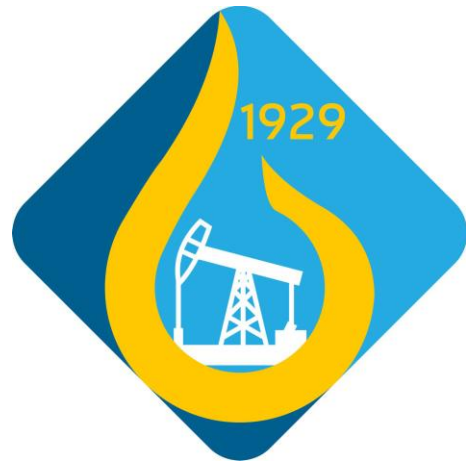


MINISTRY OF EDUCATION AND SCIENCE OF
UKRAINE NATIONAL TECHNICAL
UNIVERSITY
"Dnepr Polytechnic"



PRE PRACTICE PROGRAM
for the first (bachelor) level of higher education
185 specialty "Oil and Gas Engineering and Technologies"

Dnipro
NTU "SE"
2019

Pre-practice program for the first (bachelor) level of higher education in the specialty 185 "Oil and gas engineering and technology" / EA Korovyaka, A. Ignatov, S. Bartashevskyy, OV Denyschenko; N-of Education and Science of Ukraine, Nat. Sc. University of "Dnepr Polytechnic". - D .: NTU "SE", 2019. - 30 p.

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Methodical commission approved 185 specialty Oil Engineering and Technology (Minutes № 8 of 21.11.19r.) On the proposal of the department of oil and gas drilling and engineering (protocol number 4 from 12.11.19r.).

Posted guidelines for the pre-practice. The material that helps to activate the executive phase of learning of students during their practical training in the oil and gas company.

Designed for 185 bachelors specialty "Oil and gas engineering and technology."

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1. TERMS

In the educational and professional programs of the National Technical University "Dnepr Polytechnic" 185 specialty "Oil and gas engineering and technology" made for sharing learning outcomes of educational components. In particular, the subject P5 "pre-practice" training attributed these results:

CL7	Demonstrate teamwork skills during laboratory work, course design integrated projects, preparing presentations, internships and more.
SR2	Explain the general structure, relationships and functionality of individual elements of the system of Ukraine hydrocarbons
VR1.4	Use practical methods of diagnosis of the equipment for drilling oil and gas wells
VR1.5	To ensure the safety of drilling operations in accordance with the operating rules
VR1.6	Evaluate and restore process quality construction of oil and gas wells
VR1.1 1	Monitor organizational performance, efficiency, perfection and prospects of construction of oil and gas wells
VR1.1 2	Improve construction technology oil and gas wells and organizational activities in accordance with the requirements of modern production and competitive economy
VR2.3	Calculate and adjust the modes of gas-oil supply for various conditions
VR2.4	Use practical methods of diagnosis efficiency of gas-oil supply
VR2.5	To ensure the safety of the components of the gas oil supply in accordance with the operating rules
VR2.6	Assess the quality and restore the properties of the elements of water and oil supply to specific conditions
VR2.1 1	Monitor organizational performance, efficiency, perfection and prospects of gas and oil supply
VR2.1 2	Improve technology transportation and storage of hydrocarbons and organizational activities in accordance with the requirements of modern production and competitive economy

Pre-practice - is the final step prior learning and performance of applicants higher education qualification works. It involves the synthesis and improving their acquired knowledge, practical skills, mastery of professional experience for the purpose of training for independent work and collecting materials to perform qualification activities.

The purpose - formation of competencies for the design level of certification, with the possibility of partial or full implementation in manufacturing, construction technology oil and gas wells and oil supply of water under conditions ensuring a high level of performance, safety and minimal costs.

2. CONTENTS AND MAIN OBJECTIVES PRE PRACTICE

2.1 Development of mineral deposits requires extensive geological studies to provide reliable information on reserves through drilling.

Construction of wells is extremely capital intensive. For this reason the search for reserves increased productivity of drilling operations - the most important task. Recommendations for drilling technology, the choice of method of drilling, such as equipment and rock cutting tool and, especially, methods of designing the profile drilling not justified, inhibiting the development of new technology and advanced technology in drilling and first oil.

That task lists appear to future professionals, whose resolution is not possible without thorough theoretical and practical knowledge and experience in specialty establishment of geological and technical projects construction of wells.

2.2 Ensuring the supply of gas and oil products to end consumers requires teamwork of all components of the system related to the collection, preparation for transportation, storage, pipeline, road, rail and water transport and distribution of petroleum, petroleum products and gas. The life cycle of facilities of water and oil supply consists of five stages: design, creation, maintenance, refurbishment and decommissioning. Therefore, future professionals the necessary theoretical and practical knowledge of building projects, selecting the mode of operation, repair and maintenance, installation and dismantling activities.

2.3 Pre-practice - is the final step prior learning and performance of applicants higher education qualification works 185 specialty "Oil and gas engineering and technology."

Pre-practice is in the course of IV, after theoretical studies in the spring semester. The reason for the practice is the order of the rector of the university, which, in particular, pre-defined database managers practice and practice from the University.

2.4 The bases are pre-practice in sections petroleum and geological fields:

Number / p	Base Manufacturing Practice	Legal address
1	Poltava Branch BU "Ukrburhaz"	c. Poltava street. Turquoise Marshall 7
2	Krasnogradsky department BU "Ukrburhaz"	m. Krasnograd Kharkiv region., street. Poltava 86
3	Pryluky control drilling	m. Priluki Chernihiv region., Str. Kiev, 200
4	Khrestyshchenske control drilling	m. Krasnograd Kharkiv region., street. Industrial, 7

5	LLC "Dnipro drilling plant equipment"	m. Dnipro Str. Krasnozavodsk 70
6	Ltd. "Ukrspetsstroybureniye"	m. Dnipro Str. Prince Yaroslav Wise, 68
7	Dnipropetrovsk Geophysical Expedition "Dniproheofizyka" State Geophysical Enterprise "Ukrgeofizika"	m. Dnipro Str. Geophysical 1
8	LLC Research and Production Enterprise Dniprohidroheolohiya "	m. Dnipro Str. Quay Victory 58
9	Geological Drilling Company "Odesaburvod"	c. Odessa, st. Great Arnautskaya 76
10	Ltd. "Heobudivelni technology" Drilling company	Dnipropetrovsk region. m., Novomoskovsk, st. Zina Byeloyi, 156
11	Engineering and geophysical center of Dnipropetrovsk Geophysical Expedition State Enterprise "Ukrgeofizika"	m. Dnipro Str. May, 6
12	Managing energy sector Dnipropetrovsk Regional Administration and Energy Efficiency	m. Dnipro, pr. Alexander Fields 1
thirteen	Dnipro industrial area of Zaporizhia branch UMG LVUMG "Kharkivtransgas" AT "Ukrtransgaz"	m. Dnipro Rih Highway 24
14	Ltd. "Naftasiti"	m. Dnipro Str. Ocean, 11
15	Proletarian VP Production Management underground gas storage subsidiaries "Operator storage facilities of Ukraine" BP "Ukrtransgaz"	Dnipropetrovsk region., Novomoskovsk district, with. Pryorilske Str. Industrial, 1
16	JSC "Dnepropetrovskgas"	m. Dnipro Str. Shevchenko, 2
17	JSC "Dniprogaz"	m. Dnipro Str. Volodarsky, 5
18	LLC "Dnipro OIL TRADE"	m. Dnipro Str. Quay Victory 10-I.

2.5 Duration of practice - 2 weeks (3.0 ECTS credits); a form of total control - differential offset.

2.6 The main tasks of pre-practice:

- generalization and improvement of acquired knowledge and practical skills in the art and technology of construction of oil and gas wells, acquiring professional experience to prepare for self-employment and collecting materials to perform qualification activities.

- explore innovative domestic and foreign technology, used in the search, exploration and development drilling oil and gas wells.

- generalization and improvement of acquired knowledge and practical skills for the design, creation, maintenance, renovation and dismantling of objects and systems of collection, transportation, storage and distribution (distribution system) of oil, petroleum products and gas.

- explore innovative domestic and foreign technology, used in the transportation and storage of oil, oil products and gas.

3. ORGANIZATION OF PRACTICE

3.1 Responsibility for the organization, implementation and quality control practices pre-assigned to the first pro-rector. General practice organization and monitoring its implementation in the university provides Head of institution of higher education.

3.2 Management practices at faculties shall accordingly Dean, Chair and Head of the faculty.

3.3 Educational and methodical management of pre-practice and monitoring the compliance program practice exercise practice leaders (representatives of the department and go through training).

3.4 The leadership of the pre-candidates practice of higher education involved experienced teachers and their subsequent appointment of supervisors perform qualifying work.

3.5 Department no later than one month before the start of practice prepares and provides to the Dean idea of passing the pre-practice applicants for higher education. Submission defined: base and duration of the practice; composition of the group of candidates for higher education; Senior Staff.

3.6 Distribution of applicants for higher education practice and time spent on management is conducted according to the rules of time planning and accounting of educational, technical, scientific and organizational work of teaching staff of the National Technical University "Dnepr Polytechnic".

3.7 Distribution of students practice exercises department conducting practice with the obligatory account of concluded contracts and orders for training, and the possibility of future employment.

3.8 If there are vacant places of higher education applicants may be accepted on a full-time position if the nature of the program meets pre-practice. In this case, at least 50% of the time is taken away in zahalnoprofsiynu training program practice.

3.9 At the beginning of the practice of higher education applicants are instructed on safety and health, acquainted with the internal regulations of the enterprise, the procedure of obtaining documents and materials.

3.10 Referring seekers of higher education to the workplace (permanent positions) for the passage of practice are covered by labor legislation and internal regulations of the company.

3.11 Competitors of higher education, studying on the job and are not specialty must undergo pre-practice prescribed curriculum.

If applicants are higher education in the chosen specialty, department completed by the practice of the curriculum loans without passing it on the basis of certificates of employment and protection of the individual report tasks.

3.12 The working hours of higher education applicants during their practice is regulated by the Labor Code of Ukraine and the applicable rules of time planning and accounting training, guidance, scientific and organizational work of scientific and pedagogical pratsivnykivNTU "Dnepr Polytechnic".

4. PRE REPORTING PRACTICE

4.1 Report Pre practices in enterprises with drilling should contain the following sections of this content:

The title page of the pre-practice report in the prescribed form.

Introduction.

1. Chapeau.

1.1 General characteristics of oil and gas companies.

1.2 The geological structure of site survey.

1.3 Modern drilling techniques for the construction of oil and gas wells that are used now.

1.4 Geological drilling specifications and advanced design of wells.

1.5 Applicable drilling equipment and tools.

1.6 Drilling technology.

1.7 Repair of drilling equipment.

1.8 Technical and economic calculations drilling.

1.9 Occupational Health.

2. Special part (individual task). Conclusions.

References. Graphics applications and a list of them.

The report should be written brief, have clear headings, rich factual material necessary for further work to implement certification work aimed at improving technological methods of conducting drilling operations, rather illustrated diagrams, photographs and sketches.

Graphic materials attached to the report, be sure to:

1. Survey geological map of the area of work;

2. The geological map work station and stratigraphic column;

3. Geological sections along the lines of well construction;

4. Graphic materials on reservoir pressure;

5. Typical geological and technical outfits for groups of wells;

6. Table of species by category of hardness;

7. Technical characteristics of technological equipment and tools.

Requirements for filling sections of the report on practice:

Overview of Oil and Gas Company

The geographical position of the area of work; Transportation, electricity possibility of drilling operations; communication; economic characteristics of the region; general description of the company, the task facing it, its structure and technical equipment, the volume of work performed.

The geological structure of the area of work

The geological structure of the area and the areas subject to exploration or development, their stratigraphy and lithology; geochemical characterization of minerals; Analysis of possible complications in the construction of wells; spatial distribution layers of minerals, mineralogical and grain size bed mineral resources.

Modern drilling techniques for the construction of oil and gas wells

Analysis of modern methods of conducting drilling operations developed or advanced, including implementation in production systems with automated top drive.

Geological drilling specifications and advanced design of wells

Typical lithological column; distribution of species by category of hardness; the

nature of complications and their influence on the design of wells; values and analysis of hydraulic pressure reservoir; allocation of work to groups of wells; advanced design of wells, compliance with the actual construction project; mounting holes; typical geological and technical outfits (projects) in the drilling of wells and their analysis.

Applicable drilling equipment and tools

Drill pipe and their connections strengthen tubes and their protection against wear and corrosion; fighting drill string vibration, maintenance of drill pipes; drills in groups of wells, pumps, compressors; Drilling rigs and mast tackle gear system, drive drilling tools; layout of equipment on the drilling platform; installation, dismantling and transportation of drilling equipment; measures to protect labor and the environment.

Drilling technology

Rock cutting tool and drilling regimes for individual intervals; type and parameters of drilling fluid and processing of chemical reagents; cooking and cleaning drilling fluid; Organization management on clay station; means test bed maintenance facilities; means to combat distortion wells; method, technique and technology of directional drilling; profiles aimed wells; Methods of designing structures wells; the most typical complications and accidents for specific conditions and means of dealing with them, the analysis of time spent on combating geological complications and accidents.

Repair of drilling equipment

The scope and nature of repairs, repair organization, certification of equipment, recording time worked, plan and schedule repairs drilling equipment.

Technical and economic calculations drilling

The introduction of advanced methods of work UBR, control and management of drilling operations, schedule and schedule of drilling operations, scheduling; ITR Labor Organization, the time spent on a typical drilling wells; analysis of the balance of work; performance of drilling operations; costs of materials and tools for the drilling of 1 m, the cost of work performed; criteria of quality and efficiency; economic analysis of the enterprise; feasibility study of the plan of the enterprise.

Occupational Health

Analysis of data on occupational injuries; measures to reduce injuries and ensure safe working conditions; Industrial sanitation and technical elements of aesthetics.

Special part (individual task).

During the practice the student must perform individual tasks that Head of the university gives advance and that is in the future, the basis for determining the qualification of topics.

During pre-practice, consistent with the theme of individual tasks, the student collects and summarizes the necessary material, conducting personal observation and research. The results obtained in the future used on a qualifying work.

For individual tasks can be recommended for the following topics:

1. Automated systems of oil and gas companies.
2. Development (improvement) of means test bed facility operational.
3. Improving the design of rock cutting tool.
4. Physico-chemical principles of regulation of drilling fluid properties.
5. The stability of a dispersed drilling fluid system. And coagulation of structure in

the drilling fluid.

6. Circulating gaseous agents, their advantages and disadvantages and scope
7. Basis of preparation technology and chemical processing of drilling fluid.
8. Cleaning drilling fluid vyburenoyi of rock and gas.
9. The use of high-frequency vibrations to intensify various processes during drilling.
10. The use of hydrodynamic fluctuations in the preparation of cleansing agents during drilling.
11. The use of hydrodynamic fluctuations for cleaning drilling fluid from vyburenoyi breed.
12. The latest development in the preparation of drilling fluid.
13. Protecting the environment from the effects of drilling fluid, recycling drilling fluid and cuttings.
14. Development of cement mortar formulations.
15. Development of the construction of means of cementing casing.
16. The technology of directional drilling.
17. Improving the technology of artificial distortions wells.
18. Profile Design of wells.
19. Development (improvement) a technological measure emergency response in wells.
20. Choice and justification layout bottom of the drill string to prevent distortion wells.
21. The choice of recipe mixtures of oil drilling in salt deposits.
22. Development of measures to protect the environment.
23. Development of measures to prevent and eliminate hazonaftoproiyaviv.
24. Development of means to eliminate pryhoplennya drill string.

4.2 Report Pre practices in enterprises with transport and storage of hydrocarbons should contain the following sections of this content:

The title page of the pre-practice report in the prescribed form.

Introduction.

1. Chapeau.
 - 1.1 General characteristics of the company (geographic position, administrative subordination).
 - 1.2 Characteristics of hydrocarbon cargo transported (stored, distributed).
 - 1.3 The existing plant flowsheet for transport (storage and distribution), its detailed description and analysis of the strengths and weaknesses.
 - 1.4 The main and auxiliary machinery and equipment (destination indicators, reliability, security, etc.).
 - 1.5 Technical and economic indicators of the current transmission system (storage and distribution) hydrocarbons.
 - 1.6 Occupational Health.
 - 1.7 Environmental protection.
 2. Special part (individual task).
- Conclusions.
- References.

Mr rafichni applications and their list.

The report should be written brief, have clear headings, rich factual material necessary for further work to implement certification work aimed at improving the technological schemes of transportation, storage and distribution of hydrocarbons, rather illustrated diagrams, photographs and sketches.

Graphic materials attached to the report, be sure to:

1. The geological structure of the area (for underground storage).
2. The plan of the company.
3. Flow charts during transportation (storage and distribution) hydrocarbons.
4. Specifications and equipment process equipment.

Requirements for filling sections of the report on practice:

General characteristics of the company

Geographical location; economic characteristics of the region; General characteristics of the company, its structure and technical equipment, the volume of work performed.

Characteristics of hydrocarbon transportation

Osnovnifizyko-mehanichnivlastyvostryproduktiv carriage (Storage and distribution), chemical composition and specific requirements.

The existing plant flowsheet for transport (storage and distribution), its detailed description and analysis of the advantages and disadvantages definition

The volume of active and buffer gas wells and storage structure (for underground gas storage facilities); stages of main and auxiliary processes in the enterprise (preparation, drying, cooling, heating, filling, etc.). and analysis.

Osnovnetadopomizhneustatkuvannyaiaobladnannya (Indicators purpose, reliability, security, etc.)

Characteristics of pipelines, tanks, pumps, compressors, gas turbines, devices for draining, filling, reducing pressure, dehydration, dust reduction, cooling and heating, fight paraffin, sulfur and the formation of hydrates, engaging speakers, gas filling lines, regasification plants, Packages computer programs.

Technical and ekonomichnipokaznykydiyuchoyisystemytransportuvannya (storage and distribution) hydrocarbon energy

The introduction of advanced methods of work of the enterprise; workforce tradespeople and engineers; wage rates and salaries; payroll pay; depreciation of equipment; energy costs; Transportation costs (storage, distribution) units of cargo.

Occupational Health

Potentially hazardous factors that may lead to occupational diseases and accidents; measures to ensure normal working conditions; Fire safety measures; Industrial sanitation and technical elements of aesthetics.

Environmental protection

Harmful environmental impact of transportation products (storage and distribution) hydrocarbons and measures to minimize it.

A special part of (individual objectives)

For individual tasks can be recommended for the following topics:

1. Project autonomous gas supply liquefied gas.

2. Independent gas project on compressed gas.
3. Project refueling complex.
4. Draft filling complex.
5. The project combined filling complex.
6. Development tools for eliminating oil.
7. The project section with steel oil storage tanks.
8. Draft gas storage station.
9. Project reservoir type RVS
10. Project reservoir of variable volume.
11. The draft of the pontoon vessel.
12. Project floating tank roof.
13. Project gasholder.
14. Project trench reservoir.
15. The project is an underground reservoir.
16. Draft station underground storage.
17. Project drain terminal pouring hydrocarbons.
18. Draft gas filling station.
19. Project depot station with soft tanks.
20. Project development plan overhaul reservoir.
21. The project involving the operation nyzkodebetnyh wells (artificial sources of gas).
22. The project pipeline go through natural (artificial) barriers.
23. Project technology to combat the formation of hydrates.
24. Project control technology with the formation of sulfur deposits.
25. Project control technology to form deposits of paraffin.
26. Development of technology for synthetic hydrocarbon fuels.

5. Obligations of participants the organization and pre practice

- 1.1 The main duties of the head of the university practices:
- concluding at the beginning of the school year at the request graduating department contracts with enterprises (organizations, institutions) are determined to base practice valid for one to five years;
 - coordination of the timing of practice and the number of higher education applicants - trainees;
 - clarify with managers bases its conduct practice conditions;
 - Chairs provide information on the availability of practice under the concluded contracts;
 - control over the practice, analysis and synthesis of results;
 - Departments providing documentation on practice;
 - control the availability of program practices;
 - Analysis reports faculties (institutes) the results of practice and preparation of the final certificate;
 - Practices provide the basis for approval of the program (two months before the

start of practice), not later than one week - a list of student-trainees.

1.2 The main duties of dean:

- control over the timely development department, conducting practice, representation of applicants to practice a particular specialty of higher education;
- Organization drafting the order of the rector of internship applicants for higher education;
- Head of meetings (responsible for specific practices);
- Reporting to the Academic Council faculty (university) on the status and prospects practices;
- control over the organization and conduct of organizational measures before sending candidates to higher education practices, timely protection practices results in the departments;
- process control contracts with bases practices;
- Readiness practice database to host students and appropriate training activities;
- Sector representation in practice educational department a written report on the results of practice no later than the first working week of December.

1.3 The main duties of Head of Department:

- organization development and improvement programs of certain practices and other teaching documents and reports (including the specific specialty 185 Oil and gas engineering and technology);
- event before sending candidates to the practice of higher education, including:
 - monitoring the passage of applicants practices of higher education based on practice;
 - Head of coordination assigned to groups of applicants for higher education;
 - submission Dean Faculty and Head of the University of the written report of practice with comments and suggestions to improve practices.

1.4 The main duties of the head of the department of practice:

- briefing on the order of practice on health;
- applicants provide higher education - trainees required documents (referral programs diaries (v.t.ch. individual tasks), guidelines, etc.), a list of which is set in the programs of the candidates practice of higher education with specific training in the specialty 185 Oil engineering and technology;
- acquaint applicants with higher education system of reporting practices, namely a written report design tasks performed by the individual, protection of the report;
- of applicants to higher education prior discussion of the content and results of practice needs change programs, etc;
- development subjects of individual tasks, taking into account trends in research, course work and qualifications;
- agreement with the Head of the organization, institutions, etc. of individual tasks allowing for the place of practice;
- Controls to ensure proper working and living conditions interns;
- candidates participate in the distribution of higher education places for practice;
- monitor the timely arrival of applicants to places of higher education practice, practice compliance program and compliance with the dates;
- provide consultations to applicants of higher education in the performance of individual tasks and collecting materials;

- consultation on processing the material collected and its use for reporting practices;
- receiving and evaluating reports of higher education applicants to practice;
- reporting higher education applicants about the practice to store the department.

1.5 The main duties of the head of the practice firm:

- organization of trainees under the program practice;
- determining job seekers practice of higher education, to ensure the effectiveness of its passage;
 - briefing and higher education applicants comply with safety regulations and safety in the workplace;
 - promote higher education seekers - trainees to use the available literature, the necessary documentation etc.
 - monitoring compliance of higher education applicants internal regulations;
 - creating the necessary conditions to familiarize applicants with higher education with new equipment, modern technologies and methods of work organization;
 - providing job seekers with higher education review evaluation of practical training.

1.6 Applicants with higher education practice passage shall:

- prior to practice to get the head of the practice direction to practice individual task briefing on the order of practice and the safety advice on the registration of all necessary documents;
 - zavizuvaty complete and the dean diary of practice and referral;
 - in time to arrive at the base practices;
 - fully perform all the tasks under the program practice;
 - observe safety rules, safety and industrial hygiene;
 - be responsible for the work;
 - timely submit a report on internships and protect it;
 - perform internal regulations base practices order of administration and heads of practice.

In the case of non-compliance with the eligibility criteria of the trainee, it can be removed from further practical training.

6. CRITERIA PRE PRACTICE

6.1 Upon expiration of the practices of higher education applicants report on the program and individual tasks. Reporting on the applicant higher education internship - a written report.

6.2 The report consists of two parts. In its general part covers the following topics:

- base practice;
- database structure practice;
- generalized description of the manufacturing process at the plant (algorithm and description of technological operations that make the system of organization and management);
 - implementation of technological processes management.

The second part of the report should reflect the results of the practice during individual tasks, which aims - acquiring skills self-help production, organizational and management issues in the specialty. Individual work provided by Head of Department shall contain a description of the practical nature and its evaluation.

6.3 The report also asserts rezenszye head unit base practices and checks from Head of Department.

6.4 Report seekers with higher education takes practice by Head of Department.

The head of department takes practice test candidates in higher education at the university during the first two weeks of the semester, which begins at the end of practice.

If applicants want to get higher education evaluation practice before the start of the semester (go to study in another institution of higher education, etc.) from the Head of Department receives credit for one week after practice.

Evaluation results of the practice of students held a 100-point scale with the mandatory transfer of scores to institutional scale. Score introduced the practice to test-examination information and academic records of the applicant higher education signed by the head of department practice.

The scales of evaluation of educational achievements of students of NTU "SE"

Ranking	Capacity
90 ... 100	fine / Excellent
74 ... 89	good / Good
60 ... 73	satisfactory / Satisfactory
0 ... 59	Unsatisfactory / Fail

Choice, specification and detailing evaluation criteria specific to the educational program "Oil and gas engineering and technology" and its components based on common criteria below:

General criteria for achieving learning outcomes for 7-qualification for LDCs (BA)

Integral competence - the ability to solve complex problems and specialized practical problems in a particular industry or professional activities in the learning process, which involves the use of certain theories and methods relevant science and characterized by complexity and uncertainty conditions.

descriptors NLC	Requirements for knowledge, communication, autonomy and responsibility	Performance evaluation
Knowledge		
♦ Conceptual knowledge acquired during the training and professional activities, including some knowledge of modern	- A great - proper, reasonable, sensible. Measures the presence of: - conceptual knowledge; - a high degree of state ownership issues; - critical understanding of the main theories, principles, methods and concepts in education and careers	95-100
	A nehrubi contains mistakes or errors	90-94
	The answer is correct, but has some inaccuracies	85-89

achievements; ♦ critical understanding of the main theories, principles, methods and concepts in education and careers	The answer is correct, but has some inaccuracies and not justified	80-84
	The answer is correct, but has some inaccuracies, insufficiently substantiated and meaningful	74-79
	A fragmentary	70-73
	A student shows a fuzzy idea of the object of study	65-69
	Knowledge minimally satisfactory	60-64
	Knowledge unsatisfactory	<60
♦ solving unforeseen complex problems and issues in specialized areas of professional and / or training, which involves the collection and interpretation of information (data), choice of methods and tools, the use of innovative approaches	- The answer describes the ability to: - identify problems; - formulate hypotheses; - solve problems; - choose the appropriate methods and tools; - collect and interpret logical and understandable information; - use innovative approaches to solving task	95-100
	A characterizes the ability to apply knowledge practice with no blunders	90-94
	A characterizes the ability to apply knowledge practice, but has some errors in the implementation of a requirement	85-89
	The answer describes the ability to apply knowledge in practice, but has some inaccuracies in No implementation requirements	80-84
	A characterizes the ability to apply knowledge practice, but has some errors in the implementation of the three requirements	74-79
	The answer describes the ability to apply knowledge in practice, but has some inaccuracies in of four requirements	70-73
	A characterizes the ability to apply knowledge practice when performing tasks on the model	65-69
	The answer describes the ability to apply knowledge when performing tasks on the model, but with uncertainties	60-64
	The level of skill poor	<60
Communication		

<p>◆ report to specialists and non-specialists of information, ideas, problems, solutions and their experience in the field of professional activity;</p> <p>◆ the ability to form effective communication strategy</p>	<p>- Fluent problematic area. Clarity response (report). Language - correct;</p> <p>- - net;</p> <p>- - clear;</p> <p>- - accurate;</p> <p>- - Logic;</p> <p>- - expressive;</p> <p>- - concise.</p> <p>Communication strategy: coherent and consistent development of thought; availability of own logical reasoning; relevant arguments and its compliance with the provisions vidstoyuvanyam; correct structure response (report); correct answers to questions; appropriate technology to answer questions; ability to draw conclusions and formulate proposals</p>	95-100
	Adequate ownership industry issues	90-94
	minor faults. Sufficient clarity answers (Report) with minor faults. Appropriate communication strategy with minor faults	
	Good knowledge of the problems of the industry. Good clarity response (report) and relevant communication strategy (a total of three not implemented requirements)	85-89
	Good knowledge of the problems of the industry. Good clarity response (report) and relevant communication strategy (total not implemented four requirements)	80-84
	Good knowledge of the problems of the industry. Good clarity response (report) and relevant communication strategy (total not implemented five requirements)	74-79
	Satisfactory ownership issues of the industry. Satisfactory clarity response (report) and relevant communication strategy (seven in total not implemented requirements)	70-73
	Partial ownership issues of the industry. Satisfactory clarity response (report) and communication strategy of faults (total not implemented nine requirements)	65-69
	The fragmented ownership issues of the industry. Satisfactory clarity response (report) and communication strategy of faults (total not sold 10 requirements)	60-64
	The level of poor communication	<60
Autonomy and responsibility		

<ul style="list-style-type: none"> ♦ management actions or complex projects, the responsibility for decision-making in unpredictable conditions; ♦ responsible for the professional development of individuals and / or groups ♦ the ability to further study with a high degree of autonomy 	<p>- Excellent management competencies possession of personality-oriented:</p> <p>1) management of complex projects, providing:</p> <ul style="list-style-type: none"> - exploratory learning activities marked ability to independently evaluate various life situations, events, facts, detect and defend personal position; - ability to work in a team; - control their own actions; <p>2) responsibility for decision-making in unpredictable conditions, including:</p> <ul style="list-style-type: none"> - justify their decisions the provisions of the regulatory framework of sectoral and national levels; - independence while performing tasks; - initiative to discuss problems; - responsible for the relationship; <p>3) responsible for the professional development of individuals and / or groups that includes:</p> <ul style="list-style-type: none"> - use professionally-oriented skills; - the use of evidence from independent and proper 	95-100
	<p>reasoning;</p> <ul style="list-style-type: none"> - possession of all kinds of learning activities; <p>4) the ability to further study with a high degree of autonomy, which provides:</p> <ul style="list-style-type: none"> - degree possession of fundamental knowledge; - independent valuation judgments; - high formation obscheuchebnyh skills; - search for and analyze information sources 	
	Management is confident possession competencies personality (not implemented two requirements)	90-94
	Good knowledge management competencies personality (not implemented three requirements)	85-89
	Good knowledge management competencies personality (not implemented the four requirements)	80-84
	Good knowledge management competencies personality (not implemented six requirements)	74-79
	Satisfactory ownership management competencies personality (not implemented seven requirements)	70-73
	Satisfactory ownership management competencies personality (not implemented eight claims)	65-69
	The level of autonomy and responsibility fragmented	60-64
	The level of autonomy and responsibility poor	<60

6.5 The final assessment for practicing calculated as the average score on the results of the general part of the report, individual tasks and subject to review practices database manager. Exposed at this point is taken into account in determining the rating for the semester during which there was protection, and designed scholarships.

6.6 A student who has not fulfilled the practice program for valid reasons, may be eligible to practice again for the next school year on an individual schedule. The student who received a second negative evaluation of practice, measured from the

university.

6.7 Live organization and practice passing the pre-higher education applicants, proposals for further improvements discussed at annual meeting of the department, and general practice summed up at the meeting of the Academic Council of the Faculty of exploration.

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APPLICATIONS

Appendix 1

CONTRACT number ____
to carry out the practice of students of higher education
institutions

m. Dnipro

" ____ " _____ 20 ____ g.

We, the undersigned who, on the one hand - National Technical University "Polytechnic Dnepr" (hereinafter - institution of higher education), represented by Vice Rector _____, Acting in accordance with the statute and, on the other hand,
(Name, initials)

(Name of company, organization, institution)

(Hereinafter - the base practices) represented _____
(Position, name, initials)

acting in accordance _____,
(Charter enterprise, orders, order)

entered into a contract:

1. Base practices shall:

1.1. Take the students to practice on a schedule:

№ p / p	name specialty	Course	Type RUF-ki	Amount stu- dents	The term practice	
					beginning	end

1.2. Assign the order of qualified specialists for the direct management practice.

1.3. Students create the necessary conditions for the program practice to avoid using them on positions and activities that do not meet the program practices and future specialty.

1.4. To provide students with safe work conditions at each workplace. Conduct mandatory training on safety, enrollment and in the workplace. If needed, trainees teach students safe methods of work. Provide clothing and safety measures at rates established for staff. This also applies to health care services.

1.5. Provide Student Intern and Head of institution of higher education the opportunity to use laboratories, offices, workshops, libraries, and other technical documentation required for program execution practices.

1.6. Provide accounting start working students trainees. About all violations of labor discipline and internal regulations to notify the institution of higher education.

1.7. After the practice to characterize studenta- for each trainee and feedback on the prepared report.

1.8. Additional conditions:

a) in terms of free base practices - establishment of higher education;

2. Higher education institutions shall:

2.1. Two months before the start of practice provide the basis for approval practice program and no later than one week - a list of student-trainees.

2.2 Appoint Head of qualified teachers.

2.2. Ensure that students work discipline and work rules. To participate in the investigation commission base practice accident that occurred with students.

3. Responsibilities of the parties for breach of contract:

3.1. The parties responsible for failing to execute their responsibilities to the organization of practice under current labor legislation in Ukraine.

3.2. Usisuperechky, schovynykayutmizhstoronamy be settled
in due course.

The contract takes effect after its signing by the parties and diyedo the end traineeship under the schedule.

Agreement is made in duplicate - based practices and institutions of higher education.

Legal addresses of the parties:

institutions of higher Education: The base
Avenue. D. Yavornytsky 19
m. Dnipro, 49005, Ukraine,
training department of NTU "SE"

practice:

Signature and stamp:

institutions of higher Education: The base

practice:

" ____ " _____ 20__ g.

" ____ " _____ 20__ g.

Place corner of the stamp
institution of higher
education

head

REFERRAL TO PRACTICE

According to the agreement on "_____ " _____ 20_____, the
number _____ Which concluded with

(Full name of the enterprise, organization, institution)

sending students to practice _____ course, studying the direction of (specialty)

name practice

Terms of practice " _____ " _____ 20____ year
on " _____ " _____ 20____ year

Practice Leader of NTU "SE" _____
(Signature) (surname and initials)

Surname, name and patronymic STUDENTS

Printing dekanatu

Dekan faculty (Director

Institute) _____

(signature)

National Technical University
"Dnepr Polytechnic"

DIARY OF PRACTICE

(Name of practice)

students _____

(Full Name)

Faculty (Institute) _____

Chair _____

The degree of higher education _____

Specialty _____

_____ course, group _____

(Code group)

Practice Leader of NTU "SE" _____

(Position, surname and initials)

signet dekanatuDekan faculty (Director Institute)

(signature)

Calendar schedule to practice

Number s/ n	The names of work (individual tasks)	Week traineeship					Evaluation of the performance
		1	2	3	4	5	

Head of:
institution of higher education

_____ (signature)

_____ (surname and initials)

of companies, organizations, institutions

_____ (signature)

_____ (surname and initials)

Student _____
(Full Name)

arrived " _____ " _____ 20 _____ g.

the enterprise, organization, institution and began to practice.

Seal,
organization, institutions " _____ " _____ 20 _____ G.

(Signature) (position, name of the responsible people)

Eliminated " _____ " _____ 20 _____ g.
of companies, organizations, institutions

Seal,
organization, institutions " _____ " _____ 20 _____ G.

(Signature) (position, name of the responsible people)

Review and assessment of student work in practice

(Name of company, organization, institution)

Practice Leader of enterprises, organizations, institutions

(Signature) (name and initials)

Seal,
organization, institutions " _____ " _____ 20 _____ g.

Review persons tested traineeship

Conclusion practice leader of the institution of higher education internships

Date of the championship " ___ " _____ 20___ year

Rating:
by instutytsiynoyu shkaloyu _____
(Words)
scores _____
(Numbers)

Practice Leader of the institution of higher education

(Signature) (surname and initials)

Educational edition

Korovyaka Evgeny Ignatov Andrey
Bartashevskyy Stanislav Evgenevich
Denyschenko Alexander V.

Pre Practice Program
for the first (bachelor) level of 185 higher education specialty
"Oil and gas engineering and technology"

In the wording of the author

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