_7-137.pdf Recommendations: *It's not necessary*	*Compliance*
8.	There is an official procedure for the students to contest the evaluation and to solve the appeals, which is presented to the students. Findings from the Self-Evaluation Report/ Visit: In case of disagreement with the grade, students can use the official procedure for challenging the grade and resolving this problem with the appeal. To resolve conflict situations, a special commission is created at the faculty level, if necessary - at the university level. All controversial issues regarding the grades are decided by the Appeal commission. If during the conduct or preparation for the control event there are signs of procedural violations that could affect the results of the exam, on the basis of a written appeal, a commission is created by decision of the dean, which decides on the merits of the appeal. The commission may request the necessary explanations from the division administration, the head of the department, the guarantor of the educational program, scientific and pedagogical workers, familiarize themselves with any relevant documents for making a decision. Teachers from specialized disciplines, the head of the department, students are included in the composition of the commission - with their consent. The total composition of the commission is no more than 5 people. The response period should not	*Compliance*

	exceed 5 days. The head of the chair where the applicant studies is usually appointed as the head of the Appeal commission. In the event that an appeal is submitted to the grade received from the head of the chair, the latter cannot be a member of the Appeal commission, which should be taken into account when forming such a commission. A student may submit an appeal 1 time based on the grade from one credit module.According to the students' responses to the Google form they know about the possibility and a procedure of appealing grades, some even pointed out to making such appeals with positive results. This means that official procedure to contest the evaluation is well established, documented and known to the students. Regulations on appeals in the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/182 RegulationsontheresolutionofconflictsituationsinIgorSikorskyKPIhttps://osvita.kpi.ua/2020_7-170 https://document.kpi.ua/2020_7-170 **Recommendations:** *It's not necessary*	
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 possibility of re-examinations and postponed examinations for good reasons is regulated by the provision on the evaluation system and the Regulations. The applicant, who, according to the results of term control, has academic debt, has the right to liquidate it. To eliminate academic debt, the applicant is provided with no more than two attempts from each exam. A commission can be created to conduct such an exam by decision of the department. Liquidation of academic debt is carried out upon completion of term control within the terms established by individual orders. Such elimination at the student's request and with the permission of the graduating department and the department teaching the discipline may be transferred in the new academic term. The right to re-pass term exam in order to improve positive grade can be given based on the student's request, but the maximum of grades retaken can be no more than three for the entire learning period at a certain educational level. In case of postponed exams for valid reasons, the student is given an individual schedule. According to The Code of Honor the principle of justice states that in an academic community, it is significant to be impartial and objective in assessing the results of education, research, and work duties. But if the cases of fraud or academic integrity are reported, they are subject to appropriate regulations and procedures. Provisions on the system of evaluation of learning results in Igor Sikorsky KPI https://osvita.kpi.ua/node/37 https://document.kpi.ua/files/2020_1-273.pdf Regulations for semester control, organization and defense of qualifying papers and attestation exams in distance modehttps://osvita.kpi.ua/node/368https://document.kpi.ua/2020_HY-22 TheCodeofHonorofNationalTechnicalUniversityofUkraine«IgorSikorskyKyivPolytechnicInstitute»https://kpi.ua/codehttps://kpi.ua/files/honorcode_2021.pdf https://kpi.ua/en/code Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/47 Regulations on the commission on ethics and academic integrity of Igor Sikorsky KPIhttps://kpi.ua/files/etic_comission.pdf	*Compliance*

	Recommendations: *It's not necessary*	
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: Completion of studies, according to the educational program, involves the preparation and public defense of a diploma project. The diploma project demonstrates the student's ability to independently perform the assigned task at the level of the established standards of specialty 131 "Applied mechanics". The project presents the use of acquired competencies on examples of practical issues. The university takes measures to prevent plagiarism, the plagiarism check of the project, together with the review of the project, is a prerequisite for admission to the defense. Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/35 Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/index.php/node/35 Regulations on the system of prevention of academic plagiarism at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/47 Academic integrity policies, standards andprocedureshttps://kpi.ua/academic-integrity https://kpi.ua/en/node/18066 Participation of Igor Sikorsky Kyiv Polytechnic Institute in the project "Academic Integrity and Quality Initiative"https://kpi.ua/2020-Academic-IQhttps://kpi.ua/en/2020-Academic-IQ Plagiarism check service “Unicheck”https://unicheck.com/uk-ua Recommendations: *It's not necessary*	*Compliance*
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: According to the educational program, a number of diploma projects were prepared, the topics of which were determined in cooperation with industry representatives. Implementation of such projects takes place with two managers: from the university, from the enterprise. Specialists and managers from enterprises take part in the public defense of diploma projects. Stakeholder representatives are invited to join the examination committee to bring the learning outcomes closer to the needs of cleanliness. For example, during 2017-2019, the chief designer of SE ANTONOV Oleksandr Los was a member of the state examination commission. Regulations on the examination commission and certification of applicants for higher education in Igor Sikorsky KPIhttps://osvita.kpi.ua/node/35	*Compliance*

	Recommendations: *It's not necessary*	
	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 process of competitive selection at the university is regulated by the "Procedure for conducting competitive selection or selection by competition for filling vacant positions of scientific and pedagogical workers and concluding employment contracts (contracts) with them". A candidate for the position of a teacher must meet the prescribed set of requirements of professional standard for the group of professions "Teachers of higher education institutions", the Charter of Igor Sikorsky KPI and the License conditions for carrying out educational activities, which cover scientific, methodical, teaching, practical activities, scientific publications, etc. Competitive selection is carried out on the principles of competitiveness in accordance with the "Regulations on the procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts with them". The procedure for competitive selection by filling vacant positions of scientific and pedagogical workers and concluding employment contracts with themhttps://osvita.kpi.ua/competitionhttps://document.kpi.ua/files/2020_7-65.pdf Recommendations: *It's not necessary*	*Compliance*
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: Evaluation of teachers by students is voluntary. There is an evaluation form in the Electronic Campus system (Teacher through the eyes of students) that is provided to students to evaluate all their teachers. The form is approved by the Scientific Council, and the results of the surveys are taken into account during the competitive selection of teachers and are considered after each semester of study. All surveys are anonymous and the answers are confidential. Survey "Teacher through the eyes of students" is conducted in order to improve the quality of the educational process at the university and it is taken into account when forming the ratings of scientific and pedagogical workers. This survey is also the only one that is necessarily taken into consideration when the teacher is applying for the continuation of their tenure. Assessment of teachers is carried out according to the following criteria: objectivity of evaluation; ability to convey material to students; ability to establish partnerships with a student; benevolence and tactfulness towards students; organization of interaction with students in the conditions of distance learning. There is an interactive system "SOVA", which evaluates teachers based on an extended list of indicators. The form is filled in anonymously and by guaranteeing the confidentiality of the evaluator. When filling out the form on campus, the student uses his personal office, which prevents external influence. The analysis of responses given by students to the Google form, provided by the evaluation panel, let us make a conclusion that the majority of students participate in evaluating teaching staff at least once a year, most common – after each examination session. Such unity in answers demonstrate high level of teacher’s evaluations conducted by the Igor Sikorsky KPI.	*Compliance*

	Order №НОН/209/2021 dated 10.09.2021 "Conducting a sociological survey of employers"https://document.kpi.ua/2021_НОН-209 Educational and scientific center of applied sociology "Socioplus"http://socioplus.kpi.ua/ Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Student and stakeholder survey form on the department's websitehttps://docs.google.com/forms/d/e/1FAIpQLSfRH-FpdWmUflHUJxkfxMg79-cPhwkUzzLzsqnFfogMmO0u4w/viewform Students' Responses to the Google Form Recommendations: *It's not necessary*	
3.	The academic staff carries out self-evaluation and he/she is also evaluated by the head of the department. Findings from the Self-Evaluation Report/ Visit: All teachers are annually rated according to indicators of teaching, methodical, scientific and organizational-educational activity. Teachers enter indicators independently. The results of the teacher's rating are reviewed annually at the department meeting, the teacher's report is heard, the report and the teacher's individual plan are approved by the head of the department. Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home Regulations on the rating of scientific and pedagogical workers of Igor Sikorsky KPIhttps://osvita.kpi.ua/node/30 Recommendations: *It's not necessary*	*Compliance*
	C.5 Accessibility of the adequate learning resources	
1.	The faculty disposes of incentive programmes for the students with outstanding results and recovery programmes for the students with learning difficulties. Findings from the Self-Evaluation Report/ Visit: The university provides educational services to all, including students with learning difficulties or with special educational needs on an equal basis, without discrimination, regardless of age, citizenship, place of residence, sex, race etc. Personal-oriented teaching methods can be provided based on the individual characteristics of students with learning difficulties, taking into consideration recommendations of the individual rehabilitation program, conclusion on a comprehensive psychological and pedagogical assessment or any other significant document. Such students can be a part of separate inclusive class, regular class or they may need specialized chaperons, which can be provided by the university. For students with learning difficulties, adaptation programs are available in a number of disciplines: mathematics, physics, etc. In cases of valid reasons, students with learning difficulties are provided with individual schedules for the implementation of the educational program. The faculty provides nominal and advanced scholarships for students with outstanding academic results.Such students can be involved in scientific or academic complementary chair or faculty work that can serve as additional educational workload. Onsite visite ProvisionsontheexpulsionинterruptionofstudiesrenewalandtransferofstudentsofhighereducationinIgorSikorskyKPIhttps://osvita.kpi.ua/node/17	*Compliance*

	8 https://document.kpi.ua/2020_HOH-39 Regulations on the organization of inclusive education at the Igor Sikorsky KPIhttps://osvita.kpi.ua/node/172 **Recommendations:** *It's not necessary*	
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 university has a central structure for registration of student mobility - the Department of academic mobility, and has those responsible for organizing academic mobility at the faculty and department. Currently, under this educational program, 6 students have taken advantage of the academic mobility program. Academic mobility is one of the priority activities of the university. The right to it is realized on the basis of international and domestic cooperation agreements. University recognizes step, credit, initiative and virtual mobility – all these types can be short or long term. Program learning outcomes based on educational components, determined in a cooperation contract and put in the individual learning plan, should comply with learning outcomes determined in the educational program. According to Regulations on recognition learning outcomes acquired in non-formal / informal education at Igor Sikorsky KPI learning outcomes and competencies required for the awarding of an educational or professional qualification can be achieved and obtained ina formal, non-formal, or informal education system. The discipline can be credited both in full and in separate components (educational components, content modules, individual topics). For example, passing didactic courses at enterprises with a certificate (FESTO DE), participation in the organization and conduct of the Summer school (Summer School "Mechatronics in mechanical engineering"). In the presence of an international certificate in a foreignlanguage (English, French, German) at the level of B2 and above, the discipline “Foreign language” from the cycle of general preparation of the curriculum of the bachelor's degree can be credited with the maximum mark. According to the survey on the quality of educational process through the eyes of the students during 2021-2022 study year, 64.5% of students know of the possibility of recognition of non- formally acquired qualifications or skills. Regulation on academic mobility at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/124https://document.kpi.ua/files/2021_HOH-303.pdf Regulations on recognition in Igor Sikorsky KPI results of preliminary studieshttps://osvita.kpi.ua/node/181https://document.kpi.ua/2020_7-157 Regulations on double degree programs at Igor Sikorsky KPIhttps://document.kpi.ua/files/2021_HOH-199.pdf Regulations on recognition learning outcomes acquired in non-formal/informal education at Igor Sikorsky KPIhttps://osvita.kpi.ua/node/179 **Recommendations:** *It's not necessary*	*Compliance*
3.	The faculty, through the university, disposes of social, cultural and sports services for students, like: accommodation premises for at least 10% of the students, sports centre, various advisory services, which have an efficient management. The students are informed on the existence of such services. **Findings from the Self-Evaluation Report/ Visit:**	*Compliance*

	Mechanical Engineering Institute through the university provides social, cultural and sports services for students, namely: living quarters for more than 20% of students, a sports complex for program classes and participation in the work of various sports sections, advisory services, etc. Students can receive psychological support in the department of social and psychological work of the university, they also have the opportunity to stay at the recreation centers of the university. Students receive up-to-date information on the educational process from official sources: websites of the Igor Sikorsky KPI, faculty, department, Facebook-page of the department, etc. Direct assistance in organizing the educational process is provided by the curators of the academic groups. For student's convenience curator and teachers use social network chats or bots, like Telegram. KPI's Student Council is also functions as an important social support student's institution. They protect the rights of students, organize and hold cultural and mass events. Students trade union committee holds administration accountable for living conditions in the student's accommodations, helps students with direct financial assistance, gets them discounts on subway and travel tickets, etc. The Physical Education and Sports Centre includes 2 swimming pools, 8 sports halls (aerobics, wrestling and boxing, weightlifting, acrobatics, etc), a shooting range, a large stadium, an artificial turf football pitch and a rugby practice field. All students are informed about the availability of such services through the KPI website, the student trade union committee, and electronic networks. Onsite visit Center for physical education and sports of Igor Sikorsky KPIhttp://sport.kpi.ua/ Services in the field of health improvement, recreation, nutrition and sports in Igor Sikorsky KPIhttps://relax.kpi.ua/ Student social service in Igor Sikorsky KPIhttps://sss.kpi.ua/ Office of the psychologist of the Student Social Servicehttps://psybooking.simplybook.it/v2/ Office of psychological counselinghttps://kpi.ua/kpk Associations of university graduateshttp://alumni.kpi.ua/ Students trade union committee https://studprofkom.kpi.ua/shho-take-profkom/ Recommendations: *It's not necessary*	
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: Teachers of the Applied fluid mechanics and mechatronics department and invited stakeholders provide appropriate support to students in the learning process (career advice, mentoring and assistance), thereby contributing to the assimilation of knowledge and skills and the improvement of qualifications.Teacher curators and student curators, starting from the 1st day of study, help students master student life and form an individual learning trajectory. Certificate program leaders are involved in consultations with students, who explain the relationships between studies, disciplines, professions and career growth. Meetings with representatives of stakeholders are organized for first-year students, including at industrial sites. For example, in 2020, first-year students met with specialists of the Antonov aircraft construction complex at the enterprise. Students visited production and testing facilities, talked with graduates of the department from previous years, got acquainted with modern aviation equipment.On the university level there is Students Career and Recruitment Centre of Igor Sikorsky KPI – a space of interaction of students and graduates and employers. This center shared important news, information on the internship programs and professional study	*Compliance*

	courses, current vacancies and events announcements. All interested in career advice or assistance can participate in different current events, courses and lectures, look through list of existing vacancies or, in the case of employers – add their own. According to the Monitoring the satisfaction of employers with the graduates of Igor Sikorsky KPI in 2022, more than 95% of employers think that KPI graduates have high or probably high level of general educational training, more than 71% think that their qualification totally meets the work requirements. Career fairhttps://careerfair.kpi.ua/ Reviews and protocols of meetings with stakeholdershttps://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/Review%20KPI.pdf https://drive.google.com/drive/u/1/folders/1U2GlrobK6oVTy04H_hs0vTCnbGhLC0MI List of the department's stakeholdershttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/universytety-partneryhttp://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppmahistr/partnery-i-steikkholdery/partnery-z-promyslovosti-i-naukyhttp://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/partners-and-stakeholders/industry-partnershttp://Applied fluid mechanics andmechatronics.kpi.ua/en/epp/partners-and-stakeholders/university-partners Department of Professional Growth – Centre for career developmenthttps://robota.kpi.ua/https://robota.kpi.ua/eng#about_us OrderНУ/216/202dated11.10.2021"OntheimprovementoftheemploymentsystemforhighereducationacquisitionsofthelgorSikorsky KPIandthecreationofacenterforprofessionaladaptationofstudents" https://document.kpi.ua/2021_НУ-216 Associations of university graduateshttp://alumni.kpi.ua/ Survey on the Monitoring the satisfaction of employers with the graduates of Igor Sikorsky KPI in 2022http://socioplus.kpi.ua/wp-content/uploads/2022/12/oczinky-yakosti-osvity-ochyma-robotodavcziv_2021.pdf Recommendations: *It's not necessary*	
5.	There are sufficient personnel with adequate training to provide support services to students. Findings from the Self-Evaluation Report/ Visit: The KPI and Applied fluid mechanics and mechatronics department has enough teaching and support staff with appropriate training to provide support services to students (7 people: an engineer, a teaching master, a laboratory assistant). Graduate students of the department, who take part in the work of auxiliary staff, help in working with students. Staff list of the university for 2022https://kpi.ua/2022-stafflist Recommendations: *It's not necessary*	*Compliance*
	C.6 Information management	
1.	At faculty level, the institution has a computer system which facilitates the collection, processing and analysis of data and information relevant for the efficient organisation and operation of the study programmes and of the other activities.	*Compliance*

	Findings from the Self-Evaluation Report/ Visit: At the university level, the interactive system "Electronic Campus" is used, which includes the electronic dean's office. The system combines the collection, processing and analysis of data and information in all areas necessary for the effective organization and functioning of educational programs and other activities.It contains educational programs, electronic schedule, schedule of sessions, individual plans, rating results, survey results, current control results, semester control results, methodical materials for disciplines, etc. All users have a perating system of evaluationnal electronic account. *Onsite visit* Information and telecommunication system "Electronic campus"https://ecampus.kpi.ua/home **Recommendations:** *It's not necessary*	
	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:** Official page of the Department of fluid mechanics and mechanics contains accurate and relevant general information about educational program, its learning outcomes, tools, existing peculiarities, curriculum for the students of 2019, 2020 and 2021 admission years and teaching stuff. Curriculum contains comprehensive, up-to-date and easily accessible quantitative and qualitative public information about the aims, teaching and learning process, resources, outcomes and organizational framework. The educational program specifically contains its characterization (learning objectives, tools, methods and techniques), means of teaching and assessment, general and professional competences, learning outcomes, main resources, etc. The department provides additional information on the educational trajectory and components, basic data on partners and industry or university stakeholders of the department and educational program. These materials are presented not only on the website of the department, but also in the Campus system. Students and other interested individuals have free access to all provided materials, which cover human and laboratory resources, relations with stakeholders, topics and archives of diploma projects, etc. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor’s educational program http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program- Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems” http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf **Recommendations:** *It's not necessary*	*Compliance*

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: Graduates receive a supplement to their diploma at the cost of producing forms. The supplement contains, in two languages, all the information about achievements during training, provided for by current regulatory documents.These information was in the sel evaluation report and conduct to Partial Compliance. The response of KPI after the visit was: *After 2019 all paper graduation documents (diploma, supplement to the diploma, certificates) are free of charge for each student. Before 2019 on his request, a student could receive a paper version of documents with payment for printing services only.* ARACIS standards impose that paper version documents are free of charge. Educational and professional bachelor's program “Automated and Robotic Mechanical Systems”https://osvita.kpi.ua/131_OPPB_ARMS Curriculum of the bachelor’s educational program *http://Applied fluid mechanics and mechatronics.kpi.ua/uk/osvitni-prohramy/oppbachelor/navchalni-plany http://Applied fluid mechanics and mechatronics.kpi.ua/en/epp/general- information/educational-program-* Working curriculum of the educational and professional bachelor’s program “Automated and Robotic Mechanical Systems”*http://Applied fluid mechanics and mechatronics.kpi.ua/downloads/bakalavry/2022/About%20EPP.pdf* Sample of the appendix to the KPI diplomahttps://pgm.kpi.ua/downloads/bakalavry/2022/diploma-2017-1.pdf Recommendations: *It is recommended that graduates receive diploma and diploma supplements free of charge.*	*Partial Compliance*
	C.8 Qualityassurancebyperiodicexternalreview	
1.	Thehighereducationinstitutioncomplieswiththelegal 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. Orders on conducting and results of the inspection of universities of the Ministry of Educationhttps://mon.gov.ua/ua/ministerstvo/poslugi/licenzuvannya/kontrol-za-dotrimannyam-licenzijnih-umov/nakazi-pro-provedennya-ta-rezultati- perevirki206l National Agency for Higher Education Quality Assurance(NAQA) https://naqa.gov.ua/ https://en.naqa.gov.ua/ Recommendations: *It's not necessary*	*Compliance*

Other observations/findings:

Before the visit, preparations began. The schedule of online meetings, the people who will carry out the onsite visit, the objectives they will pursue, how the other members of the visit will be informed about the elements identified on the spot (report and photos), as well as the list of questions on which the commission members will address to the participants.
The KPI visit was conducted on 29.05.2023 by Prof. Oleksandr Petrov and Miss Priliepo Nataliia.
During the visit, Prof. Oleksandr Petrov and Miss Priliepo Nataliia have the following responsibilities:
1. Visiting the Robotics program laboratories, as indicated in the self-evaluation report, to take pictures and evaluate the suitability of the conditions for quality education. This includes examining the types of equipment available, the laboratory spaces, didactic facilities, and discipline-specific platform laboratories.
2. Visiting the secretariat to assess if:
- Student records are correctly organised if they have an electronic platform for student records and results,
- First-year student files follow standard quality regulations. This evaluation will also examine whether the admission procedures and student files meet the university's regulations, such as the study contract, personal documents, and other requirements.
- Final-year student files adhere to quality regulations for filing. This involves verifying if any additional acts or new study contracts have been signed, which outline all program disciplines, including optional and facultative ones. Ensuring that all exams and credits are accurately recorded in the student file is also crucial.
- Students may have the opportunity to study in another country for a few months, a semester, or one year. In return, the credits obtained in the visiting country (all or partial) are equivalent to credits of discipline in the native country.
- Both the principal and assistant evaluators sign the examination catalogue.
3. Additionally, visiting the library (university, faculty, department) would be helpful to evaluate if it corresponds with program requirements and the student campus, dormitory, canteen, and sports camp where students can benefit from social facilities.
4. Main classrooms 300-1, 300-a, 299-6, 299-6, 299-7, 05-1, 06a, 06b, 08-1, 120-a, 126-1. Reserve classrooms 299-2, 299-3, 07-1, 132-1.Lecture halls, classrooms and laboratories for fundamental and general academic disciplines
5. Certificates and diplomas of prize-winning places for students of this study program, classrooms where student scientific circles are held

6. Documents certifying the participation of students in pre-diploma practice
7. Viewing educational resources in the "Campus" electronic system by authorising student and teacher accounts
8. Documents on the education of graduates of this study program: diploma and supplement to the diploma.
9. Bachelor theses + reviews + plagiarism check

The two members reported to the commission members that all the conditions corresponded to the specific quality indicators, and through their report and the pictures presented, the entire commission agreed with this conclusion.

The list of questions agreed upon by the commission members is presented in the annexe to the visit sheet. With the help of members from Ukraine, all questions were translated into Ukrainian. Due to the conditions of war, to ensure correct evaluation, the questions were permanently displayed on the screen of each meeting and at the same time, google form questionnaires were sent to the participants, with all the questions asked, requesting the completion of the individual questionnaires within 12 hours.

These questionnaires were sent by email, preserving the anonymity of those who completed the questionnaire, being carried out on the server of the coordinator's institution as follows:

1. Meeting of the evaluation team with teaching staff - https://forms.gle/6vyXTnf7nXgancZAA
2. Meeting of the members of the evaluation team with students - https://forms.gle/aAy9AURDjZRN6pB8A
3. Meeting of the members of the evaluation team with graduates - https://forms.gle/ZbKaAirq4uJNPgGcA
4. Meeting of the evaluation team with employers - https://forms.gle/kwN58FF8fhVhSkiF9
5. Meeting of the evaluation team with institutional representatives and representatives of the university / faculty/ department coordinating the study programme, Quality Evaluation and Quality Assurance Committee (CEAC-D) - https://forms.gle/LQLX25y5VssaNAJd8
6. Meeting of the evaluation team with the team who realise the self-evaluation report - https://forms.gle/a1TxnEFQw341SC8y9

Unfortunately, the number of respondents to these questionnaires was reduced (the team that created the self-evaluation file - 0 people, students - 7 people, employers - 4 people, teachers - 4 people, graduates - 5 people, the management of the institution - 0 people)

The online meetings were held on the ZOOM platform at https://us02web.zoom.us/j/83663638886?pwd=cmY4VE5hMUlDVG5kR1VwNjNjajN4dz09, Meeting ID: 836 6363 8886, Passcode: 2023.

Nineteen people participated in the meeting with the teaching staff: Associate Professor Kostiantyn Belikov, Associate Professor Igor Gryshko, Associate Professor Oleksandr Haletskyi, Professor Oleksandr Hubarev, Associate Professor Volodymyr Korenkov, Associate Professor Dmytro Kostiuk, Associate Professor Oleksii Koval, Professor Vasyl Kovalev, Associate Professor Oleh Levchenko, Chief of

department Oleksander Luhovskyi, Associate Professor Alona Murashchenko, Associate Professor Ihor Nochnichenko, Associate Professor Oleksiy Nyezhentsev, Associate Professor Serhii Strutynskyi, Associate Professor Andrii Titov, Associate Professor Volodymyr Turyk, Professor Oleksandr Uzunov, Senior lecturer Andrii Zilinskyi. Professor Oleh Yachno. The discussions were focused on the specific problems of online teaching, the number of hours of teaching activity (600 hours/year), the equipment of the laboratories, the service personnel of the laboratories, the rewards for excellence in education and research, the evaluation of teaching staff by students, the updating of the disciplines and collaboration with the economic environment. During the academic week, teachers spend at least half their time working with documents, teaching, research and self-training. Teachers use different teaching methods in online education, which students mostly accept. Teachers annually revise the content of the educational discipline and, if necessary, make changes, as a rule, before the beginning of the educational classes. Teachers express their opinion about the salary increase, which has become even more relevant recently. The department's teachers conduct active international work, participate in international conferences and undergo internships, including online. Of course, the war left its mark on all teaching and research activities. However, the entire teaching staff supported the fact that under these conditions, the teaching and research activities are carried out properly, there is a collaboration with the students and the management of the institution, and there are no problems that could have been brought to the attention of the evaluation committee.Recommendations of the external evaluation committee:

- Increasing the number of practice hours and introducing field and speciality practice starting from year II or III;
- Redesigning the curriculum with 25 training hours/ECTS credit and implicitly the number of credits allocated to the disciplines;
- Redesigning the curriculum by introducing specialised and domain courses, along with optional courses, the reduction/combination of fundamental or general courses;
- The resizing of the annual distribution of training activities by increasing the examination support period to a minimum of 3 weeks instead of the current two weeks and introducing periods for re-examinations;

Promotion of young teaching staff to ensure the sustainability of the current excellent research and pedagogy existing at the KPI level;

- Add a written or oral examination regarding the domain and speciality learning outcomes
- Adaptation of existing procedures to international standards. Even if currently this compatibility at the level of the procedures is over 90%, completing the missing procedures becomes full.

▶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 10.07.2023 was ***maintaining accreditation – monitoring after 2 years*** and ***awarding*** EUR-ACE certification of the bachelor's study programme AUTOMATED AND ROBOTIC MECHANICAL SYSTEMS, for the form of education full-time, with 240 of credits and tuition capacity in the first year of studies of 75 of students, according to the Extract from the minutes, the Evaluation Report of the Commission and the Evaluation Sheets, registered at ARACIS with no. 4562 from 10.07.2023.

▶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 AUTOMATED AND ROBOTIC MECHANICAL SYSTEMS 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 AUTOMATED AND ROBOTIC MECHANICAL SYSTEMS;
- ⇒ Bachelor field – Applied Mechanics;
- ⇒ from the Faculty of Educational and Research Institute of Mechanical Engineering;
- ⇒ National Technical University of Ukraine „Igor Sikorsky Kyiv Polytechnic Institute";

13.07.2023

⇒ form of education – full-time;

⇒ number of credits – 240;

⇒ tuition capacity in the first year of study of 75 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 13.07.2023.

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 27.07.2028 (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, July, 2023 *SL/CM*
UA01/ 4562 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)	The 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)	Applied Mechanics
3.	Bachelor's degree programme (title in Romanian and English)	Automated and Robotic Mechanical Systems
4.	The number of enrolled students per year of study	75
5.	The number of teaching staff teaching at the programme, of which holders	43
6.	Diploma issued	Mechanical Engineer
7.	Qualification level according to CNC	BACHELOR STUDIES - LEVEL 6 CNC AND 6 EQF
8.	Duration of schooling (expressed in number of semesters)	8
9.	Total number of ECTS credits	240
10.	Targeted qualifications/occupations	2145 - Professionals in the field of mechanical engineering 2149 - Professionals in other fields of engineering
11.	The approval given to the evaluated study programme	Maintaining accreditation - Monitoring after two years, Awarding EUR-ACE label
12.	Date of last ARACIS assessment	-
13.	ARACIS commission of expert evaluators:	BÎZDOACĂ Nicu George DOBRESCU Tiberiu OLEKSANDR Petrov COSSERON Philippe PRILIEPO Nataliia
14.	Evaluation visit period	29-31 May 2023