

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
**KYIV NATIONAL UNIVERSITY OF
CONSTRUCTION AND ARCHITECTURE**

**PRE-DIPLOMA PRACTICE.
MAGISTRACY**

Methodical recommendations
to perform an individual task during the pre-diploma practice by applicants of
higher education at the second (master's) level performing attestation work at
the Department of Construction Technologies,
Branch of knowledge 19 «Architecture and Construction»,
Specialty 192 «Building and Civil Engineering»

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Pre-diploma practice. Magistracy: methodical recommendations to perform
ПЗ1 an individual task during the pre-diploma practice by magisters performing attestation work at the Department of Construction Technologies /Authors: O.F. Osipov, L.S. Chebanov, S.O. Osipov, T.L. Chebanov, O.O. Ignatenko. – Kyiv : KNUCA, 2025. – 12 p.

The methodical recommendations contain brief information about the general content and procedure for passing the pre-diploma practice and the methodology for performing an individual task by the magisters performing the attestation work at the Department of Construction Technologies

Переддипломна практика. Магістратура : методичні рекомендації щодо
ПЗ1 виконання індивідуального завдання під час проходження переддипломної практики магістрами, які виконують атестаційну роботу на кафедрі «Будівельні технології».

Intended for applicants of higher education at the second (Master's) level of specialty 192 "Building and Civil Engineering".

GENERAL CONTENT PRE-DIPLOMA PRACTICE

The purpose of pre-diploma practice is to familiarize for applicants of higher education at the second (master's) level scientific and pedagogical aspects of the work of specialists of the educational "Master's" qualification level according to the specialization "Industrial and Civil Engineering" (Specialty 192 «Building and Civil Engineering»); collection of source material on the theme of Magister's attestation work.

The task of pre-diploma practice is the acquisition and systematization of special knowledge by applicants of higher education at the second (master's) level and applied skills in highly qualified practically manufacturing, project-design and scientific-pedagogical work in the construction industry. Acquisition and systematization of knowledge consists in the adoption of science-based design and engineering, organizations technological and control-technical solutions in the field of technology and organization of construction production, as well as in the implementation of scientific and design developments in the scientific specialty "Construction and Civil Engineering."

According to the results of the pre-diploma practice the future specialist should

✓ **know:** modern methodology of construction, organizational and technological design; general structure and content of applied research in the field of technology and organization of construction; information bases and applied computer support of design processes, organizational and technological monitoring of construction processes and applied scientific research; general structure, material and technical basis of design, contractors and scientific organizations in the construction industry; progressive methods of construction processes and organization of construction production; methods of construction management, quality control of works and products; general structure and content of design and as-built documentation, main stages of science and research works (SRW) , research and design developments (RDD);

✓ **be able to:** use modern information bases, applied computer software and research equipment, necessary for the implementation of the design and research part of the magister attestation work; analyze, process (by formal methods) and generalize experimental data, which were obtained from the results of applied research;

✓ **get:** architectural and planning, design, technological solutions for industrial or civil building, which will be used in the project part of the magister attestation work; materials of previously performed scientific research in the direction of magister attestation work.

THE ORDER OF PASSAGE OF PRE-DIPLOMA PRACTICE

Sending students for pre-diploma practice is carried out by order of the rector of Kyiv National University of Construction and Architecture and admission to practice - by order of the head of the host organization - a scientific, design or construction organization.

The location for pre-diploma practice. State enterprise «Science and Research Institute of Construction Production» (SRICP), Kyiv, Ukraine.

Students of Magistracy, also, can independently, with the permission of the department and dean's office, choose for themselves the place of passing the pre-diploma practice. At the same time, possible objects of this practice should correspond to the modern level of scientific and design work and meet the requirements stipulated by the purpose and objectives of the practice.

The places of pre-diploma practice for students of Magistracy in the Science-Research State Enterprises, Design and Engineering Institutes, Construction companies are appointed exclusively within in Kyiv.

Organization, holding, methodological guidance and control of pre-diploma practice for students of Magistracy is carried out by the Department of Construction Technologies (DCT) of Kyiv National University of Construction and Architecture (KNUCA).

For each student of magistracy, the Department of Construction Technologies KNUCA appoints the head of the practice, which is approved by the order of the rector.

Direct management for students of magistracy during pre-diploma practice is assigned to constantly working specialists scientific, design or construction organization (host organization).

On the proposal of the head of practice from the university, the Department of Construction Technologies decides to change the place of practice, suspension the student from passage of pre-diploma practice, encouraging the student on the basis of passing the practice.

Procedure for passing pre-diploma practice. Before the beginning of practice, the Department of Construction Technologies of Kyiv National University of Construction and Architecture together with a representative of the dean's of Construction Faculty holds meetings for students of magistracy. Students are required to be present at the meeting. At the meeting, the rector's order regarding distribution by place of practice is announced, instruction on the procedure for passing the practice is carried out, personal compliance with occupational health and safety standards, other issues at the choice of the Department of Construction Technologies. After the meeting and until the end of practice, all issues related to the passage of practice, students decide with the practice head.

Registration of students for passage of practice in the host organization is carried out on the basis of the direction of the university (KNUCA).

Students at the places of practice are required to comply with the rules of internal regulations, that is installed in the host organization. The labor regime is also part of this.

When passing the pre-diploma practice, students of magistracy are required to:

- strictly observe the rules of internal regulations and generally accepted or due to legal acts norms of conduct at construction sites, in host organizations and the university, public places;

- before starting the practice, study the safety and health, fire safety rules;
- get a general instruction of labor protection in both the receiving organization and the work place;
- personally make sure that there is an order of the head of the host organization on hiring for practice;
- in case of absence from the workplace for valid reasons, immediately notify the practice manager, and after the resumption of work, provide him with documents confirming these reasons.

Stream control is carried out at arbitrary moments of time by the head of practice from the university during the passage for students of magistracy of pre-diploma practice. At the same time, the conditions of practice, compliance with safety and labor protection requirements, compliance with the internal regulations and the practice program by trainees are checked.

At the end of the practice, the student is obliged to draw up a report on pre-diploma practice and receive a set-off.

The trainee must submit a report that contains the results of the individual task in order to receive set-off.

THE CONTENT AND GENERAL METHOD OF PERFORMING AN INDIVIDUAL TASK

During the pre-diploma practice, each student of magistracy performs an individual task, which is issued by the professor (associate professor) of the Department of Construction Technologies of Kyiv National University of Construction and Architecture, appointed by order of the rector as the head of the attestation work of the student of magistracy.

The purpose and content of the individual task is determined by the head of the attestation work of the student of magistracy in accordance with the assigned theme for attestation work of magistracy and selected subject of applied research in the field of technology and organization of industrial and civil engineering.

The general method for performing an individual task has the following structural elements (**Fig. 1**):

A-stage. Definition of the purpose and objectives of the study (block 1 and 2);

B-stage. Research with justification and choice of research methods, development of a plan for their implementation, actually research and processing of results (blocks 3 - 6).

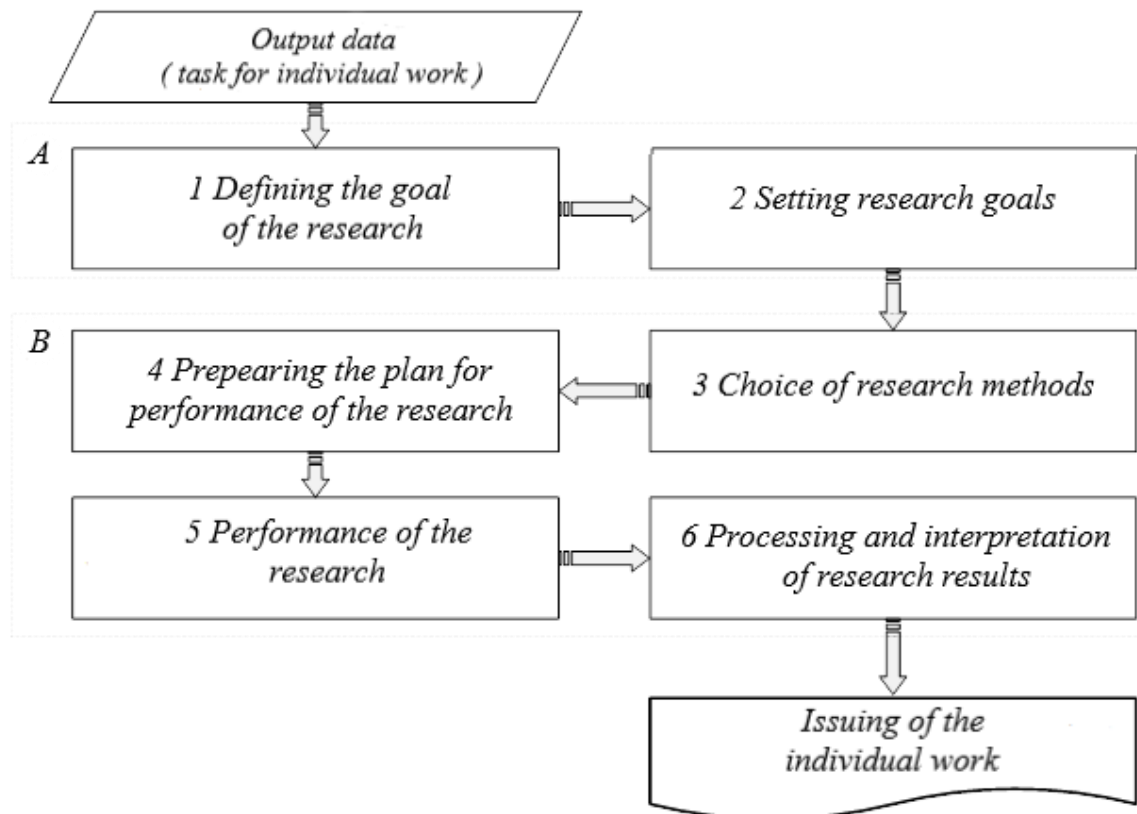


Fig. 1 Method scheme for research in the individual work

The results of the research are provided in a graphic or analytical presentation:

- ✓ establishes dependencies between researched parameter;
- ✓ processing of statistical material by researched organizational and technological parameter;
- ✓ technic-economic research and optimization of applications of construction technologies, methods of construction processes;

- ✓ variant tests for the execution and mechanization of construction processes.;
- ✓ technological maps for the leading, innovative process on the theme of pre-diploma work for student of Magistracy, etc..

REQUIREMENTS FOR DESIGN OF THE WORK

Individual work is performed on sheets of **A4 format**.

LIST OF LITERATURE

1. *Технологія будівельного виробництва* : підручник / В. К. Черненко, М. Г. Ярмоленко, Г. М. Батура. О. Ф. Осипов та ін.; за заг. ред. В. К. Черненко. – Київ : Вища шк., 2002 – 430 с.

2. *Технологія монтажу будівельних конструкцій* : навчальний посібник для студентів вищих навчальних закладів, які навчаються за напрямком «Будівництво» / В. К. Черненко, О. Ф. Осипов, Г. М. Тонкачєєв та ін. – Київ : Горобець Г. С., 2011. – 372 с.

3. *Технологія будівельного виробництва* : практикум : навч. посіб. / М. Г. Ярмоленко, Є. Г. Романушко, О. Ф. Осипов та ін.; за заг. ред. М.Г. Ярмоленка. – Київ : Вища шк., 2007. – 207 с.

4. *ДБН А.3.1-5-2016*. Організація будівельного виробництва. – Київ : Держкоммістобудування України, 2016. – 61 с. – Чинний з 01.01.12.

5. *ДБН А.3.2-2-2009*. Охорона праці і промислова безпека у будівництві. – Київ : Міністерство регіонального розвитку та будівництва України, 2012. – 96 с. – Чинний з 01.04.12.

6. НПАОП 45.2-4.01-98 (5-47). Положення про безпечну та надійну експлуатацію виробничих будівель і споруд.

7. *ДБН А.2.2-3:2014*. Склад та зміст проектної документації на будівництво.

8. *ДБН В.1.2-5:2007*. Науково-технічний супровід будівельних об'єктів.

9. *ДБН В.1.2-12-2008*. Будівництво в умовах ущільненої забудови. Вимоги безпеки.

10. *ДСТУ-Н Б В.1.2-18:2016*. Настанова щодо обстеження будівель і споруд для визначення та оцінки їх технічного стану.

11. ДБН В.1.3-2:2010. Геодезичні роботи у будівництві.
12. *Рекомендації* про проведення практики студентів вищих навчальних закладів України. – Київ : ІТЗО, 2013.
13. *Положення* про практичну підготовку студентів Київського національного університету будівництва і архітектури.

INFORMATION RESOURCE

1. <http://library.knuba.edu.ua/>

Application Form of task for execution
individual work →

TASK

for executing of individual work

Title of the theme of individual work:

“ _____ ”

OUTPUT DATA AND CONDITIONS

<i>No s.n.</i>	

SUBJECT OF RESEARCH:

REQUIREMENTS FOR DESIGN: The work is performed on sheets of format A4

<p><i>Student of Magistracy</i> _____</p> <p><i>Faculty</i> _____</p> <p><i>Date of issue of the task</i></p> <p>“ ___ ” _____ 20___ y.</p> <p><i>Head of Attestation Work</i> <i>Professor (Associate Professor)</i> _____ (_____)</p>

FOR NOTES

Навчально-методичне видання

ПЕРЕДДИПЛОМНА ПРАКТИКА.

МАГІСТРАТУРА

Методичні рекомендації
щодо виконання індивідуального завдання
під час проходження переддипломної практики магістрами,
які виконують атестаційну роботу
на кафедрі «Будівельні технології»

Укладачі: **Осипов** Олександр Федорович,
Чебанов Леонід Сергійович,
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Чебанов Тарас Леонідович,
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