REPORT (OF THE STATEMENT) ON SELF-APPRAISAL OF THE EDUCATIONAL PROGRAMME

General information

Information about the higher education institution

Registration number of the higher education institution in the United State Electronic Education Database (Ukr. ЄДЕБО)	134
Full name of the higher education institution	National Metallurgical Academy of Ukraine
Identification code of the higher education institution	02070766
Full name of the head of the higher education institution	Velychko Olexander Grygorovych
Link to the official web-site of the higher education institution	http://www.nmetau.edu.ua
Branch office of the higher education institution	
Full name of the branch office of the higher education institution	
Identification code of the branch office of the higher education institution	
Full name of the branch office head of the higher education institution	
Link to the official web-site of the branch office of the higher education institution	

General information about the educational program being submitted for accreditation

ID of the educational programme in the United State Electronic Education Database (Ukr. ЄДЕБО)	
Name of the educational programme	«Metallurgical processes of production and processing of metals and alloys»
Requisite details about the decision to license the specialisation at the	MES of Ukraine Order № 15 of December 19, 2016

appropriate degree level	
Cycle (degree level)	Second (master's) level of higher education
Subject area, speciality and specialisation (if appropriate)	Knowledge Area 13 "Mechanical Engineering", Specialty 136 Metallurgy
Structural subdivision that ensures the implementation of the educational programme	Department of Iron and Steel Metallurgy, Department of Steel Metallurgy, Department of Theory of Metallurgical Processes and Chemistry
Professional qualification conferred in accordance with the educational programme (if appropriate)	Master's Degree in "Metallurgy" with a major in "Physical and Chemical Foundations of Metallurgical Processes"
Language (languages) of education	Ukrainian
Full name and position of the educational programme guarantor	Kamkina Ludmila Vladimirovna, Dean of the Faculty of Metallurgy

General information about the EP, history of its development and implementation

EP “Metallurgical Processes of Production and Processing of Metals and Alloys” of the second (master's) level of higher education was developed by members of a special group headed by the guarantor of the educational program in accordance with such normative documents as the methodological recommendations “Development of educational programs” (Dnipro, NMetAU, 2017). . Seminar Materials “A Guide to the Description of the Educational Program in the Context of New Higher Education Standards” (March 24, 2017, Speaker - Prof. Y. Rashkevich) (https://erasmusplus.org.ua/korysna-informatsiia/korysni-materialy/category/3-materialy-natsionalnoi-komandy-ekspertiv-shchodo-zaprovadzhennia-instrumentiv-bolonskoho-protsesu.html?download=285:metodychni-rekomendatsii-shchodo-opysu-osvitnoi-prohramy-v-konteksti-novykh-standartiv-vyshchoi-osvity),. Letter of the Ministry of Education and Science of Ukraine № 1 / 9-239 dated 28.04.2017 (https://nung.edu.ua/files/attachments/lyst_mon_1_9-239_vid_28.04.2017_r._prymirnyy_vzirec_osvitno-profesiynoyi_programy.pdf) within the framework of implementation of the law of Ukraine "On Higher Education" (https://zakon.rada.gov.ua/laws/show/1556-18) at the Department of Iron Metallurgy, Steel Metallurgy, Theory of Metallurgical Processes and Chemistry of the Metallurgical Faculty of the National Metallurgical Academy of Ukraine . The EP was approved by the Scientific Council of NMetAU (protocol № 4 of May 04, 2017) and implemented since May 5, 2017 (order № 26-1 of May 05, 2017) for the preparation of masters in the field of knowledge 13 "Mechanical Engineering", specialty 136 Metallurgy, qualification: Master of Metallurgy.

The Master may hold primary engineering and managerial positions (grassroots management personnel with no seniority requirements) as provided by the National Classifier of Occupations (DK 003: 2010) (3,117 - Technical Specialists in Mining and

Metallurgy; 2147.2 - Engineer (Metallurgy); 2147.2 - Engineer-technologist (metallurgy); "2149.2 - Engineer for system management and maintenance"; "2149.2 - Engineer for equipment and materials"; "2149.2 - Engineer for organization of operation and repair"; "2149.2 - Engineer for production preparation" ; 2149.2 - Professional Engineer active works ";" 2149.2 - Engineer for repair ";" 2149.2 - Engineer for calculations and modes ";" 2149.2 - Engineer for quality ";" 2149.2 - Engineer for the introduction of new technology and technology ";" 2149.2 - Design engineer "; "2149.2 - Engineer-controller"; "2149.2 - Engineer-technologist") and the nomenclature of positions of industrial enterprises, design and research organizations, profile or particular areas of activity of which correspond to the obtained professional specialization of the master. Work in specialty at metallurgical enterprises, research institutes, higher educational establishments, including engineering, scientific and teaching work

The EP has a clearly stated purpose, the realization of which occurs through student-centered, problem-oriented teaching at lectures, practical and seminar classes, and also provides for initiative self-study. EP "Metallurgical Processes of Production and Processing of Metals and Alloys" is composed in the modern paradigm of the student-centered approach, which is evidenced by the existence of a cycle of disciplines of free choice of the student, which allows the students of higher education to be not an object, but a full-fledged participant in the educational process. participate and make responsible decisions. Within the framework of scientific and practical training, OP envisages passing undergraduate practice, which positively influences the development of practical skills in the field of technical translation and prepares students for future professional activity.

1. Projecting and Objectives of the Educational Programme

What are the objectives of the educational programme?
What are the peculiarities (uniqueness) of this programme?

The purpose of the EP is to provide in-depth theoretical and practical knowledge, skills, skills at the master's level, the formation of general principles of the methodology of scientific and professional activity, as well as appropriate competencies sufficient to effectively perform the tasks of scientific, industrial, managerial, innovative nature. EP is based on the known provisions and results of modern scientific research in metallurgy and is focused on professional activity in the field of metallurgical production, including: integrated application of a complex of methods, methods, means, techniques and methods of science and technology aimed at the creation and production of competitive metallurgical products; effective technological support of production processes; researches on creation and introduction of modern methods of metallurgical production, technologies of smelting of metals and alloys, after-treatment; computer simulation, production automation and design tools; substantiation, research, development, implementation of standards, norms, technical requirements and control over the products

of metallurgical production; management of production projects in the field of metallurgy, as well as in various industries and technical and scientific activities. The peculiarity of the program is the use of modern software at all stages of metallurgical production (technology development, design and smelting of metals and alloys), the widespread use of additive technologies that meets the labor market demands of the Dnieper industrial region, which ranks first in Ukraine in terms of industrial production and maintains economic relations with more than 160 countries.

The uniqueness of the EP lies in the fact that, through selective components, students in addition to industry professional competencies acquire the relevant competences in the fields of economics and management, intellectual property, management of innovation and information and analytical activity. Pre-diploma practice programs are aimed at consolidating the acquired knowledge, skills and learning outcomes at the city's specialized enterprises and state administration bodies. The EP has a student-centered orientation, takes into account students' personal initiatives and ensures the exercise of their academic rights and freedoms.

Using references to specific documents, demonstrate that the objectives of the educational programme comply with the mission and strategy of the higher education institution

The goals of the EP are in line with the Strategic Plan of the National Metallurgical Academy of Ukraine for 2019 - 2025. (https://nmetau.edu.ua/en/minfo), in particular such areas as Educational Activities and Quality Assurance in Higher Education (Item 1 Implementation of the Student-Centered Learning Concept, Item 4 Improving and Improving the Evaluation Procedures of Higher Education Applicants Education, item 5 Provision of quality production training of students in modern enterprises and institutions), Development of scientific research, integration of educational and scientific process, Ensuring the process of education and self-development of creative personality. The OP also complies with the provisions of the Educational Activity Concept set out in the Statute of the National Metallurgical Academy of Ukraine (revised) 2017. (https://nmetau.edu.ua/ua/minfo).

Describe how the interests and propositions of the following stakeholder groups were taken into account during the formulation of objectives and programme outcomes of studying at the educational programme:

- higher education applicants and program graduates

Forming the goals and program results of training of the educational and professional program of preparation of the second (master's) level of specialty 136 "Metallurgy" was carried out taking into account the interests of higher education applicants, since the main purpose of the program is to ensure the formation of a set of competencies necessary for successful professional realization. Since the development of a vocational program was carried out in 2019, during the study of the first bachelor's degree program in the fourth year, consideration of the proposals of higher education applicants is planned during the renewal of the educational program after the first graduation in 2021.

- employers

Formation of goals and program results of training of educational and professional training program for higher education applicants of the second (master's) level of specialty 136 "Metallurgy" was carried out in close cooperation with representatives of employers. In particular, representatives of the following enterprises took active part in discussing the interests of employers (reflected in the relevant protocols of scientific and methodological seminars of specialty 136 "Metallurgy"): "Zaporizhstal", Institute of Ferrous Metallurgy them. ZI Nekrasov NAS of Ukraine, as well as discussion of topics of final qualifications and tasks of undergraduate practice.

- the academic community

The content of the educational and professional program, the formulation of goals, program results of training and competencies were discussed during joint meetings of the heads of departments and members of the group providing the OP specialty 136 "Metallurgy". Members of the Specialty 136 "Metallurgy" group of the Academy regularly participate in these meetings (Ph.D., Prof. Kamkina LV, Ph.D., Assoc. Prof. A. Nadtochy, Ph.D. Assoc. Prof. Mameshin VS) and representatives of HEI, which provide training for specialists in the field of metallurgical production: Zaporizhzhya National Technical University, Donbass State Machine-Building Academy, State Technical University of Kamianske, National Technical University of Ukraine "Kyiv Polytechnic Institute Igor Sikorsky ».

Successful fulfillment of the requirements of the EP and mastering the declared competences opens up to the graduates wide opportunities of employment for positions of engineering and technical personnel at the enterprises of metallurgical profile of the Dnieper region.

At the stage of development of the EP such potential employers as «Dnipro Metallurgical Plant», «Poltava Mining and Processing Plant», «Dnipro Metallurgical Plant», «Zaporizhstal», Institute of Ferrous Metallurgy them Z.I. Nekrasov NAS of Ukraine, based on its own interests of human resources, gave a positive assessment of its goals and expected program results, which gives employers the opportunity to complete the training at the EP to obtain qualified specialists in metallurgical production, capable of solving complex specialized problems and technologies of use in metalworking in the field of metallurgical production.

- In the interests of the academic community, the conditions required for higher education students are provided, specialists are trained for the needs of industrial enterprises and organizations of the Dnieper region, which is taken into account and correlated with the purpose of EP and corresponds to the program results of study.

- The interests of any other natural or legal persons potentially interested in cooperation with the graduates were taken into account and implemented in the EP, in accordance with its programmatic results of training for the stated purpose - to train specialists in metallurgical production of metals and alloys and to create conditions for their improvement.

Demonstrate how the objectives and programme outcomes of studying at the educational programme comply with the tendency of speciality development and

labour market.

The goals and program results of the education of the professional-vocational program reflect the trends of specialty and labor market development, since their formulation was carried out in 2019 taking into account the actual interests of all interested parties: higher education applicants, employers and the academic community. There is an urgent need in the labor market for specialists capable of using modern means of improving existing metallurgical processes for the needs of the modern machine-building industry. This is the main focus of the educational and professional program, the content of which provides the formation of competences necessary for the practical use of modern computer-integrated technologies for the design, organization and quality management of metallurgical products.

Demonstrate how the field and regional context was taken into account during the formulation of the objectives and programme outcomes of studying at the educational programme

The objectives and programmatic results of the EP training are aimed at training metallurgical specialists in accordance with the labor market demands of the Dnieper industrial region, which is characterized by a high level of heavy industry development. About 500 large and medium-sized industrial enterprises of the main types of economic activity are operating in the region, including Interpipe NTZ, Dnipro Metallurgical Plant, Dnipropetrovsk Aggregate Plant, "Production Association Southern Machine-Building Plant. O.M. Makarov ", PJSC" Zaporizhstal "and others. According to DniproODA (https://adm.dp.gov.ua/en/pro-oblast/dnipropetrovshina/ekonomichnij-potential), a fifth (UAH 481.5 billion) of all industrial production of Ukraine is produced in Dnipropetrovsk. By this indicator, the region ranks first in Ukraine. The index of industrial production of the region for 2018 amounted to 103.0%. The results of the industry of the region were formed as a result of increasing production of raw materials in the mining industry, quarrying, processing and supply of electricity, gas, steam and air conditioning. In view of this situation in the region where the National Metallurgical Academy of Ukraine is located, the focus of the EP is taking into account the demand for specialists of general profile, familiar with modern advanced technologies of production of metals and alloys and their improvement for the needs of industrial enterprises.

Demonstrate how the experience of analogous national and foreign programmes has been taken into account when formulating programme outcomes of studying at the educational programme.

During the formulation of the goals and program results of training under the educational and professional program, the experience gained by the scientific and pedagogical staff of the Department of Iron and Steel Metallurgy and Theory of Metallurgical Processes and Chemistry was used in the implementation of the tasks of metallurgy on the basis of a competent approach and the best experience Of the Bologna Process, funded by the European Union under the international TEMPUS program. During the development of the EP, similar programs were conducted by leading domestic defense law enforcement agencies HEI: "National Technical University of Ukraine Igor Sikorsky Kyiv Polytechnic

Institute", Zaporizhzhya National Technical University, Donbass State Machine-Building Academy, State Technical University of Kamyanskoe. The experience of the Czestochow Polytechnic University, AGH Krakow, the Freiberg Mining Academy and others was also taken into account. Content of educational components was formed taking into account available equipment and software. The comparative analysis shows the competitiveness of the accredited EP, along with similar domestic and foreign counterparts.
Demonstrate how the education programme allows to achieve the studying outcomes determined by the higher education standard according to the corresponding speciality and degree level (if appropriate) There is no standard
If there is no higher education standard for the corresponding speciality and higher education level, please explain how the programme training outcomes stated by the educational programme comply with the requirements of the National Qualifications Framework for the relevant qualification level? The educational program meets the requirements defined in the National Qualifications Framework for the Master's level of training of higher education applicants. The program results of training form an integral competence, which consists in the ability to use professional-profile knowledge and practical skills to solve specific problems of metallurgy in the field of metallurgical production; ability to analyze and evaluate a range of tasks that promote the efficient use of natural resources and products of metallurgical enterprises; the ability to evaluate existing technologies and materials to formulate requirements for the development of promising metallurgical metals and alloys and the technologies for their production; the ability to apply knowledge and skills to solve qualitative and quantitative tasks in real-world production; ability to evaluate, interpret the input data for the synthesis of new types of alloys and processes; ability to perform metrological assessment of conformity of quality of metals and alloys with national and international standards of EN and ISO systems. The EP envisages the formation of knowledge, skills, communication and autonomy and responsibility necessary for the formation of general and professional competences of the specialty 136 "Metallurgy", as well as professional competencies of professional direction, which are provided with the variant ability to study special disciplines selective blocks "Metallurgy of steel" and "Metallurgy of cast iron", "Physico-chemical bases of metallurgical processes.

2. Structure and content of the educational program

What is the volume of educational programs EP (in ECTS credits)? 90
What is the volume of educational components (in ECTS credits) which are aimed at building competencies defined by the standard of higher education in the relevant specialty and higher education level (if the presence) ? 66

What is the volume (in ECTS credits) determined in elective disciplines?
24

Demonstrate that the content of the EP is relevant to the subject area of declared specialty (for interdisciplinary specialty)?

The content of the EP has a clear structure and fully corresponds to the objects of study and activity of the specialty 136 “Metallurgy”; the educational components included in the educational program constitute a logical interconnected system and in the summation make it possible to achieve the stated designs and programmatic learning outcomes.

Educational components are formed to provide required level understanding of the second (masters) level students of the theoretical content of the subject area and provide for the study of notions and concepts in the specialty 136 "Metallurgy" required to explain the facts and predict the results.

While studying the educational components, the learners assimilate modern methods, techniques and technologies, which are required to decision practical problems of metallurgy in conditions of technical uncertainty, taking into account the demands of sustainable development.

The implementation of educational components involves a combination of lectures and practical, laboratory and course work.

Practical training of future specialists involves the use of required tools and equipment.

Emphasis is placed on the use of modern computer-integrated technologies to decision the practical problems of metallurgy.

The list of educational components was agreed with the representatives of the employers and was formed in such a way as to provide the higher education students with a set of knowledge, skills and competences required to decision real needs in the production and processing of metals and alloys.

In addition, EP provides for the study of humanities - professional foreign vocabulary (required), national economy, the basics of intellectual property, the basics of marketing.

How are higher education learners provided with the opportunity to form an individual educational trajectory?

The structure of the educational program provides for the possibility for the formation of an individual educational trajectory, in particular through the individual choice of learners for higher education disciplines to the extent prescribed by law.

The procedure for selection of higher education learners by the individual educational trajectory is regulated by the Regulations on the organization of the educational process (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf), Organizational and methodological principles of providing a selective component of educational and professional training programs for specialists at NMetAU(https://nmetau.edu.ua/file/omz_zvsopppf.pdf).

Formation of individual educational trajectory is reflected in individual curricula of students and provides for the possibility of individual choice of their disciplines within the determine limits by the relevant educational program and work curriculum (in the amount of not less than 25% of the total ECTS credits provided for a certain higher

education level), in respectively sequence their study in accordance with the structural and logical scheme of specialist training.
During the formation individual curriculum of the student for the next academic year, take into account the actual implementation of the individual curriculum by the student of the
Higher education learners have the opportunity to form an individual educational trajectory through:
- free individual choice of specialization with a list of subjects (presented in the regulatory part of the EP), which provide in-depth knowledge of specific technologies, making it possible to increase competitiveness and demand in the labor market;
-free individual choice of courses (presented in the choices part of the EP) with an extended subjects list for acquisition of basic and professional competences;
- possibility to individual choice of theme of qualification works
-the possibility to participate in international mobility programs (Erasmus+, TEMPUS, DAAD, Visby etc. "The Regulations on the Procedure for Exercising the Right to International Academic Mobility of NMetAU Educational Process participants" are in operation at the Academy. (https://nmetau.edu.ua/file/polozhennya_pro_akademichnu_mobilnist_nmetau.pdf);
- the possibility of recognition of the results of study on the results of studying additional subjects not included in the register of disciplines.
This disciplines are included in the individual plan at the request of the student in the presence of an official document issued by the institution (domestic or foreign), which is entitled to provide higher education services (license) and confirms the award of ECTS credits in this discipline.
The total amount of additional courses may not exceed 10 ECTS credits per year.

How do the high education learners can actualize exercise their right to choose courses?

Higher education learners can exercise their right to choose courses in accordance with the Regulations on the Organization of the Educational Process (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf) and Organizational and methodological principles of providing a selective component of educational and professional training programs for specialists at NMetaU (https://nmetau.edu.ua/file/omz_zvsopppf.pdf).
The choice of educational disciplines is carried out by the student in the process of forming his individual curriculum within the limits stipulated by the EP and the work curriculum, in accordance with the sequence of their study in accordance with the structural and logical scheme of specialist training.
In order to exercise the right to choose the subjects, a constantly updated register of disciplines has been created in the EIS, which can be offered for the choice of the applicant of higher education.
This register includes disciplines of both selective and regulatory disciplines of all other specialties and levels, which can be staffed and organized.

The list of courses and work programs for them are available on the Academy's website.
Selective courses included in the individual student's curriculum are required for their study by the student.
Choise courses can be included in the individual student's curriculum for the Master's level of preparation beginning in the 2nd quarter of the 1st year of study.
Formation of individual educational trajectory occurs in the following stages:
1. The specialty of Metallurgy is that it incorporates technologies quite diverse in nature - from almost pure chemistry in hydrometallurgy to almost pure mechanics in metalworking.
All this eliminates the possibility of training universal metallurgists and requires the development of training programs for specializations in accordance with specific technologies.
The peculiarities of our EP are its focus on obtaining a wide range of basic knowledge in the specialty 136 Metallurgy and advanced in accordance with the specializations of "Metallurgy of pig iron"; “Steel Metallurgy”; "Physico-chemical bases of metallurgical processes".
Therefore, at the moment of admission (at the stage of submission of documents) there is a survey of students on the choice of specialization within the specialty.
Every specialization has its own block of regulatory disciplines in the amount of 30 ECTS credits, which give in-depth knowledge in accordance with specific technologies.
The relevant specialization is attested by the additional NMetAU certificate, which is given together with the diploma of the state model.
2.The study of selective subjects is planned in the curricula for the preparation of masters from the beginning of the 2nd quarter of the 1st year of study.
During the 1st quarter of the 1st year of study, students are provided with a list of elective subjects for study in the academic year and are asked to prioritize their study based on their own wishes.
The individual curriculum is prepared by the beginning of the 2nd quarter of the 1st year of study and approved by the Dean of the Faculty and the first Vice-Rector of the Academy.
The educational and professional program for higher education master's degree students in 136 Metallurgy provides for the distribution of the teaching load into compulsory and selective components as 66 and 24 ECTS credits, respectively. That is, choisen disciplines account for 26.7% of the teaching load.
Higher education learners are able to choose elective educational components from both the general education cycle (foreign language for vocational training, higher education pedagogy and psychology, intellectual property), and from the vocational training cycle, where they are combined into two sample units.

Describe how the EP and curriculum envisage it practical training for higher education learners, enabling them to acquire the competences necessary for further professional activity

Practical training of higher education master's degree students in the specialty 136

"Metallurgy" provides for the formation of professional competencies of the specialty necessary for further professional activity.
The educational-professional program provides a through-line program of practical training, the curriculum provides undergraduate practice on the topic of master's qualification work, programs (for each specialization) that regulate its content, goals, stages of completion and expected results are developed, as well as recommendations on drawing up a report the results of the practice.
Companies (practice base) meet the requirements set out in the Student Practice Regulations https://nmetau.edu.ua/file/provedennya_praktiki.pdf).
In 2019 students of the groups ME01-14-M, ME02-14-M and ME03-14-M passed the practice on the topics of master's qualification works at the relevant departments of the Metallurgical Faculty of the National Metallurgical Academy of Ukraine and in the following enterprises: "Dnipro Metallurgical Plant" , «Poltava Mining and Processing Plant», «Dniprovsky Metallurgical Plant», «Zaporizhstal», IFM named after Z.I. Nekrasov NAS of Ukraine.
Practice agreements are concluded with the companies (practice base) in accordance with the Student Practice Regulations.

Demonstrate that the EP allows you to secure the acquisition of social skills (soft skills) during the study period that meet the purpose and outcomes of the EP learning outcomes of the EP training.

The program results of training under the EP provide for the formation of the following social skills (soft skills) for the higher education students:
-ability to communicate with representatives of other professional groups of different levels (with experts in other fields of knowledge / types of economic activity);
- to receive and understand the scientific and technical foreign literature in the specialty, to prepare scientific and technical documentation and to communicate on professional topics in English;
-the ability to act on the basis of ethical considerations (motives);
- ability to take into account social, environmental, ethical, economic and commercial considerations that influence the implementation of technical solutions in metallurgy;
- ability to demonstrate an understanding of the legal framework relevant to metallurgical activities, in particular with regard to personnel, health, safety and risk (including environmental risk).
Formation of the listed competences and learning outcomes is integrated in accordance with the structural and logical scheme due to the students learning relevant educational components.
For example, the ability to understand and understand foreign scientific and technical literature in a specialty, to prepare scientific and technical documentation and to communicate on professional topics in English can be formed in studying the discipline "Professional foreign vocabulary"; the ability to demonstrate an understanding of the legal framework relevant to metallurgical activities, in particular in relation to personnel, health, safety and risk (including environmental risk) - in the study of Occupational

Safety and Civil Protection.
How does the content of the EP take into account the requirements of the relevant professional standard? There is no professional standard
What approach does the institution use to relate the volume of individual educational components of EPs (in ECTS credits) to the actual workload of higher education applicants (including self-employment)? The ratio of the volume of individual educational components of the EP to the actual load of higher education applicants is determined by the Regulation on the organization of the educational process(https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf), according to which the educational process at NMetAU is carried out in accordance with the European Credit Transfer and Accumulation System (hereinafter referred to as ECTS), which is based on determining the academic load of the higher education student required to achieve the expected learning outcomes and is accounted for in ECTS credits. The volume of one ECTS loan is 30 hours. ECTS credit structure is the percentage of student's classroom and extra-curricular study time as a percentage. The recommended structure of the ECTS loan at NMetAU provides for the degree of higher education "Master" as a rule, 35-45% of class. For independent out-of-class work of students there is a transition from informative training to training aimed at achieving concrete practical results, involving students into active creative work, oriented to solving problematic situations in scientific, design and entrepreneurial activity; reorientation of the student from the passive user knowledge to the active, who is able to use them in specific practical situations, can formulate a problem, analyze ways to solve it, make sound management decisions, etc.
If the EP prepares higher education learners for dual-level education, demonstrate how the curriculum structure and curriculum determine the objectives and features of this form of education Preparation of higher education learners for dual education is not provided

3. Access to the educational program and recognition of learning outcomes

Bring reference around to a web page, what contains information about the rules of reception on studies and requirements to the entrants EP - (the educational program)	https://nmetau.edu.ua/ua/mabitur
Access to the educational program and confession of results of studies The rules of reception are worked out by the Receiving commission of National to the metallurgical academy Ukraine in accordance with Terms of reception on studies to establishments of higher education of Ukraine in 2019, ratified by the order of Department of education and science from 11.10 2018 № 1096 and registered in Ministry	

of Justice of Ukraine 21.12 2019 after №1456/32908 (https://nmetau.edu.ua/file/pro_priymalnu_komisiyu.pdf)
The list of competitive subjects required for admission to NMetAU for the Master's Degree in Bachelor's Degree or full higher education in 2019 for the specialty 136 Metallurgy for both budget and non-budget proposals included the following: Proficiency Exam (Profile), English Exam languages (the first competitive subject). Such competitive subjects correspond to the cycles of general and professional preparation of EP "Metallurgical Processes of Production and Processing of Metals and Alloys". Competitive selection threshold is approved by NMetAU Scientific Council.

What document regulates the issue of recognition of learning outcomes obtained in other institutions? How is it made available to participants in the educational process?

The Academy approved the Regulations on Academic Mobility of Students of NMetAU (Order of NMetAU №74 of 04.07.2013), the Regulations on the Recognition of Documents on Secondary, Secondary Professional, Professional and Higher Education, issued by educational institutions of other states, at NMetAU (Academic Council, Protocol No. 6 of 25.05.2015) and the Regulations on the procedure for deduction, interruption of education, renewal and transfer of students enrolled in the National Metallurgical Academy of Ukraine, as well as granting them academic leave (https://nmetau.edu.ua/file/polozhennya_pro_poryadok_vidrahuvannya.pdf) in particular, paragraph 4 Transferring students to NMetAU from another institution of higher education and paragraph 5 Procedure for identifying and eliminating academic differences. Transfer of credits, establishment of equivalence of the assigned qualifications is carried out by examination of documents on education (diplomas, academic certificates, etc.). The Regulations on the Procedure for Exercising the Right to International Academic Mobility of Participants of the NMetAU Educational Process (Order of NMetAU of 02.02.2018 No. 23ag) (https://nmetau.edu.ua/file/polozhennya_pro_poryadok_vidrahuvannya.pdf) also apply. Academic mobility training is based on ECTS. Comparison of academic load during international academic mobility programs is based on a comparison of the learning outcomes achieved by the higher education provider at the partner institution and the learning outcomes planned by the NMetAU educational program.
Describe, in specific examples, the practice of applying these rules to the relevant EP (if any)?
On the grounds and in the order determined by the provisions of the normative documents students of the groups ME02-14 Chmyrkov A.O., ME01-16 Volodenkov V.A., ME03-16 Roman V.V. were transferred to training at NMetAU from other institutions. At the same time, the preliminary results of higher education students' studies were compared with the planned program results of the EP, and the academic difference was identified and eliminated.

What document of institution is regulate results of educating got in other institutions? How is his availability provided for the participants of educational

process?
The issue of recognition of the results of training received in non-formal education is regulated by the Regulations on the Organization of the Educational Process at the National Metallurgical Academy of Ukraine. (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf)
Describe on certain examples practice of application of the indicated rules on corresponding ОП (if such were)? *short field*
At present, there is no practice in the Metallurgical Processes for the Production and Processing of Metals and Alloys to recognize the learning outcomes obtained in non-formal education.

4. Teaching and teaching under the educational program

Demonstrate how the forms and methods of teaching and teaching are on EP contribute to the achievement of programmatic learning outcomes? Point links to relevant documents
Achievement of the program results of training at EP "Metallurgical Processes of Production and Processing of Metals and Alloys" is possible due to the optimal combination of such forms and methods of teaching as lectures, practicals, seminars and laboratory classes, completion of course work, completion of practice on the topic of master's qualification work, (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf 4. Forms of training organization), stagnation of distance learning methods https://dl.nmetau.edu.ua/login/index.php). Teaching of disciplines for each of the specializations included in the EP is carried out with active use of multimedia tools, specialized software, modern laboratory equipment.
-Specialization in Cast Iron Metallurgy (http://nmetau.edu.ua/en/mdiv/i2023/p2711)
- Specialization in Metallurgy of Steel (http://nmetau.edu.ua/en/mdiv/i2030/p2714)
-specialization Physico-chemical bases of metallurgical processes (http://nmetau.edu.ua/en/mdiv/i2004/p2707).
These methods and techniques correspond to the program results of training and contribute to mastering students declared in the EP competencies. Credit-modular learning technology and personality-oriented learning technology are also used to develop students' individual cognitive abilities. The work programs of the disciplines provide correlation of the learning outcomes of a particular discipline with the program results of the training, which reflects the matrix of software of the program results of the training provided by the EP with the corresponding components of the educational program.

Demonstrate how the forms and methods of learning and teaching are meet the requirements of a student-centered approach? What is the level satisfaction of higher education applicants with teaching and teaching methods according to survey results?
NMetAU promotes a student-centered approach in the choice of forms and methods of

teaching and teaching. The learning process at the Metallurgical Processes for the Production and Processing of Metals and Alloys is based on the principles of mutual respect between students and teachers, with the use of verbal, visual and practical forms and methods of teaching and teaching that contribute to the achievement of higher education program students. For the development of individual cognitive abilities of higher education applicants, a cycle of disciplines of free choice of students has been developed and logically structured to ensure the exercise of their right to choose educational subjects, which is regulated by the Law of Ukraine "On Higher Education" (https://zakon.rada.gov.ua/laws / show / 1556-18) and correlates with the NMetAU Strategic Development Plan. In accordance with paragraph 3.1.12. Regulations on Student Self-Government of the National Metallurgical Academy of Ukraine https://nmetau.edu.ua/file/polozhennya_studsovet_zi_zminami.pdf), students have the right to request proposals for improvement and reform of the educational process, etc., and therefore can participate in internal quality assurance procedures through comprehensive testing of their knowledge, skills and skills acquired as a result of training. Teachers of EPs act as full-fledged facilitators, because in addition to conducting lectures and practical classes, they organize interactive communication with students, promote the personal development of higher education students, create a favorable psychological atmosphere of understanding and trust in the classes. In particular, from 2019-2020 the practice of questioning students to determine their level of satisfaction with the methods of teaching and teaching the subjects of EP.

Demonstrate how the methods are met teaching and teaching at EP the principles of academic freedom is a short field

Methods of teaching and teaching under EP contribute to the realization of the principles of academic freedom, since it provides for the possibility of self-determination and self-realization of students, as well as the development of their creative personality. The compulsory and selective components of EP are studied through a variety of methods and techniques, enabling higher education students to develop thinking and apply a broad creative approach to problem solving.

Students have the opportunity to freely choose the topics of the qualification work:

-specialization in Cast Iron Metallurgy (https://nmetau.edu.ua/en/mdiv/i2023/p3064)

- Specialization in Steel Metallurgy (https://nmetau.edu.ua/en/mdiv/i2030/p3060)

- specialization Physico-chemical bases of metallurgical processes ().

In accordance with the Law of Ukraine "On Education" and the Regulations on the organization of the educational process at NMetAU (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf) scientific and pedagogical workers are given the opportunity to creatively fill the content of disciplines, to make changes in the work of disciplines programs, choose teaching methods for the effective acquisition of knowledge, conduct classes using modern technologies, choose an independent form of study of individual topics.

Describe how and at what time the participants in the educational process are provided with information about the goals, content and expected learning outcomes,

procedure and evaluation criteria within the individual educational components.
In accordance with the Regulations on the organization of the educational process at NMetAU (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf), for each of the subjects included in the Operational Program "Metallurgical Processes of Production and Processing of Metals and Alloys" a program that contains information on the goals, content and expected learning outcomes, procedure and evaluation criteria.
Full information on the goals, content and expected learning outcomes.
The evaluation procedure and evaluation criteria are provided orally to higher education applicants in verbal form by EP teachers at the first session. In addition, the evaluation criteria are governed by the Regulations on the Organization of the Educational Process at the National Metallurgical Academy of Ukraine », which is openly accessible (https://nmetau.edu.ua/file/ organizatsiya_osvit._prots.pdf) (p. 5. Organization of control and evaluation of students' educational achievements). The modular test papers also contain a scoreboard of scores, divided into three parts according to primary, intermediate, and higher levels of difficulty. Students can get acquainted with the schedule of the educational process and the schedule of attestation weeks. at the booths of graduating departments responsible for the preparation of masters in OP "Metallurgical processes of production and processing of metals and alloys":
- Cast Iron Metallurgy (specialization Cast Iron Metallurgy)
- Steel Metallurgy (specialization Steel Metallurgy)
- Theories of metallurgical processes and chemistry (specialization Physico-chemical foundations of metallurgical processes). And also in the public domain on the Academy's website (https://nmetau.edu.ua/en/mdiv/i2030/p3292). All information about the organization of the educational process is provided to students on time and in full.

Describe how the combination of learning and research underneath is implementation timeEP
At the Departments of the Academy providing teaching of the subjects of professional training of masters in EP "Metallurgical processes of production and processing of metals and alloys" considerable attention is paid to the research work of students, which covers two interrelated aspects: teaching students the elements of research activity, organization and methodology of research creativity; carrying out scientific researches carried out under the guidance of scientific and pedagogical staff of the respective departments.
The scientific activity carried out at the departments is closely related to the creative interests of students. Beginning in the junior years, students are involved in scientific seminars and student circles and societies. Example:
-specialization in Cast Iron Metallurgy (https://nmetau.edu.ua/en/mdiv/i2023/p2265)
-specialization in Metallurgy of Steel (https://nmetau.edu.ua/en/mdiv/i2030/p2222)
-specialization Physico-chemical bases of metallurgical processes (https://nmetau.edu.ua/en/mdiv/i2004/p1531).
This allows you to identify students who have a penchant for scientific creativity. Each student studying under the EP "Metallurgical Processes of Receiving and Processing of Metals and Alloys" can freely choose the topic of scientific-research, which he performs

during his studies (during the course work) and during undergraduate practice. The results of the research work are reported at the scientific and technical conferences of the Academy and form the basis of the final qualification works. The best works are recommended for publication and participation in competitions.
Every year at NMetAU there is an international student conference "Young Academy" (http://nmetau.edu.ua/en/mdiv/i2024/p1078), whose participants are from 2014 to 2019. have become more than 75 students. At the same time more than 15 of them became winners and took the prize places.
The result of the scientific activity of students studying at the EP "Metallurgical processes of production and processing of metals and alloys" for 2014-2019. more than 50 publications have been published in conference proceedings and professional periodicals. All publications were published jointly with the teachers of the department of the Academy. Also the achievements of the scientific-pedagogical teams of the departments providing the teaching of the subjects of professional training of bachelors for the EP "Metallurgical processes of production and processing of metals and alloys" are victories in various competitions of scientific works:
- Danilov O.A. (gr. ME01-13-M) was awarded the 1st degree diploma for the best report at the All-Ukrainian Scientific and Technical Conference of Students and Young Scientists "Young Academy 2018", Metallurgy Section (pig iron metallurgy department, supervisor - Ph.D., prof. Tarakanov A.K.);
- Fedorov O.V. (gr. ME01-13M) for the best report at the All-Ukrainian Scientific and Technical Conference of Students and Young Scientists "Young Academy 2018" (pig iron metallurgy subsection, scientific supervisor - Ph.D., Candidate of Technical Sciences ,Assoc. docent. Boyko M. M.);
- Ignatenko V.L. (gr. ME01-14-M) - Grade II diploma All-Ukrainian competition of student works in the field of metallurgy. - 2019 (supervisor - Ph.D Candidate of Technical Sciences ,Assoc. docent. Yagolnyk MV);
- Khutornyy D.Y. (gr. ME-02-15), diploma of the third degree at the All-Ukrainian competition of student works in metallurgy - Dnepropetrovsk, 2018 (Doctor of Technical Sciences, Professor Boychenko V.M.);
- Pushkaryov D.O. (gr. ME -02-12 m), diploma of the second degree in the second round of the All-Ukrainian student Olympiad in the specialty of metallurgy of ferrous metals, Dnipro, 2017 (supervisor - Ph.D., Candidate of Technical Sciences ,Assoc. docent. Stoyanov O.M.).
- Sheremeta N.A. (gr. ME 02 -13m), diploma of the winner of the competition of NAS of Ukraine for winning prizes for young scientists and students of higher educational institutions for the best scientific works, 2017 (scientific supervisor - Ph.D., Candidate of Technical Sciences, Assoc. docent Molchanov L.S.);
- Volodko K.R. (gr. ME02-14), diploma of the first degree in the second round of the All-Ukrainian student Olympiad in the specialty of metallurgy, Dnipro, 2018 (supervisor - Ph.D., Candidate of Technical Sciences, Assoc. docent. Stoyanov O. M.).
- Glazkova A.V. (gr. ME-03-10), diploma of the 2nd degree at the All-Ukrainian

competition of student scientific works in metallurgy - Dnepropetrovsk, 2014 (supervisor - Doctor of Technical Sciences, Prof. Kamkina L.V.)
- Sinitsin Y.S. (gr. ME-03-11), Pinchuk Foundation Fellow, 2014
- Rosenberg O.V. (gr. ME-03-12), diploma of the 2nd degree at the All-Ukrainian competition of student scientific works in metallurgy - Dnipropetrovsk, 2015 (scientific supervisor - Ph.D., Candidate of Technical Sciences ,Assoc. docent. Myanovskaya Y.V.)
- Nazarenko R.V. (gr. ME-03-13) diploma of 3 degrees at the All-Ukrainian competition of student scientific works in metallurgy - Dnipropetrovsk, 2015 (scientific supervisor - Ph.D., Candidate of Technical Sciences Assoc. docent. Kolbin M.O.)
- Kulchytska O.S., Kazatkova K.S. (gr. ME-03-13) diploma of 3 degrees at the All-Ukrainian competition of student scientific works in metallurgy - Dnepropetrovsk, 2016 (scientific supervisor - Ph.D., Assoc. Candidate of Technical Sciences docent. Myanovskaya Y.V.)
-Zikin EV (gr. ME-03-14) diploma of 3 degrees at the All-Ukrainian competition of student scientific works in metallurgy - Dnipropetrovsk, 2017 (scientific supervisor - Ph.D., supervisor - Ph.D., Candidate of Technical Sciences Assoc. docent. Grishin O.M.)
- Varitsev A.O. (gr. ME-03-14) diploma of 3 degrees at the All-Ukrainian competition of student scientific works in metallurgy - Dnepropetrovsk, 2018 (scientific supervisor - - Candidate of Technical Sciences, Senior Lecturer Bezhkurenko OG)

Demonstrate, with specific examples, how teachers update the content of educational components on the basis of scientificachievements and current practices in the relevant field

In accordance with the Regulations on quality assurance groups of NMetAU educational programs (https://nmetau.edu. Ph.D., Lecturer Bezhkurenko O.G.) ua / file / polozhennya_pro_gzyaop_nmetau.pdf) for EP “Metallurgical Processes of Obtaining and metal and alloy processing »the quality assurance team is one of the main goals of which is:

- ensuring that the educational programs of specialists are up-to-date with the current state of science and technology, labor market requirements and the latest educational technologies.

This goal is achieved by performing the following tasks:

- annual monitoring of individual educational components and the educational program as a whole;
- ensuring participation of higher education applicants in the development and monitoring of the educational program and quality assurance of education;
- providing higher education applicants with the educational program the opportunity to form individual educational trajectories;
- revision and improvement of the system of evaluation of higher education applicants in the educational program;
- academic support for higher education applicants in the educational program;
- evaluation of scientific-pedagogical workers who teach in the educational program, by their professional activity;

- promoting the development of educational resources for the educational program;
- informing stakeholders about all aspects of educational program activities.

Based on these principles and based on the principle of academic freedom, the leading lecturer determines what scientific advances and current practices should be offered to applicants during their studies.

The content of the educational components of the EP is updated at the initiative of a leading lecturer (taking into account the scientific interests of higher education applicants) before the beginning of the current academic year. It should be discussed at a meeting of the relevant graduating department and approved by the head of the group providing the specialty 136.1 "Metallurgical processes of production and treatment of metals and alloys" (Ph.D., Prof. Kamkina L.V.)

It should be noted that the content of the educational components of the master's level of training of higher education students of the specialty 136 "Metallurgy" was first approved in 2017, so the work programs of the educational disciplines consisted of modern practices and scientific achievements. However, the content of some of them has since been updated. For example, to expand the content of the sample educational component and to take into account the real needs of production, the content of the discipline "Integrated use of raw materials and waste" and "Theoretical and technological bases of obtaining alloys with specified properties" were developed

Describe how you teach, teach and research there is a short field within the EP related to the internationalization of the institution activity

The National Academy of Metallurgy of Ukraine pays considerable attention to bringing the curricula, training technologies and research activities of the Academy in line with European principles and standards of education. NMetAU is an active participant in such European projects as Erasmus +, TEMPUS, DAAD, Visby and others. The Regulations on the Procedure for Exercising the Right to International Academic Mobility of Participants of the NMetAU Educational Process are in effect at the Academy (Order of NMetAU of 07.02.2018 №23ag) (https://nmetau.edu.ua/file/polozhennya_pro_akademichnu_mobilndf_nak_metaknmet_nak , a form of academic international mobility for NPPs is a scientific internship. Teachers Y.V Myanovskaya, Vanyukov A.A have undergone a scientific internship at the Faculty of Engineering and Materials Technology of Czestochow Polytechnic University (Poland, 2017).

NMetAU is the founder and co-organizer of the most important international conference in the field of metallurgy in Ukraine - Advances in Metallurgical Processes and Materials, which in June 2018 brought together dozens of leading scientists from Japan, the USA, China, Australia, Austria, Sweden, Germany, the Netherlands, Southern Korea , India and other countries in the world.

Cooperation with German universities - the Freiburg University of Mining Academy, the University of Hanover and the University of Padeborn - is continuing to develop. Several grants have been received to support student and staff mobility within the Erasmus + KA-1 program with the Freiberg Mining Academy. During the years 2017-2018, lectures by

professors at the NSAA at NMetAU and by professors at the NSAAU at the FSA have been repeated. During this time 6 students and 2 postgraduate students studied under the double diploma programs and underwent internship at the Technical University of Freiburg Mining Academy.
Cooperation with Poland continues: During 2017-2019, 20 students and 1 graduate student of NMetAU studied and conducted research at universities in this country. Two NMetAU faculty members visited the Cracow Mining and Metallurgy Academy for a study visit.
Cooperation with Japanese universities is increasing. For the second time in 2017, the Academy has hosted the School of Theory and Technology of Ferroalloy Manufacturing with the participation of 4 students of Akita University, and in 2018, a graduate student at Tohoku University completed a three-month internship at NMetAU on the use of biofuels in metallurgy. In 2018, the NMetAU representative became the first Ukrainian representative to attend the annual meeting of the Iron and Steel Institute of Japan International in Tokyo.

5. Control measures, evaluation of higher education applicants and Academic virtue

How are the forms and forms of control measures and criteria for evaluating the educational attainment of higher education students ensured?
The clarity and comprehensibility of the forms of control measures and criteria for evaluating the academic achievements of higher education students are ensured by: a thorough approach of the department to their planning and formulation; mandatory reconciliation of learning outcomes, types of learning activities and assessment; end-to-end student outreach, and more. The system of evaluating the academic achievements of higher education applicants is defined by the “Regulation on the Organization of the Educational Process in the National Metallurgical Academy of Ukraine” (https://nmetau.edu.ua/file/ organizatsiya_osvit._prots.pdf) (p. 5. Organization of the control and evaluation of educational achievements students). The level of knowledge, skills and skills of NMetAU students is estimated on a 12-point scale, which is an internal scale of NMetAU assessment. Also, in accordance with the "Regulations on the rating system for evaluating the achievements of students of NMetAU" (https://nmetau.edu.ua/file/polozhennya_pro_reyting_studentiv_nmetau-zmini.pdf), a rating score is defined as a comprehensive assessment of student achievement. he organization of certification of higher education applicants and the rules for their conduct at NMetAU is regulated by the "Regulations on examiners of NMetAU" (https://nmetau.edu.ua/file/ekzamenatsiyna_komisiya.pdf). Assessment methods and criteria are described in the work programs and syllabuses for each educational component of the EP, communicated to lecturers at the beginning of the discipline, and posted on the websites of the departments of the academy responsible for teaching this educational component of the EP. Criteria for evaluating academic

achievement by form of rectorial control and residual knowledge control are given in the rector's and complex control work packages and are communicated to the student before the control event.

Describe how the forms of control measures within the EP disciplines allow you to verify the achievement of programmatic learning outcomes?

The forms of control measures and evaluation criteria for educational recipients within the educational components of the EP are clear, understandable, provide an opportunity to establish the achievement of higher education by the applicant and be made public in advance. The regulation on the organization of the educational process in NMetAU (https://nmetau.edu.ua/file/ organizatsiya_osvit._prots.pdf) provides the following types of control: current control; modular control; semester (final) control; state certification of graduates. The main measures (forms) of control are: control work; protection of modular individual task; protection of course project (work); examination; complex control work; protection of qualifications, because they allow you to effectively check the achievement of programmatic learning outcomes. Forms of control measures within the educational disciplines of the OP allow you to check the achievement of program results of training due to the fact that at the stage of preparation of work training programs the content of the control measures should correspond to the results of the discipline correlated with the results of learning. Assessment of student learning outcomes is carried out according to the 12-point assessment scale set in NMetAU. Forms of control over the learning outcomes of students in the discipline and the criteria for their assessment are determined by the work program of the discipline.

Tests for individual modules of the discipline are written and can be done in a test or non-test form, or in a mixed form. Modular individual tasks in the form can be calculated, graphical, calculated and graphical, have the form of an abstract, student research report and more. The defense of the course project (work) occurs before the commission formed by the department teaching the discipline, which evaluates its quality according to the established criteria, the student's report, the completeness and correctness of the answers to the student's questions. Assessment of the results of undergraduate practice is carried out in accordance with the Regulations on the practice of students of NMetAU (https://nmetau.edu.ua/file/provedennya_praktiki.pdf) on the basis of the submitted report and characteristics of the head of qualification work, who is the head of practice from the department. The exam is the final stage of the study of all or part of the discipline and aims to test students' knowledge of theory and to identify the skills of applying the knowledge obtained in solving practical problems, as well as the skills of independent work with educational and scientific literature. The exam in the discipline is written. Delayed control (complex control work) is part of the internal quality assurance system of education. The results of deferred control are not taken into account when evaluating the learning outcomes of a higher education applicant from an educational component. According to the OP, the certification of the applicants for education at the second (master's) level is provided in the form of

preparation and protection of the qualification work of the master. The basic requirements for the content and design of the master's qualification work, as well as information about the procedure and peculiarities of its preparation, are defined by the Regulations on the organization of final qualification work at NMetAU (https://nmetau.edu.ua/file/organizatsiya_vikonannya_vipusknih_kvalifikatsiynih_robit_u_nmetau._2016.pdf). The level of achievement of higher education students' learning outcomes is reflected in the academic record, the individual curriculum and the higher education applicant's study card.
How and at what time do the information on the forms of control measures and assessment criteria be communicated to higher education applicants? Information on the forms and criteria for assessing academic achievement are set out in the work program of the discipline and syllabus of the discipline, which are posted on the websites of the departments of the academy responsible for teaching the discipline. In addition, the lecturer is obliged to make the students aware of this information at the first lesson of the discipline, as well as to inform them about the presence on the site of the department of the academy, the syllabus of the discipline and methodological support of the discipline. The timeliness and availability of information about forms of control and evaluation criteria can be communicated to higher education applicants through age groups, social networks, and more. All types of controls and their documentation are carried out using the methods and means provided by the Regulations on the rating system of student achievement of the National Metallurgical Academy of Ukraine (https://nmetau.edu.ua/file/polozhennya_pro_reyting_studentiv_nmetau-zmini.pdf) educational process at NMetAU (https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf). Criteria for evaluating academic achievement by forms of rectoral control and residual knowledge control are given in the rector's and complex control work packages and are communicated to the student before the control event.
How do the forms of certification for higher education applicants meet the requirements of the higher education standard (if any)? There is no higher standard of higher education in the specialty 136 "Metallurgy" of the second (master's) level of training for higher education applicants. The organization of certification of higher education applicants and the rules for their conduct in NMetAU is regulated by the Regulations on examiners of NMetAU (https://nmetau.edu.ua/file/ekzamenatsiyna_komisiya.pdf).
What document does the institution of higher education regulate the procedure for conducting control measures? How is it made available to participants in the educational process? The procedure for carrying out control measures is regulated by the Regulations on the organization of the educational process at NMetAU. This document is accessible to all participants of the educational process on the official site NMetAU in the tab Public

Information https://nmetau.edu.ua/file/organizatsiya_osvit._prots.pdf.
Tasks to the control measures are concluded by the teacher, their samples are contained in the package of materials of educational and methodological support of the discipline and approved by the department teaching the discipline. The criteria for assessing the academic achievement of applicants within a particular discipline are made known to the students in the first lesson and are made public on the websites of the departments teaching the discipline.

How do these procedures ensure that examiners are objective? What are the procedures for preventing and managing conflicts of interest? Give examples of how to apply these procedures to your education program.

Teachers' objectivity in carrying out control measures is ensured through the following procedures: carrying out only written works (verified and signed by the responsible teacher the written works are stored at the department teaching the discipline for one calendar year) and possible selective verification by the guarantor of the educational program, the head of the department, or by another examiner.
The prevention of conflicts of interest between the participants in the educational process is regulated by the Code of Academic Integrity (https://nmetau.edu.ua/ua/minfo). EP teachers adhere to the principles of impartiality and objectivity in carrying out control measures and clearly adhere to the assessment criteria, which are regulated by the Regulations on the organization of educational process in NMetAU (https://nmetau.edu.ua/file/ organizatsiya_osvit._prots.pdf)

How do the higher education institution's procedures regulate the procedure for retaking control measures? Provide examples of application of the relevant rules in the educational program

The procedure for repeated passing of control measures at the Academy is regulated by the Regulations on the organization of educational process in NMetAU (https://nmetau.edu.ua/file/ organizatsiya_osvit._prots.pdf). The transfer of a credited credit module in order to increase the module score is not allowed. If a certain module is not enrolled to the student due to poor grade or absence of the student at the appropriate control measure without valid reasons, the student with the consent of the dean is allowed two additional attempts to retake the module: the first - the teacher who has carried out the corresponding module control measure; the second, in case of unsuccessful first attempt, is a commission, which is appointed by the head of the department teaching the discipline.
The presence of unassigned previous modules is not a reason to prevent a student from taking control measures from subsequent modules. In case of failing the exam, the student, with the consent of the Dean, is allowed two additional attempts to retake: the first - the teacher who conducted the exam; the second, in case of unsuccessful first attempt, is a commission, which is appointed by the head of the department, which teaches the discipline, composed of two or three teachers of the department with the participation of the responsible teacher who conducted the exam. Retaking the exam in order to increase your positive score is not allowed.

How does the institution's procedures regulate the procedure for appealing the procedure and the results of the control measures? Give examples of how to apply the appropriate rules to your EP.

In case of disagreement with the assessment, the higher education applicant has the right to file a written appeal on the day of the announcement of the assessment or the next business day, stating the specific reasons for disagreement with the assessment. The Dean with the Head of the Department and the Examiner, involving, as necessary, other specialists, considers the appeal and orally informs the applicant of higher education about the results of the examination.

There were no cases of appeal of the procedure and the results of the control measures on the educational program.

What institution documents contain policies, standards and procedures for maintaining academic integrity?

Academic Integrity Policies, Standards and Procedures are outlined in the Academic Integrity Code (https://nmetau.edu.ua/ua/minfo). In their work, the teachers of the EP are guided by the provisions of the Guidelines for Higher Education Institutions in Support of the Principles of Academic Integrity (http://nmetau.edu.ua/file/metodrekom_mon.pdf). The basic principles of conflict of interest settlement in NMetAU are regulated by the NMetAU Anti-Corruption Program (https://nmetau.edu.ua/file/antikoruptsiyna_programa.pdf) and the Regulations on the internal quality assurance system of higher education in NMetAU (https://nmetau.edu.ua/file/polozhennya_pro_svzya_nmetau.pdf), which outlines the educational quality assurance procedures; the system and mechanisms for ensuring academic integrity; published criteria, rules and procedures for evaluating educational recipients.

What technological solutions are used on the program as a tool to counteract the violation of academic integrity?

The following are used as tools to counteract academic integrity violations in the educational program:

clear notification of higher education recipients about the inadmissibility of plagiarism, requirements for public speaking, visual presentations, correct reference to sources of information when borrowing ideas, statements, information and adherence to the rules of copyright law;

with the aim of spreading knowledge, skills, basic principles of academic virtue, teachers of graduate departments for students conduct seminars, workshops, presentations;

to prevent and detect academic plagiarism, a procedure is developed by leading teachers to tailor individual topics for the qualification work, to discuss them at the meetings of graduating departments;

Master's student in the explanatory note to the qualification work certifies that in the work there are no borrowings from the works of other authors without corresponding references;

counter-plagiarism examination of qualification work is carried out by the responsible teacher for norm control with the help of programs and online resources https://unicheck.com/, https://plagiarismdetector.net/, https://advego.com/plagiatus/, https://smallseotools.com/plagiarism-checker/, https://www.plagramme.com/free-plagiarism-checker-online; after protection, all materials from qualification work are transferred for storage in the office of the diploma projecting, where a file of final qualification works is conducted in accordance with the specialty.

How does the institution promote academic virtue among higher education applicants?

Promoting academic virtue among higher education applicants is through:

interviewing curators with academic groups on a set of principles, rules of conduct of participants of the educational process, aimed at forming an independent and responsible person, able to study, teach and engage in scientific activities, in compliance with ethical and legal norms;

by encouraging students of the department's teachers to independently complete the educational tasks, tasks of current and final control of the learning results;

with the aim of spreading knowledge, skills, basic principles of academic virtue, teachers of graduating departments for students conduct seminars, workshops, presentations.

How does an institution respond to violations of academic integrity? Provide examples of relevant situations for higher education applicants for their respective educational program.

In order to monitor the observance of the moral and legal standards of the Academic Integrity Code by members of the staff (https://nmetau.edu.ua/ua/minfo), the Academic Integrity Commission (https://nmetau.edu.ua/file/nakaz.pdf). The Commission is empowered to receive and consider allegations of violation of the Code and to submit proposals to the NMetAU administration (faculties and institutes) to impose appropriate sanctions. For violation of the principles of academic virtue, the NMetAU education applicants are held liable, which includes repeated assessment (test work, exam, etc.); repeated completion of the training course; deductions from the school. Upon the detection of academic plagiarism in the qualifying works of the applicants, it is possible to refine the work and retest for plagiarism.

During the reporting period, no violations of academic integrity were found under the educational and professional program.

6. Human resources

In what way does the program teachers provide the necessary level of professionalism?

The graduating departments of the specialty 136 "Metallurgy" under the program "Metallurgical Processes of Production and Processing of Metals and Alloys" at the Faculty of Metallurgy at NMetAU are: Department of Iron Metallurgy, Head of the

Department of Engineering Sciences, prof. A.K. Tarakanov; Department of Steel Metallurgy, Acting Head of the Department, Doctor of Technical Sciences, prof. K.G. Nizayev; Department of Theory of Metallurgical Processes and Chemistry, Head of the Department, Ph.D., prof. D.A. Kovalyov.

At NMetAU, at the Faculty of Metallurgy, at the respective graduating departments, teachers are selected in accordance with the requirements of academic and professional qualifications in order to ensure the achievement of the programme's goals and program outputs. The qualification of teachers involved in the implementation of the program 136 "Metallurgy" of the master's level of training fully meets the personnel requirements for ensuring the pursuit of educational activities in the field of higher education.

The competitive selection procedures of teachers are transparent and provide an opportunity to provide the necessary level of their professionalism for successful implementation of the educational program. The competitive selection of teachers is carried out in accordance with the Regulations on the procedure for competitive selection and drawing up of employment contracts (contracts) with scientific and pedagogical staff of the National Metallurgical Academy of Ukraine (https://nmetau.edu.ua/file/polozhennya_pro_obrannya.pdf). The analysis of the performance of the graduating departments testify to the high level of their scientific and pedagogical potential, which meets the Licensing conditions and allows to provide qualitative training of applicants for the second (master's) level of higher education in the specialty 136 "Metallurgy".

Describe, by reference to specific examples, how the institution engages employers in organizing and implementing the educational process

An example of involvement of employers in the implementation of the educational process of preparation of applicants for higher education specialty 136 "Metallurgy" can serve as a close collaboration of graduating departments of the Metallurgical Faculty of NMetAU with "Dnipro Metallurgical Plant", "Poltava Mining and Processing Plant Dnepropetrovsk Dnepropetrovsk Dnepropetrovsk ferrous metallurgy them Z.I.Nekrasov of Ukraine. On the basis of enterprises and institutions, higher education graduates practice on the topics of master's qualifications. Representatives of enterprises take an active part in shaping the content of the program, taking into account actual problems of metallurgical production.

Head of department of technological equipment and control systems Institute of ferrous metallurgy them Z.I. Nekrasov of Ukraine Irina Muravyova is the chairman of the examination commission for the defense of the final qualification works of bachelors and masters at the department of iron metallurgy. Head of the Department of Physical and Chemical Problems of Metallurgical Processes Institute of Ferrous Metallurgy prof. , Ph.D. Togobitskaya D.M. is a member of the examination committee for the defense of the final qualification works of bachelors and masters at the Department of Theory of Metallurgical Processes and Chemistry, and takes an active part in vocational work, promotes the expansion of material and technical base and

methodological support of educational activities.

Describe, by reference to specific examples, how an institution engages in a classroom program of practitioners, industry experts, employers' representatives

The educational program has the practice of conducting seminars and trainings with the participation of representatives of employers and students, which discuss the current problems of metallurgical production, employment of graduates, solve practical issues. The course "Physical and chemical support of technologies of restorative processes", "Modeling of technological processes" is taught by Doctor of Technical Sciences, prof. D.M. Togobitskaya, Head of the Department of Physical and Chemical Problems of Metallurgical Processes. On the basis of the Institute of Ferrous Metallurgy them Z.I. Nekrasov Department of Theory of Metallurgical Processes and Chemistry has a branch, where students have the opportunity to use modern laboratory equipment and software during practical and laboratory classes, to pass practice. Also, teachers who have considerable experience of scientific work in this institution are involved in the educational process at EP 136 “Metallurgy”: Ph.D., Assoc. Molchanov LS, Doctor of Technical Sciences, Prof. Chernyatevich AG

Describe how the institution promotes the professional development of program teachers? Provide specific examples of such assistance

In accordance with the Regulations on professional development of pedagogical and scientific-pedagogical workers of NMetAU (https://nmetau.edu.ua/file/polozhennya_pro_pkp_i_np.pdf), the qualification and training of scientific and pedagogical workers (SPW) is provided not once with average wage. In the case of advanced training or internship, the employees are entitled to the guarantees and compensations provided by the legislation of Ukraine.

The purpose of advanced training and internships is to improve the professional training of the employee by deepening and expanding the professional knowledge, skills and skills, gaining experience in performing additional duties and tasks related to their professional activity. NMetAU employees are obliged to constantly improve their professional level, pedagogical skills and scientific qualification; to undergo advanced training, at least once every five years. In the last five years, all teachers of graduation departments involved in teaching at the Metallurgical Processes of Production and Processing of Metals and Alloys have passed the advanced training.

Demonstrate that the institution encourages the development of teaching skills

Effective tools for promoting the professional development of teachers are the implementation of the Regulations on the material promotion of scientific-pedagogical, pedagogical, scientific and engineering staff and doctoral students of NMetAU and the Regulations on awarding the honors of NMetAU. Material incentives imply that for each type of work performed by a teacher or any other employee of the university, he will receive appropriate financial incentives (in the form of bonuses, allowances, surcharges).

In particular, material stimulation of scientific and pedagogical staff for the protection

of dissertation works, preparation of highly qualified scientific personnel, publication of scientific articles in scientific periodicals, included in international scientometric databases Scopus, Web of Science, achievement of the h-index value in scientometric databases, Sc. Web of Science, equal to 10 and above, preparation of scientific and educational publications, gaining foreign educational or scientific grants, teaching courses in special subjects English in this language, obtaining international language certificates, training students, graduate students - winners and winners of all-Ukrainian Olympiads and competitions, improving the material and technical base, etc. Intangible promotion involves the awarding of four levels of honors for achievements in scientific, pedagogical and community work, diligent work for the benefit of NMetAU, and services to it.

7. Educational environment and material resources

Demonstrate how financial and logistical resources (library, other infrastructure, equipment, etc.), as well as educational and methodological support for the EP, help to achieve the goals and program outcomes identified by the EP?

The academy has 12 teaching buildings and laboratories, with a total area of 72190.6 m^2, of which 38140.5 m^2 is located in training and control facilities and computer laboratories. This provides an indicator of 8.4 m^2 per higher education applicant for the actual contingent and is sufficient to create the right learning environment. The financial resources of the program are generated at the expense of the University, and are sufficient to secure it. Documents for financial activity are available by letter https://nmetau.edu.ua/ua/minfo/i12/p2479

All educational premises are the property of the Ministry of Education and Science, described in the "Passports of sanitary-technical condition of working conditions", connection to engineering networks (gas, drainage, sewerage, power supply, heating systems), meet the sanitary-hygienic standards, requirements of fire safety rules , building codes. No injuries have been reported. Every year, the department of labor protection checks the state of sanitary and technical conditions of work in the premises of the department, records are kept in the journal. Material assets are stored in premises equipped with burglar alarms. All buildings have security around the clock.

The educational process is fully carried out in the training and laboratory areas of the NMetAU premises, which are included in the class schedule. The auditorium, laboratory and office premises of the Academy have an air volume and a level of illumination that meet the established standards (DBN B.2.2-3-97 "Buildings and Structures of Educational Institutions", approved by the Order of the State Committee for Construction of Ukraine of June 27, 1996, No. 117). The educational classrooms used for the education of masters in the educational and professional program are located in the educational buildings № 1, 2, 3, A, and B, which are located at Gagarina 4-6, Dnipro, 49005.

In addition to a strong material and technical base, the Academy also has a well-

developed social infrastructure. On its territory there are a dining room, buffets, a health post and a student dispensary. The security of higher education applicants is 100%. The high level of equipment of the facilities of the NMetAU material base and, in particular, the graduating departments of the educational and professional program, specialty 136 "Metallurgy" meets the license conditions and allows to provide quality training of specialists of the second (master's) level within the licensed volume. The equipment, equipment and software of specialized computer laboratories that ensure the implementation of the Master's Degree Plan for Higher Education Applicants in accordance with the technological requirements for higher education educational activities fully complies with the Master's Licensing Conditions.

Demonstrate how the HEA's educational environment meets the needs and interests of higher education applicants EP? What measures are the institution taking to identify and address these needs and interests?

NMetAU provides free access to the infrastructure and information resources needed for teaching, teaching and research activities within the educational program by teachers and higher education providers. Measures are constantly being taken to improve and update the material and technical base. Developed a strategic plan for the development of NMetAU until 2025 in the context of the requirements and regulations arising from the acquisition by the Academy of the status of a self-governing, autonomous, research university https://nmetau.edu.ua/file/strategichniy_plan_2019-2025-.pdf.

Одна з основних цілей стратегічного плану розвитку є створення середовища, сприятливого для навчання, праці та розвитку особистості, що приваблюватиме вступників, зокрема іноземних, забезпечуватиме високу якість освітніх послуг та здійснення наукових досліджень високого рівня. Серед іншого передбачено щорічний моніторинг системи внутрішнього забезпечення якості https://nmetau.edu.ua/file/polozhennya_pro_svzya_nmetau__2018.pdf, щорічне соцопитування студентів для вирішення проблем щодо їхньої адаптації тощо https://nmetau.edu.ua/file/polozhennya_pro_anketuvannya.pdf

The primary needs of students are addressed when communicating with the group supervisors https://nmetau.edu.ua/file/polozhennia_pro_kuratora.pdf, in more difficult cases students turn to the Dean of the Faculty. Joint meetings of the Academic Councils of the Faculty are held, in which students' participation is presented, which allows to satisfy the needs and interests of higher education program applicants

Describe how the institution ensures the safety of the educational environment for the life and health of higher education recipients (including mental health)?

The educational environment is safe for the lives and health of higher education students enrolled in EPs and enables them to meet their needs and interests. All educational and administrative facilities meet the requirements of safety and provide living conditions for lighting, heat and air, technological processes in specialized laboratories, etc. The operating modes of training equipment and equipment comply with the standards. Higher education providers are briefed on safety issues. At

NMetAU there is a department of labor protection, which performs work on the control of the state of labor protection in the units of the Academy together with the commission on labor protection of trade unions and public labor inspectors. NMSAU has activities dedicated to safety and health issues. For example, in 2019, for the second time, the Occupational Safety Forum hosted a risk-based approach to occupational safety and health. Each forum creates a working group to implement the work. The Provision of the Academic Group Curator is also in force, whereby the Curator is obliged, in particular, to have information about the students' individual characteristics, their health status, family and living conditions, to promote the creation of a healthy moral and ethical climate and emotional culture in the group. teachers about the peculiarities of the psychological state of the students of the group, etc.

Describe the mechanisms of educational, organizational, informational, advisory and social support for higher education applicants?

What is the satisfaction level of higher education applicants with this support according to the survey results?

NMetAU provides educational, organizational, advisory and social support to higher education students enrolled in EPs. Appropriate structural units and necessary mechanisms are in place at the Academy. Communication with students is done by bringing the necessary information to students, both directly by teachers during classes, consultations and teaching hours, and by using modern information technologies. In particular, the official website of the academy contains all the information needed for higher education applicants regarding the organization of the educational process, the content of educational programs and individual educational components, the timetable of the academic process, the timetable of academic mobility, current opportunities for academic mobility, participation in applying for grants and scholarship programs, competitions , conferences, and more. Higher education applicants and other participants in the educational process also have access to all the normative documents of the Academy. The specially dedicated section of the site contains information about the college of students, trade union students and graduate students, student department and campus, student polyclinic and sports club, health camps, student scientific circles and communities and more. At the Academy there is a department of youth policy and issues of social development, which coordinates the activities of structural units, student self-government bodies and cooperates with public organizations and parties in the field of youth policy and national-civic education. According to the Regulations on the activity of this unit, its purpose, among other things, is to create conditions and mechanisms for students' direct participation in the formulation and implementation of youth policy; study of problems of student youth, and creation of necessary conditions of activity of youth organizations for full social formation and development of youth; promotion of targeted protection and support of the socially vulnerable part of the youth, namely: students with disabilities, orphans, from large families and disadvantaged families; making suggestions of moral and material incentives and honoring the best workers and students for successes and achievements in the

educational work, public life of the university, etc.

How does the institution create sufficient conditions for the exercise of the right to education by persons with special educational needs? Please provide specific examples of creating such conditions on the EP (if any)

Since 2002, the National Academy of Metallurgy of Ukraine has created conditions for higher education for persons with physical disabilities. Considering the positive experience of the National Metallurgical Academy of Ukraine on learning of hearing and vision disabled, by the order of the Ministry of Education and Science of Ukraine of 19.04.2004, for the first time a Regional Center for Education of Disabled Persons was established in Ukraine on the basis of NMetAU (https://nmetau.edu.ua / ua / mfac / i2060 / p2690). The task of the Center is to create conditions for the education of the hearing and vision disabled, their methodological and psychological support, social integration into the society of this category of citizens. According to the order of the Ministry of Education and Science of Ukraine No. 587 of June 27, 2008, the NMETAU RFEI entered the Experiment on the organization of integrated training of persons with special educational needs in higher educational institutions.

During the period of work in this field, 180 students with sensory defects received a diploma with a qualification "bachelor"; 180 - with master's degree qualifications, of which 5 students received honors degrees.

The development of a system of providing educational services for the education of persons with special educational needs at NMetAU is carried out on the basis of regular needs assessments, first of all the needs of persons with disabilities, chronic diseases and other special educational needs, including the needs of war veterans, combatants and their members.

https://nmetau.edu.ua/file/nakaz__no_375-k.pdf

https://nmetau.edu.ua/file/poryadok_suprovodu_osib_z_invalidnistyu.pdf

How the institution defines conflict management policies and procedures (including those related to sexual harassment, discrimination and corruption)? How are their educational policies and procedures made available to participants in the educational process? What is the practice of their application during the implementation of the EP?

Conflict management policies and procedures (including those related to sexual harassment, discrimination and corruption) are governed by NMetAU regulations. In particular, in accordance with the Internal Rules, the NMetAU administration is obliged to counteract bribery among NMetAU employees and students; all participants in the educational process have the right to the protection of honor and dignity; persons enrolled in NMetAU have the right to protection from all forms of exploitation, physical and mental abuse; appeal against the actions of the governing bodies of the Academy and its officials, scientific-pedagogical and pedagogical staff in accordance with the procedure specified by law.

NMetAU's anti-corruption program reflects support for the state's anti-corruption strategy, which is confirmed by the use of ethical standards and principles of providing

information on the performance of works and rendering of services, the established tariffs, indicates the desire of the NMetAU team to improve corporate culture, follow the best practices of corporate and corporate governance of the Academy of Ukraine at the proper level
https://nmetau.edu.ua/file/antikoruptsiyna_programa.pdf
https://nmetau.edu.ua/file/kodeks.pdf

8. Internal quality assurance of the educational program

What institution document governs the program development, approval, monitoring and periodic review procedures? Please provide a link to this document that was released to the public on the Internet. Describe how and at what intervals the program is viewed? What changes have been made to the program as a result of the most recent revision, why were they justified?

At NMetAU, the procedures for developing, approving, monitoring and periodically reviewing the program are regulated by the Strategic Plan of Development of the National Metallurgical Academy of Ukraine for 2019-2025. (https://nmetau.edu.ua/file/strategichniy_plan_2019-2025-.pdf), in particular areas such as Educational Activities and Higher Education Quality Assurance. Item 1 Implementation of the concept of "student-centered" education envisages introduction of regular controlled procedures of examination of current educational programs by graduates and students of the academy (term of implementation - 2019-2020); according to item 2 Application of effective mechanisms for development, approval, monitoring and periodic review of educational programs is planned to systematize labor market monitoring activities, to provide expert evaluation of the relevance of educational programs to labor market representatives (implementation period - 2021), to provide generalization and prompt response on problematic situations regarding the content of educational programs and violations regarding its implementation (term of implementation - 2019-2025).

Procedures for developing, approving, monitoring and periodically reviewing the program are governed by the Regulations on the quality assurance groups of NMetAU educational programs, which are made publicly available on the Internet (https://nmetau.edu.ua/file/polozhennya_pro_gzyaop_nmetau.pdf). In accordance with this Regulation, the monitoring program is conducted annually by the quality assurance group Metallurgical Processes for the Production and Processing of Metals and Alloys. The monitoring of the program is aimed at determining whether the program is meeting its stated goals and whether it meets the needs of students, employers, other stakeholder groups and the community.

The monitoring of the program involves the assessment of: the relevance of the program to the achievements of science in the relevant field of knowledge, trends of development of economy and society; taking into account changes in the needs of students, employers and other stakeholder groups; students' ability to complete the curriculum of the program

and acquire the expected competencies; the demand on the labor market of specialists who have graduated from the program. The program is monitored by questioning and surveying the satisfaction of higher education students with the quality of educational services (quality of educational program, organization of educational process, personnel and material support, etc.), comparison with the program of related specialties (specializations) and programs of other institutions, including foreign ones and acceptance. decisions on its results.

As a result of the latest revision of the EP, a cycle of disciplines of free choice of student was developed and logically structured in order to ensure the exercise of the right of higher education applicants to the choice of educational disciplines, which is regulated by the Law of Ukraine "On Higher Education" (https://zakon.rada.gov.ua/laws/show/1556-18) and correlates with the NMetAU Strategic Development Plan.

Demonstrate, by referring to specific examples, how higher education providers are involved in the process of periodic review of the program and other quality assurance procedures, and their position is taken into account when reviewing the program

According to the Regulations on Student Self-Government of the National Metallurgical Academy of Ukraine, published in open access on the Internet on the official website of NetaAU (https://nmetau.edu.ua/file/polozhennya_studsovet_zi_zminami.pdf), which regulates the students 'right to control the students' proposal of the educational process, and part of this right is the internal quality assurance of the program "Metallurgical Processes for the Production and Processing of Metals and Alloys", has the opportunity to be directly involved in the process of periodic review of the program:

- Metallurgy of pig iron (Alyoshina Yana (gr. ME01 -15M));
- Metallurgy of steel (Khutorny Denis (gr. ME02 -15M));
- Physico-chemical bases of metallurgical processes (Maria Khodzevich (gr. ME03-15M)).

Also, the Strategic Development Plan of the National Metallurgical Academy of Ukraine for 2019 - 2025 (https://nmetau.edu.ua/file/strategichniy_plan_2019-2025-.pdf) the introduction of regular controlled procedures of examination of current educational programs for graduates and students of the Academy.

How student self-government participates in the program's internal quality assurance procedures

According to paragraph 3.1.12. Regulations on Student Self-Government of the National Metallurgical Academy of Ukraine, published in open access on the Internet on the official website of NetaAU (https://nmetau.edu.ua/file/polozhennya_studsovet_zi_zminami.pdf), students have the right to apply to the leadership of the National Metallurgy advisory and working bodies, state bodies with proposals for improvement and reform of the educational process, etc., and therefore can participate in the internal quality assurance procedures of the program through comprehensive testing with their knowledge, skills and knowledge acquired as a result of training under the program "Metallurgical Processes for the Production and

Processing of Metals and Alloys" to identify the level of relevance of its content to the quality of program learning outcomes.

Demonstrate, by referring to specific examples, how employers are involved, directly or through their associations, in the process of periodically reviewing the program and other quality assurance procedures

The procedure for involving employers in the process of periodic review of the program and other procedures for ensuring its quality is one of the priority areas of the program development and is under development, in particular, the Strategic Plan for the development of the National Metallurgical Academy of Ukraine for 2019 - 2025. (https://nmetau.edu.ua/file/strategichniy_plan_2019-2025-.pdf), namely, in its direction, as the Application of effective mechanisms for the development, approval, monitoring and periodic review of educational programs, it is planned to systematize the activity on monitoring the labor market, providing expert assessment of relevance the content of educational programs by representatives of the labor market.

Employers of the quality assurance team of the Metallurgical Processes for Production and Processing of Metals and Alloys program include the following link (https://nmetau.edu.ua/file/polozhennya_pro_gzyaop_nmetau.pdf) for each of the specialties included in the program:

- Iron metallurgy (I.G. Muravyova (Head of the Department of Technological Equipment and Control Systems of the Institute of Ferrous Metallurgy));
- Steel Metallurgy (A.G. Chernyatevych (Head of the Department of Physical and Technical Problems of Steel Metallurgy »Institute of Ferrous Metallurgy));
- Physico-chemical foundations of metallurgical processes (D.M. Togobitskaya (Head of the Department of Physico-chemical Problems of Metallurgical Processes of the Institute of Ferrous Metallurgy)).

Describe the practice of collecting and incorporating career information and employment trajectories for program graduates

The educational-professional program “Metallurgical Processes of Receiving and Processing of Metals and Alloys” of the master's level of preparation of higher education applicants is subject to initial accreditation. The first graduation will be held in January 2021. It should be noted that all undergraduate students have continued their studies at the master's level.

The common practice for NmetAU to collect and take into account the career paths and trajectories of graduates' employment involves periodically interviewing graduates as to their employment with those responsible for the department. The information received is analyzed and transmitted to the Career Development Center, which, taking into account the information received, conducts periodically Career Day information and educational activities for NMetAU students aimed at building relationships between graduates of the institution and interested employers.

The results of the alumni survey are also informed by the Head of the Metallurgical Processes for the Production and Processing of Metals and Alloys Program, which takes

them into account as proposals in the development and review of educational programs by the Quality Assurance Group, Metallurgical Processes for the Production and Processing of Metals and Alloys.
What deficiencies in the program and / or educational activities were identified during the implementation of the internal quality assurance procedures during its implementation? How has the institution's quality assurance system responded to these shortcomings? During the implementation of the internal quality assurance procedures, no deficiencies in the program and educational activities for its implementation were revealed during the implementation of the program for the preparation of higher education master's students under the program "Metallurgical processes for the production and treatment of metals and alloys".
Demonstrate that the results of external quality assurance in higher education are taken into account when refining the program. How were the comments and suggestions from the last accreditation and accreditation of other programs taken into account in improving this program? The educational and professional program for the preparation of higher education master's degree students of the program "Metallurgical Processes for the Production and Processing of Metals and Alloys" is accredited for the first time. In May 2019, there was a successful accreditation of the Bachelor's Degree Program in Higher Education, with no deficiencies in the program and educational activities to implement it.
Describe how participants in the academic community are meaningfully involved in the program's internal quality assurance procedures? NMetAU strongly contributes to the involvement of the academic community in the internal quality assurance procedures of the program. For example, members of the academic community are constantly involved in the work of the Board for Quality Assurance in Education and Training (https://nmetau.edu.ua/file/rada_zab.pdf), which is responsible for implementing processes and procedures for internal quality assurance and content improvement. education at the Academy, in particular regarding the implementation of such procedures: - implementation of development, monitoring, review, approval and approval of educational programs; - discussing and approving normative documents on quality assurance of higher education in the established order; - popularization and adherence to the principles of academic integrity, assistance in the identification of academic plagiarism in accordance with the Code of Academic Integrity (https://nmetau.edu.ua/file/kodeks.pdf); - Publicity of information on educational programs, educational goals, evaluation of higher education applicants, etc. through the Academy's website, information stands, mass media.

Describe the division of responsibilities among the different structural units of the institution in the context of the implementation of internal quality assurance processes and procedures

The processes and procedures of internal quality assurance of higher education at NMetAU are ensured by the following units:

- Council for quality assurance of educational activity and training of specialists, namely the section for monitoring the quality of educational activity (ensuring the effective functioning of the internal system of quality assurance of university higher education);
- educational department (organization, planning, control, analysis and improvement of the educational process; organization of systematic control over the conduct of all types of educational activities; conducting systematic control over the activity of the departments of the university);
- educational and scientific center, namely the department of quality of educational activity (analysis and control of educational and methodological support of educational process; coordination of activity of methodological commissions for control of the content of educational process; organization of joint work with faculties and departments; participation in organization of professional development of pedagogical and scientific institutions; teaching staff);
- Career development center (analysis of demand and supply of labor market specialists; establishment of cooperation with enterprises that are potential employers; involvement of enterprises, institutions and organizations (employers);
- department of practice (coordination of work of faculties, profile departments in the organization of industrial practice, efficiency of use of practice bases).

9. Transparency and publicity

What documents does the institution regulate the rights and responsibilities of all participants in the educational process? How are they made available to participants in the educational process?

The rights and responsibilities of all participants in the educational process are governed by the following normative documents: Statute of the National Metallurgical Academy (https://nmetau.edu.ua/file/statut_nmetau_2017.pdf) », Rules of Internal Labor Regulations of the National Metallurgical Academy (https://nmetau.edu.ua/file/vn_rozporyadok.pdf) published in open access on the Internet on the official website of NMetAU in the Public Information tab. Documents on the organization of the educational process and links to them on the site of the institution in the tab "Regulatory documents" https://nmetau.edu.ua/ru/minfo/i12/p1733. Current information for the participants of the educational process, ensuring its accessibility is published on the websites of the departments: metallurgy of steel https://nmetau.edu.ua/ru/mdiv/i2030, metallurgy of cast iron https://nmetau.edu.ua/ru/mdiv/i2023, Theory of Metallurgical Processes and Chemistry https://nmetau.edu.ua/ru/mdiv/i2004 and Metallurgical Faculty of NMetAU

https://nmetau.edu.ua/ru/mfac/i1003
Provide a link to a web page that contains information on the project website's official website for the purpose of receiving comments and suggestions from stakeholders (stakeholders). Program guarantor Dean, Doctor of Engineering, Professor Kamkina LV https://nmetau.edu.ua/ua/mdiv/i2004/p-2/e582 Contacts: Email: lydmila_kamkina@ukr.net Phone: +38 (0562) 47-44-42; 32-10 Room: 436
Provide links to publicly available educational program information (including its goals, expected learning outcomes and components) https://nmetau.edu.ua/ua/mdiv/i2030/p2551 https://nmetau.edu.ua/ua/mdiv/i2023/p2548 https://nmetau.edu.ua/ua/mdiv/i2004/p2552