(F 03. 02-92)

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE
NATIONAL AVIATION UNIVERSITY
Faculty of Architecture, Civil Engineering and Design
Computer Technologies of Airport Construction and Reconstruction Department

AGREED
Dean of the Faculty of Architecture, Civil Engineering and Design
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"09" 12 2021

APPROVED
Vice Rector for Academics
_____ A. Polukhin
"23" 12 2021

Quality Management System

COURSE TRAINING PROGRAM
on
"Architecture of Building and Structures"

Educational-Professional Program: "Industrial and Civil Engineering"
Field of study: 19 "Architecture and Construction"
Specialty: 192 "Building and Civil Engineering"

Form of training	Sem.	Total (hours/ ECTS credits))	Lec.	Prac.	Lab.	Self-study	Homeworks control works	CP / TP	Form of control
Full-time	5	150,0/5,0	34	–	34	82	–	TP	Examination 5th semester
Part-time	5, 6	150/5,0	10	–	8	132	C.w. – 6s	TP -6s	Examination 6th semester

Indices: CB-5-192-1/21-2.1.12
CB-5-192-2/21-2.1.12
CB-5-192-1p/21-2.1.12
CB-5-192-2p/21-2.1.12

The Course Training Program on "Architecture of Building and Structures" is developed on the basis of the Educational-Professional Program "Industrial and Civil Engineering", Bachelor Curriculum and Extended Curriculum № CB-5-192-1/21, № ECB-5-192-1/21, № CB-5-192-1p/21, № ECB-5-192-1p/21, CB-5-192-2/21-2.1.12, CB-5-192-2p/21-2.1.12 for training higher education seekers of the Bachelor degree of specialty 192 "Building and Civil Engineering" and corresponding normative documents.

Developed by: Professor of
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Discussed and approved by the by the Graduate Department for the Speciality 192 "Building and Civil Engineering" (Educational-Professional Programs "Industrial and Civil Engineering" and "Highways and airfields") – the Computer Technologies of Construction and Airport Reconstruction Department,
Minutes № 5 of " 2 " 11 2021.

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INTRODUCTION

The Course Training Program of the academic discipline "Architecture of Building and Structures" was developed on the basis of the "Methodological recommendations for the development and execution of the syllabus of educational discipline of full-time and part-time forms of training", approved by rector's order No. 249/roz. of 29.04.2021 and relevant regulatory documents.

1. EXPLANATORY NOTE

1.1. Role, goal and objectives of the academic discipline

The role of the discipline in the field of science and the system of professional training.

The discipline "Architecture of buildings and structures" occupies a leading position in the process of professional training for the qualified performance of professional duties of specialists in "Building and Civil Engineering". The study of the course of this discipline is aimed at gaining knowledge about the basics of designing buildings and structures for various purposes, their compositional, spatial planning solutions with elements of architectural design.

The goal of teaching the discipline is to provide higher education with knowledge about the design of industrial buildings based on an organic combination of production and technological, technical, economic and environmental requirements and the formation of practical skills in choosing architectural, structural and technological systems and schemes of industrial buildings, rational and progressive spatial planning and design solutions. In accordance with modern requirements for the design of the construction part of industrial enterprises, the information required by students in the implementation of course and diploma projects.

The objectives of the discipline are:

- acquaintance with the basics of architecture of buildings and structures and the main problems of designing industrial facilities;
- study of the basic requirements to the objects of design and factors influencing them;
- formation and accumulation by students of higher education of knowledge on normative and technical standards used in the practice of architectural design;
- gaining practical skills in the application of architectural and compositional solutions in the design of industrial facilities.

1.2. Educational outcomes of the academic discipline

As a result of studying the discipline, the applicant acquires knowledge about the organization of architectural and construction design; the main requirements that must be met by the design solutions of industrial buildings, taking into account the technological process; technical solutions of structural elements of industrial buildings that have found application in the practice of design.

Students also acquire: PLO5 – Use and develop technical documentation at all stages of the life cycle of construction products. PLO6 – Apply modern information technologies to solve engineering and management problems of construction and civil engineering. PLO7 – Perform data collection, interpretation and application, including through the search, processing and analysis of information from various sources. PLO8 – Demonstrate the ability to effectively use modern building materials, products and structures based on knowledge of their technical characteristics and manufacturing technology. PLO9 – Design building structures, buildings, structures and engineering networks, taking into account engineering and resource-saving measures, legal, social, environmental, technical and economic indicators, scientific and ethical aspects, and modern requirements of regulatory documentation in the field of architecture and construction, environmental protection and labor safety. PLO11 – Demonstrate an understanding

of the design principles of urban areas and infrastructure. PLO14 – Ensure reliable and safe operation of building constructions, structures and engineering networks. PLO17 – Mastering work skills to work effectively independently (course and diploma design) or in a group (laboratory classes, including leadership skills in their implementation), the ability to obtain the desired result in a limited time with an emphasis on professional integrity and the exclusion of plagiarism.

1.3. Competencies obtained through the academic discipline

According to the content of the discipline, the applicant of higher education must be able to professionally assign possible options for planning decisions of industrial buildings and structures, reasonably choose the appropriate structural systems and schemes of the building, rationally combining design solutions with artistic expression of forms; to construct bearing and enclosing elements of industrial buildings and constructions; use normative-reference and scientific-technical literature; make the necessary calculations of the economic efficiency of design solutions; perform and read architectural and construction drawings.

IC. The ability to solve complex specialized tasks and practical problems in the field of construction or in the learning process, which involves the application of theories and methods of determining the strength, stability, durability, reliability and safety of buildings and structures; application of information technologies, software complexes, automated design systems.

General competencies: GC1 – Ability to think abstractly, analyze and synthesize. GC2 – Knowledge and understanding of the subject area and professional activity. GC3 – Ability to communicate in the state language both orally and in writing. GC5 – Ability to use information and communication technologies. GC6 – Ability to independently acquire knowledge by searching, processing and analyzing in-formation from various sources. GC7 – Interpersonal skills. GC9 – Ability to realize one's rights and responsibilities as a member of society; awareness of the value of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine. GC10 – Ability to save and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, use different types and forms of physical training for active leisure and leading a healthy lifestyle.

Professional competencies: PC1 – Ability to use conceptual scientific and practical knowledge of mathematics, chemistry and physics to solve complex practical problems in construction and civil engineering. PC2 – Ability to critically understand and apply basic theories, methods and principles of economics and management for rational organization and management of construction production. PC3 – Ability to design building structures, buildings, structures and engineering networks (according to specialization), taking into account engineering and resource-saving measures, legal, social, environmental, technical and economic indicators, scientific and ethical aspects, and modern requirements of regulatory documentation in the field of architecture and construction, environmental protection and labor safety. PC4 – Ability to choose and use appropriate equipment, materials, tools and methods for designing and implementing technological processes of construction production. PC5 – Ability to use computer-aided design soft-ware and its specialized application for solving engineering problems of construction and civil engineering. PC6 – Ability to perform engineering activities in the field of construction, compilation and use of technical documentation. PC7 – Ability to take responsibility for developing and making decisions in the field of architecture and construction in unpredictable work contexts. PC10 – Ability to ensure the organization of the

construction of buildings and structures of industrial and civil purposes using modern construction materials and energy-efficient technologies. PC12 – Ability to carry out and organize the technical operation of buildings and structures, to ensure the reliability, safety and durability of the construction objects in the air transport and other industries.

1.4. Interdisciplinary links

The discipline "Architecture of buildings and structures" has an interdisciplinary nature and combines courses in the disciplines of professional training. This discipline is based on knowledge of such disciplines as "Introduction to Civil Engineering", "Theoretical Mechanics", "Engineering Graphics", "Building Mechanics", "Building Materials Science" and is the basis for the study of further disciplines, namely: "Building Structures", "Organization of Construction", "Metal Structures", "Base and foundations".

2. PROGRAM OF THE ACADEMIC DISCIPLINE

2.1. Content of the academic discipline

The educational material of the discipline is structured on a modular basis and consists of two educational modules, namely:

- **educational module 1** "Fundamentals of single-story industrial buildings design";
- **educational module 2** "Fundamentals of design of multistoried industrial buildings and engineering structures", each of which is a logically complete, relatively independent, integral part of the discipline, mastering which involves a modular test and results analysis.

A separate third module (educational component EC40) is a Term Paper that the student performs in the fifth semester (sixth semester for PTS). TP is an important component of consolidation and deepening of theoretical and practical knowledge and skills acquired by students in the process of mastering the educational material of the discipline.

2.2. Module structure and integrated requirements for each module

Module №1 “Fundamentals of single-story industrial buildings design”

Integrated requirements for module 1: ***to know*** requirements for the design of construction drawings and design documentation; regulatory requirements and features of design of single-story industrial buildings and structures taking into account the functional and technological process, sanitary and hygienic requirements and fire safety requirements; ***be able*** use normative and technical literature in design issues; select structural elements of buildings and structures depending on the spatial planning decisions; perform drawings of basic architectural and construction drawings in accordance with the requirements of current regulations.

Topic 1. Fundamentals of design of industrial buildings and complexes.

Introduction. A brief history of industrial construction. Basic terms and definitions. Requirements for industrial buildings. Classification. Factors taken into account in the design of industrial buildings (air, lighting, acoustic load, fire and explosion safety, etc.).

Topic 2. Spatial planning, compositional and structural solutions of industrial buildings and structures.

System of normative documents in construction. Modular coordination. Type design and unification of industrial buildings. Snapping structural elements to modular coordination axes. Types of constructive schemes. Technical-economical parameters of buildings. Principles and means of architectural composition. Interior architecture. Improving the technical level of industrial enterprises.

Topic 3. Material handling equipment of industrial buildings.

Types of in-shop material handling equipment. Rail tracks for the movement of overhead travelling cranes and overhead track hoist. Temperature and settlement expansion joints: purpose and design solution.

Topic 4. The main elements of the load-bearing frame of a single-story industrial building: foundations, foundation beams.

Frames of industrial buildings. Structural elements: purpose and relationship in the frame system. The choice of structural scheme and frame material. Structural solutions of foundations for industrial buildings. Foundation beams. Arrangement of the basement and technical underground. Damp course and vertical waterproofing. Blind area of the building. Nodes.

Topic 5. The main elements of the load-bearing frame of a single-story industrial building: columns, crane girders. End and lateral frameworks.

Types of columns of single-story industrial buildings by purpose and their design solutions. Crane and tying beams. End and lateral frameworks.

Topic 6. Load-bearing structures covering industrial buildings.

Constructive schemes of roofs. Plane constructions of single-story industrial buildings. Spatial constructions of roofs: features, classifications and types.

Topic 7. Braces of the single-story industrial buildings frame.

Classification of braces. Vertical braces between columns. Lateral and vertical connections of the roof.

Topic 8. Monitors and roof covering of single-story industrial buildings.

Structural decisions of monitors of the industrial buildings. The main structural elements. Lantern connections. Types of roof covering of industrial buildings. Basic schemes of drainage from the roof covering of industrial buildings.

Topic 9. Enclosing structures of industrial buildings.

Wall constructions of industrial buildings, their main elements and details. Lightweight vertical enclosing structures of industrial buildings. Partitions.

Topic 10. Floors, windows and doors of industrial buildings.

Types of floor coverings of industrial buildings and requirements to them. Structural solutions for doors and gates of industrial buildings. Designs of light openings.

Module №2 « Fundamentals of design of multistoried industrial buildings and engineering structures »

Integrated requirements for module 2: ***to know*** basics of designing multi-storied industrial buildings: typology, classification, requirements, methods of architectural and compositional, spatial planning and design solutions; features of designing of administrative and household buildings of the industrial enterprises; ***be able*** to develop spatial planning and design solutions for multistoried industrial buildings and administrative and residential buildings of industrial enterprises; to design enclosing constructions of buildings from modern effective construction materials; use graphic computer programs to design architectural and construction drawings of construction objects.

Topic 1. Fundamentals of designing multistoried industrial buildings.

Multistoried industrial buildings: field of application, structural systems, ensuring spatial rigidity and stability. Features of spatial planning and design solutions of multistoried industrial buildings.

Topic 2. Constructions of frame multistoried industrial buildings.

Structural elements of multistoried frameworks of buildings: purpose constructive decisions, material. Frame buildings with frame, connecting and frame-connecting structural schemes.

Topic 3. Load-bearing structures of the floor of multistoried industrial buildings.

Prefabricated reinforced concrete floors for multistoried industrial buildings. Enclosing structures of multistoried industrial buildings.

Topic 4. Administrative-common buildings of industrial enterprises.

Assignment of auxiliary premises in the total volume of construction of industrial buildings. General requirements. Determining the composition of domestic premises and their equipment. Calculation of the area and equipment of domestic premises. Spatial planning solutions of administrative-common rooms: in the form of separate buildings attached to the production shops and built into the structure of the production shop.

Topic 5. Modern design solutions in industrial architecture.

Modern prefabricated industrial buildings based on light steel frames: features of spatial planning and design solutions, ensuring spatial rigidity and stability. Structural elements of light steel frames (LSTF): purpose, material, area of use.

Topic 6. Engineering structures of industrial enterprises.

Underground structures: retaining walls, tunnels, canals. Capacitive structures for liquids and gases: tanks and gasholders. Capacitive structures for bulk materials: silos and bunkers. Above-ground structures: open crane overpasses, shelves, noria towers, technological supports, galleries, etc. High-rise buildings: cooling towers, chimneys, etc. Capacitive structures for sewerage and water supply. Engineering structures: bridges, radio and TV towers, masts, transmission line pylons.

Topic 7. Features of design solutions of industrial buildings in areas with special natural conditions.

Structural and spatial planning solutions for industrial buildings during construction in seismic areas, on subsidence soils, in forged areas, in areas with hot climates.

Module № 3 (educational component EC-40). **Term Paper (TP)** is performed in the fifth semester, in accordance with the approved guidelines in order to consolidate and deepen the theoretical knowledge and skills acquired by the student in the process of mastering all the material of the discipline.

The specific purpose of the TP is to develop the architectural and construction part of the project of a single-story industrial building.

The content of the TP provides for the execution of sketches, development of the plan and facade of the industrial building, cross section, plan of foundations, plan of roofs in the form of an album of drawings (6 sheets of A3 format). The work includes separate structural nodes. An important part of the work is a meaningful explanatory note, which should be 10-15 sheets.

The time required to perform the CD - up to 30 hours of individual work.

2.3. Thematic plan of the academic discipline

№	Topic	Academic hours							
		Full-time study				Part-time study			
		Total	Lectures	Labs	Self-study	***Total***	Lectures	Labs	Self-study
1	*2*	***3***	4	5	6	**7**	8	9	10
Module №1 «Fundamentals of single-story industrial buildings design»									
1.1	Fundamentals of design of industrial buildings and complexes	***5* semester**				***5* semester**			
		8	*2*	*2*	3	**9**	2	-	7
1.2	Spatial planning, compositional and structural solutions of industrial buildings and structures	***7***	*2*	*2*	3	-	-	-	7

1.3	Material handling equipment of industrial buildings	***7***	*2*	*2*	3	**8**	2	-	6
1.4	The main elements of the load-bearing frame of a single-story industrial building: foundations, foundation beams	***7***	*2*	*2*	3	**-**	-	-	7
1.5	The main elements of the load-bearing frame of a single-story industrial building: columns, crane girders. End and lateral frameworks	***7***	*2*	*2*	3	**8**	2	-	6
1.6	Load-bearing structures covering industrial buildings	***7***	*2*	*2*	3	**6 semester**			
						10	2	2	6
1.7	Braces of the single-story industrial buildings frame	***7***	*2*	*2*	3	**7**	-	-	7
1.8	Monitors and roof covering of single-story industrial buildings	***7***	*2*	*2*	3	**8**	-	2	6
1.9	Enclosing structures of industrial buildings.	***7***	*2*	*2*	3	**7**	-	-	7
1.10	Floors, windows and doors of industrial buildings.	***7***	*2*	*2*	3	**8**	-	2	6
1.11	Module test №1	***2***	-	*1*	1	-	-	-	-
1.12	Control (home) work (PTS)	**-**	-	-	-	**8**	-	-	8
Total for Module №1		***72***	*20*	*21*	31	**89**	8	10	73
Module №2 «Fundamentals of design of multistoried industrial buildings and engineering structures»									
2.1	Fundamentals of designing multistoried industrial buildings	***5* semester**				***6* semester**			
		7	*2*	*2*	3	**7**	-	2	5
2.2	Constructions of frame multistoried industrial buildings	***7***	*2*	*2*	3	**4**	-	-	4
2.3	Load-bearing structures of the floor of multistoried industrial buildings	***7***	*2*	*2*	3	**4**	-	-	4
2.4	Administrative-common buildings of industrial enterprises	***7***	*2*	*2*	3	**4**	-	-	4
2.5	Modern design solutions in industrial architecture	***7***	*2*	*2*	3	**4**	-	-	4
2.6	Engineering structures of industrial enterprises	***7***	*2*	*2*	3	**4**	-	-	4
2.7	Features of design solutions of industrial buildings in areas with special natural conditions	***4***	*2*	-	2	**4**	-	-	4
2.8	Module test №1	***2***	-	*1*	1	**-**	-	-	-
Total for Module №2		***48***	*14*	*13*	21	**31**	-	2	29
Module № 3Term Paper									
3.1	Single-story industrial building	***30***	-	-	30	30	-	-	30
Total for Module №3		*30*	-	-	*30*	*30*	-	-	*30*
Total for Academic Discipline		*150*	*34*	*34*	*82*	*150*	*10*	*8*	*132*

2.4. Task for control (home) work

Control (homework) in the discipline is performed in the six semester, in accordance with the approved methodological recommendations, in order to consolidate and deepen the theoretical knowledge and skills of the student in the study of the discipline. The task for the practical part of the control (home) task is carried out by the student individually in accordance with the guidelines. The time required to complete homework is 8 hours of independent work.

2.5. List of questions for exam and final test

The list of questions and the tasks to prepare for the exam are developed by the teacher of the department in accordance with the work program and communicated to the students.

3. TRAINING MATERIALS FOR THE DISCIPLINE

3.1. Teaching Methods

When studying the discipline, the following teaching methods are used:

- explanatory-illustrative method;
- method of problem statement;
- reproductive method.

The implementation of these methods is carried out during lectures, demonstrations, independent work, work with educational literature, solving problems in building design.

3.2. Recommended literature

Basic literature

3.2.1. Куліков П.М. Архітектура будівель і споруд. Книга 5. Промислові будівлі: підручник/ П.М. Куліков, В.О Плоский, Г.В. Гетун. – Кам'янець-Подільський: Рута, 2020. – 820 с.

3.2.2. Металеві конструкції. Том 2. Конструкції металевих каркасів промисло- вих будівель: підручник для вищих навч. закладів. – С.І. Білик, О.В. Шимановський та ін. – Кам'янець-Подільський: Рута, 2021. – 448 с

3.2.3. Кінаш Р.І. Архітектурні конструкції виробничих будівель / Р.І. Кінаш. – Львів: Львівська політехніка, 2015. – 288 с.

3.2.4. Архітектура будівель і споруд. Книга 4.Технічна експлуатація та реконс- трукція будівель: підручник-довідник / В.О. Плоский та ін. – Кам'янець- подільський: Рута, 2018. - 750 с.

3.2.5. Котеньова З.І. Архітектура будівель і споруд: навчальний посібник / З.І.Котеньова. – Харків: ХНУБА, 2007. – 170 с.

3.2.6. Ching D. K. Building Construction Illustrated / Francis D. K. Ching. – Wiley, 2020. – 1169 p.

Additional literature

3.2.7. Гнідець Б.Г. Збірно-монолітні залізобетонні конструкції. Проєктування, дослідження і впровадження в будівництво / Б.Г. Гнідець. – Львів: Львівська політе- хніка, 2014. – 260 с.

3.2.8. Васильченко О.В. Основи архітектури і архітектурних конструкцій / О.В. Васильченко. – Харків : УЦЗ України, 2007. – 257 с

3.2.9. Правила виконання архітектурно-будівельних робочих креслень. Систе- ма проєктної документації для будівництва : ДСТУ Б А.2.4-7:2009. – [Чинний від 2009-24-01]. – К. : Мінрегіонбуд України, 2009. – 71 с. – (Державні будівельні норми України)

3.2.10. Світлопрозорі огородження будинків. навч. посібник / О.Л. Підгорний, І.М. Щепетова, О.В. Сергейчук та ін. – К. : Видавець, 2005. – 282 с.

3.2.11. Будинки адміністративного та побутового призначення. Будинки і споруди: ДБН В.2.2-28:2010. – [Чинний від 2011-01-10]. – К. : КИЇВЗНДІЕП, 2011. –28 с. – (Державні будівельні норми України)

3.2.12. Загальні принципи забезпечення надійності та конструктивної безпеки будівель, споруд, будівельних конструкцій та основ : ДБН В.1.2-14:2018. – [Чинний від 2019-01-01]. – К. : УкрНДІпроєктстальконструкція, 2018. – 60 с. – (Державні будівельні норми України).

3.3. Internet information resources

3.3.1. https://www.budjurnal.com.ua/
3.3.2. https://www.architectmagazine.com/
3.3.3. https://adcitymag.ru/tag/konstrukcii/
3.3.4. https://www.archdaily.com/
3.3.5. https://smp.by/o-nas/nashi-izdanija/zhurnal-arhitektura-i-stroitelstvo/
3.3.6. https://www.architectureanddesign.com.au/magazine

4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Evaluation of certain types of work done by students of the points made in accordance with Tables.4.1.

Table 4.1.

Kind of Academic Activities	Maximum Grade		Kind of Academic Activities	Maximum Grade	
	Full-time study	Part-time study		Full-time study	Part-time study
semester 5/semester 5, 6 (PTS)					
Module №1 " Fundamentals of single-story industrial buildings design "			**Module №2 «Fundamentals of design of multistoried industrial buildings and engineering structures»**		
Carrying out and Defending the laboratories 10x4=40; 3x10=30 (PTS)	**40**	30	Carrying out and Defending the laboratories 6x3=18; 1x10=10 (PTS)	**18**	10
Carrying out the control (home) work	**-**	**20**			
For carrying out a module test 1 a student must receive not less than	25	–	*For carrying out a module test a student 2 must receive not less than*	6	–.
Carrying out a module test №1	**11**		Carrying out a module test №2	**11**	–
Total for module №1	**51**	50	**Total for module №2**	**29**	**10**
Total for modules №1, №2				**80**	**60**
Semester examination				**20**	**40**
Total for academic discipline				**100**	

Module №3	
Kind of Academic Activities	Maximum Grade
	Full-time and Part-time study
Performance of a Term Paper	**60**
Defense of a Term Paper	**40**
Performance and defense of a Term Paper Project	**100**

A Semester Grade is determined (in points and in the National Scale) as a result of performing all kinds of educational work during the semester.

4.2. A student is considered to have passed the module if both his/her Current Module Grade and Module Test Grade are positive.

4.3. The Semester Module Grade is calculated as the sum of the Total Module Grades.

4.4. The Semester Module Grade and the Examination Grade together make up a Total Semester Grade which is calculated according to the National Scale and the ECTS Scale.

4.5. The Total Semester Grade is entered into the Examination Register and into a student's record book in values, National Scale grades, and ECTS Scale grades.

4.6. The Total Semester Grade is entered into a student's record book, for example: ***92/Ex/A, 87/Good/B, 79/Good/C, 68/Sat/D, 65/Sat/E***, etc.

4.7. The Total Module Grade for the Term Paper except the Examination Register is also entered into a student's record book, for example: ***92/Ex/A, 87/Good/B, 79/Good/C, 68/Sat/D, 65/Sat/E***, etc.

4.8. The Total Grade of subject that is taught during one semester is equal the Total Semester Grade. The Total Semester Grade is entered into a student's Diploma Supplement.

4.9. The Total Semester Grade of the subject is determined as the arithmetic average grade of the total semester grades in points (for the fourth semester for this subject) with its further transfer into the National Scale and ECTS Scale. The indicated Total Semester Grade of the subject is entered in the Diploma Supplement.

(Ф 03.02 – 01)

АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

№ прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки

(Ф 03.02 – 02)

АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

№ пор.	Прізвище ім'я по-батькові	Підпис ознайомленої особи	Дата ознайом-лення	Примітки

(Ф 03.02 – 04)

АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

(Ф 03.02 – 03)

АРКУШ ОБЛІКУ ЗМІН

№ зміни	№ листа (сторінки)				Підпис особи, яка внесла зміну	Дата внесення зміни	Дата введення зміни
	Зміненого	Заміненого	Нового	Анульо-ваного			

(Ф 03.02 – 32)

УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				