



# PRACTICE

## Working program of the academic discipline (Syllabus)

### Details of the academic discipline

Level of higher education	<b>Second (master's)</b>
Branch of knowledge	<i>18 Production and technologies</i>
Specialty	<i>184 Mining</i>
Educational program	<i>Geoengineering</i>
Discipline status	<i>Normative</i>
Discipline scope	<i>full-time/part-time/distance/mixed</i>
Year of study, semester	<i>II year, autumn semester</i>
Discipline scope	<i>14 credits/ 420 hours</i>
Semester control / control measures	<i>Test, report</i>
Lessons schedule	
Language of Lecture	<i>English</i>
Information about course leader / lehrer	<i>Supervisor of practice prof. Vovk O.O.</i>
Course placement	<i>Available on the Sikorsky platform. The access code is provided by the teacher at the orientation meeting</i>

### Program of educational discipline

#### 1. Description of the educational discipline, its purpose, subject of study and learning outcomes

*Practice is the final link of students' practical training. It allows you to deepen and consolidate theoretical knowledge from all disciplines of the educational process and to select actual material for the completion of a master's thesis.*

*The purpose of practice is to apply, generalize and consolidate the knowledge acquired at the University in practical activities, mastering practical experience and skills of independent work and research activities.*

*Mastering the educational component "Practice" according to the OPP enables the formation of students' abilities and learning outcomes:*

*ZK2. The ability to communicate with specialists and experts of various levels in other fields of knowledge.*

*ZK3. The ability to work in an international context and in a global information environment by profession.*

*ZK4. The ability to act socially responsibly and consciously.*

*SK2. Ability to perform theoretical and experimental studies of parameters and modes of operation of systems and technologies of mining and geoconstruction enterprises;*

*PH2. Communicate freely with specialists and experts of various levels in other fields of knowledge;*

*PH3. To work in an international context and in a global information environment by profession;*

*PH4. To act socially responsibly and consciously;*

*PH8. Develop and implement innovative products and measures to improve and increase the technical level of mining systems and technologies, ensuring their competitiveness;*

**Prerequisites:** *It is based on the study of all normative components of the OP and are post-requisites for the preparation and defense of a master's thesis. Practice is the final link of practical and research training of master's students.*

## **2. Content of the academic discipline**

*The plan envisages independent work of students during practice. The content of the practice consists of the following topics.*

*Topic 1. General information about the institution in which the student is doing practice. Organizational structure of the organization (enterprise). Subjects of design and construction works. The main tasks facing the institution and individual departments, their connection with industry, prospects for their development. Studying the duties of a trainee engineer, designer, estimator, etc. Safety and occupational health and safety techniques when performing work at the workplace. Prevention of industrial injuries and occupational diseases. Personal protective equipment. Fire prevention measures.*

*Topic 2. Justification of the choice of the topic, relevance, novelty, perspective of using and implementing the results of the project work. General introduction to the problem. Selection and compilation of bibliographic lists of domestic and foreign scientific and technical and normative literature (DBN, DSTU, monographs, textbooks, articles, etc.). Compilation of a report on a topic. Analysis, comparison, critical understanding of the processed information. Generalization of information and clarification of the state of the issue, formulation of the goal and tasks of the planned design.*

## **3. Educational materials and resources**

### **Basic literature:**

*Regulations on the procedure for the practice of students of higher education KPI named after Igor Sikorsky / Regulations on the procedure for conducting the practice of higher education Igor Sikorsky KPI*  
<https://osvita.kpi.ua/node/184>

*Provisions on the practice of students of higher educational institutions of Ukraine*  
<https://osvita.kpi.ua/node/184>

*Preparation of qualification papers for the second (master's) level of higher education [Electronic resource]: training. manual for students specialty 184 "Mining", / KPI named after Igor Sikorsky; comp.: S.M. Stovnyk, A.L. Han., Shaidetska L.V., O.V. Han. – Electronic text data (1 file: 0.64 MB). – Kyiv: KPI named after Igor Sikorsky, 2019. – 31 p.*  
[https://ela.kpi.ua/bitstream/123456789/29104/5/Pidhotovka\\_kvalifikatsiinykh\\_robit\\_za\\_II\\_RVO.pdf](https://ela.kpi.ua/bitstream/123456789/29104/5/Pidhotovka_kvalifikatsiinykh_robit_za_II_RVO.pdf)  
*research training of master's students.*

### **Additional literature.**

*In this section, the student provides his bibliography, which is used in the completion of the master's thesis.*

## Educational content

### 4. Methods of mastering an educational discipline (educational component)

#### The order of organization and practice management

*Practice for students of the II year of the specialty 184 "Mining" is conducted in accordance with the curricula of full-time and part-time forms of education. During the internship and the implementation of the main tasks of the internship program, each student must obtain specific results from the topic, which will be reflected in the formulation of the topic of the Master's thesis. The student practice program consists of the following parts:*

*formation of an individual schedule of practice and familiarization of the student with domestic and foreign analogues in order to form a bibliographic list of literature by the student on the chosen topic of the master's thesis. During this period, students are required to conduct a review of regulatory documentation and printed literature, collect and process practical and informational material, select and process statistical data on the chosen topic;*

*preparation of theses for presentation at a scientific and technical conference in the chosen direction;*

*fulfillment of an individual task, completion of work on the formation of a topic for a master's thesis, preparation of a report on the completion of practice and its defense. Educational and methodical guidance and implementation of practice programs are provided by managers from the enterprise. The general organization of practice and control over its conduct at the department is carried out by the person responsible for practice at the department, who is appointed by the head of the department.*

*To directly supervise the practice of each student, the graduating department appoints a supervisor from among the teachers, who, as a rule, combines these duties with the duties of the master's thesis supervisor.*

#### The procedure for sending students to practice

*Students are sent to practice according to the order of the university. The order determines the type of practice, the terms and place of its completion, the distribution and confirmation of students according to practice supervisors from departments, etc. The form of the order and the terms of its preparation are determined by the current requirements of the university. When starting practice, the student must receive instruction on practice and safety techniques at the department in advance. Students are instructed during orientation meetings. Orientation meetings are intended to acquaint students with the requirements for the internship and the necessary documents. During the first meeting (1-2 calendar days before the start of practice), students are provided with sample documents for registration (such a list of documents may include: a referral letter for practice, a practice schedule, a curriculum and methodological instructions for practice, etc.). In the event that the student independently chooses the object of practice, the indicated procedure for referral to practice must be clearly followed.*

#### Responsibilities of the person responsible for practice from the department:

*The person responsible for practice in the department is appointed by the head of the corresponding department. The main duties of the person responsible for practice from the department are:*

- organizing and conducting orientation meetings for students of the department (including instruction on safety and occupational health and safety) and providing them with the necessary documents before starting practice;*
- ensuring the timeliness of students' formation of individual practice schedules and their receipt of individual tasks from direct supervisors;*
- timely conducting orientation meetings on practice, familiarizing students with the requirements for the preparation of practice documentation, the reporting system and assessment criteria for*

*practice, which are regulated by the relevant normative and methodical documentation on the organization and conduct of practice;*

- *advising students on the terms and procedure of practice, preparation of practice documents and protection of the report;*
- *ensuring the timeliness of students' submission to the department of practice reports and other documents necessary for defense, their verification and visa;*
- *timely organization and implementation of practice protection;*
- *reporting on the results of practice at the department meeting.*

#### **Duties of practice managers from enterprises**

*For the direct supervision of each student's practice, the manager of the practice base enterprise appoints a (direct) practice supervisor. Duties of practice managers from the enterprise are:*

- *control of students' compliance with labor discipline and safety regulations;*
- *developing and providing students with individual tasks and other instructions for practice, taking into account the specifics of the specialty;*
- *control over the timeliness of the formation and execution of individual schedules of practice by students;*
- *advising students on the implementation of individual practice tasks and preparation of practice documents;*
- *creation of conditions for high-quality implementation of the internship program and assistance to students in obtaining materials for the report and improving their qualifications;*
- *timely processing of feedback (by assessing the attitude to work, compliance with labor discipline, the level of theoretical and practical training, etc.) and a preliminary assessment of the student's work in practice based on the examination of the practice report, the results of the individual task and other practice documents.*

#### **Responsibilities of student interns**

*Students of the department are obliged to:*

- *before the start of the practice at orientation meetings, and then on an individual basis, receive consultations from the head of the practice regarding the preparation of all necessary documents;*
- *arrive at the practice base on time (no later than the date specified in the referral);*
- *systematically work on tasks according to the practice program;*
- *fully perform all tasks provided for by the internship program, specified in the individual internship schedule and instructions of the immediate supervisor;*
- *strictly observe the working day regime, rules of internal procedure, occupational health and safety, operating on the basis of practice;*
- *be responsible for the work done;*
- *constantly maintain contacts with the department and appear for the interim control at the deadline appointed by the head of practice from the department;*
- *highlight the results of the work performed and issue them in the report on the completion of practice in accordance with the established and current requirements of the department for the structure and design of the report;*
- *submit reporting documents to the department in a timely manner and defend practice materials before the relevant commission in due time.*

## 5. Policy of academic discipline (educational component)

*Both the teacher and the student are obliged to adhere to the Code of Honor of the National Technical University of Ukraine "Ihor Sikorsky Kyiv Polytechnic Institute".*

*The main provisions of the policy:*

- attending consultations appointed by the head of practice from the department;*
- the student's execution of the task plan according to the individual task;*
- during the internship, students have the opportunity to raise any issue related to the procedure for conducting and evaluating control measures;*
- students have the right to challenge the results of the control measures, explaining with reasons which criteria they disagree with according to the evaluation letter and/or comments;*
- in case of discovery of the fact of academic dishonesty, the practice report is not counted.*

## 6. Types of control and rating system for evaluating learning outcomes (RSO)

*Forms and methods of control, summary of practice*

*The main tasks of practice are reflected in the Practice Diary, which is kept according to the form approved by KPI named after Igor Sikorsky.*

*The student makes notes in the Diary - records the content and scope of the work performed, as well as its results - during the entire practice. The actual implementation is certified by the head of practice from the enterprise.*

*The result of the internship should be obtaining results that will be used in the further development of the intern, on the basis of which the topic of the master's thesis will be clarified and will be the basis for its writing. The results are drawn up in the form of a Practice Report.*

*At the end of the internship, the manager of the enterprise prepares feedback on the implementation of the internship program.*

*The Written Report, together with the Practice Diary, is submitted for review to the immediate supervisor of the practice from the department within the term determined by the relevant department and regulated by normative and methodical documents on the organization and conduct of practice.*

*Submitted to the department in accordance with the established procedure at the department. The report is checked by the head of practice from the department. If the results of the inspection of the Report reveal its compliance with the established requirements, the Report is recommended for defense before the commission.*

*In the case of detection of uncompleted works, non-compliance with the requirements of the faculty, the report is sent for revision.*

*Based on the results of checking the report, the direct head of practice from the department writes a general review and determines the assessment with which the report is recommended for defense before the commission. The practice manager's assessment is advisory only and is not a binding defense assessment for the panel.*

*The main document that testifies to the student's implementation of the internship program is a written report. The content of the report should reveal the student's knowledge and skills, acquired by him in solving the issues determined by the goal and task of the practice. The evaluation criteria are presented in Table 1*

**Table 1**

<i>Type of student's activity points</i>	<i>Maximum number of points</i>	<i>Evaluation criteria on a point scale</i>
<i>Implementation of the internship program</i>	<i>15</i>	<i>5- the student started the practice in a timely manner and was present at orientation meetings); 10 – the student regularly and timely reported to the head of practice on the completion of assigned tasks;</i>
<i>Preparation of reporting materials</i>	<i>15</i>	<i>5- the student completed and provided a practice diary in a timely manner; 5 – the student submitted a practice report in a timely manner; 5 - the report on practice contains material that corresponds to the tasks of all stages of the calendar schedule of practice (3 sections of the explanatory note)</i>
<i>Evaluation of the supervisor of the master's thesis</i>	<i>25</i>	<i>15 - the design of the 3 sections of the explanatory note was completed in full accordance with the tasks and requirements for the qualification works; 10 – conducting mathematical or experimental modeling of the topic and the tasks</i>
<i>Protection of practice</i>	<i>45</i>	<i>10 – defining the goals and tasks of modeling fully correspond to the topic of the qualification work 5 - the review of available analogues is completed in full 10 - the research was carried out qualitatively and in accordance with the topic of the qualification work 20 - the recommendations given in the "startup" section can be fully implemented</i>

*The student is allowed to defend the practice subject to the completion of all assigned tasks.*

*Summarizing the results of practice takes place in the form of a differentiated assessment, which is accepted by the commission, the composition of which is determined by the head of the department (at least 2 members of the commission).*

*Table of correspondence of rating points to grades on the university scale:*

<b>Number of points</b>	<b>Evaluation</b>
100-95	Excellent
94-85	Very good
84-75	Good
74-65	Satisfactory
64-60	is enough
Less than 60	Unsatisfactory
Admission conditions not met	Not admitted

**Working program of the academic discipline (syllabus):**

**Compiled**

**Approved** by the Department of Geoengineering (protocol No. 18 dated June 17, 2022)

**Agreed** by the Methodical Commission of the IEE (protocol No. 12 dated 06.24.2022)