# MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL AVIATION UNIVERSITY

Faculty of Transport, Management and Logistics

Air Transportation Management Department

**AGREED** 

Dean of the Faculty of Transport,

Management and Logistics

T. MOSTENSKA

«<u>09</u>»<u>06</u> 2022 p.

APPROVED

Vice-Rector for Academics

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2022 p.



Quality Management System

### **PROGRAM**

### **Major-related Training**

Educational and Professional Programs:

«Organization

transportation

and

management on transport (air)»

of

Field of study:

27 «Transport»

Speciality:

275 «Air Transport Technologies»

Specialization:

275.04 «Air Transport Technologies»

| Training<br>Form | Course | Semester | Total (hours/credits ECTS) | Self-Study | Semester Grade |
|------------------|--------|----------|----------------------------|------------|----------------|
| Full-time        | 4      | 8        | 90/3,0                     | 90         | Graded Test    |
| External         | 5      | 9        | 90/3,0                     | 90         | Graded Test    |

Indexes: CB -7-275.04-1/21-2.2.2.3, ECB -7-275.04-1/21-2.2.2.3

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Program of Major-related Training is developed on the basis of Extended curriculum № CB-7-275.04-1/21, № CB - 7-275-13/21 approved 29.03.2021 p. № ECB-7-275.04-1/21, № ECB-7-275-1 3/21, approved 16.06.2021 p. for Speciality 275 «Air Transport Technolo-gies», c Specialization 275.04 «Air Transport Technologies», of Educational and Professional Pro-gram «Organization of transportation and management on transport (air)»

| Developed by: Associate professor of Air Transportation Management Department _ |                             | N. MIEDVIEDIEVA      |
|---|-----------------------------|----------------------|
| Guarantor of the Educational and Professional Program »                         | Blell                       | V. IVANNIKOVA        |
| Program of the practice was discussed and Department, Minutes № of «» 2022 p.   | l approved by the Air Trans | portation Management |
| Head of Department of Air Transportation Management Department _                | Blllye                      | _ D. SHEVCHUK        |

**AGREED** 

Vice Rector on International
Collaboration and Education

What Iryna ZARUBINSKA

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#### 1. DETAILS OF THE SPECIALTY AND EDUCATIONAL PROGRAM

Training of students in specialty 275 "Transport Technologies (Air Transportation)" is a training of specialists in passenger and freight transportation on all types of transport.

When managing a transport process, a higher education beneficiary (hereinafter - HEB) substantiates and decides in typical situations, using modern information technologies for this, achievement of science in the transport industry and methods and forms of management activity; It leads a constant search for new opportunities, attracts and uses to solve the tasks of resources from a variety of sources, seeking to increase the efficiency of transportation. Bachelor from transport technologies is an independent profession with its own professional-specific instrument and skills.

In a specialty 275 «Air Transport Technologies», Specialization 275.04 "Air Transport Technologies" of the educational degree "Bachelor" is prepared by HEB for the educational-professional program" Organization of transportation and management in transport (air).

The purpose of the educational and professional program (hereinafter - EPP) Organization of transportation and management in transport (air) is the training of highly skilled specialists in the field of aviation transport technologies that can solve complex specialized tasks for managing technical and commercial operation of air transport systems, solve comprehensive transport problems using theories and methods of modern science, taking into account the complexity and uncertainty of the conditions of operation of aviation transport systems. Future specialists acquire fundamental knowledge, with regard to all aspects of the transportation process to solve practical problems in the field of aviation transport, in the organization of safe transportation of passengers and cargoes at all levels of management.

EPP «Organization of transportation and management in transport (air)» This corresponds to the mission of the NAU, which emphasizes about the contribution of the NAU for the development of society at the national and international levels by generating such as new knowledge and innovative ideas, based on integration and internationalization of education, research and practice, and providing high-quality educational and research services to citizens of Ukraine and foreigners in the training of aviation-space specialists.

The EPP has no analogues among the HEB Ukraine, regarding the sectoral context of the operation of the aviation sector in the field of air transportation organization.

### 2. INFORMATION ABOUT THE BASICS OF PRACTICE

Major-related Training are the State Aviation Service, airlines, airports, air transportation agencies, tourist firms, transport and expedition companies, handling companies, other enterprises and organizations of all forms of ownership, which carry out aviation or multimodal transportation, as well as the Department of Aircraft Transportation.

Objects of organizational and technological practice are services (departments) of passenger and freight transportation, sale and booking of transportation, aircraft schedule, commercial work, mutual settlements, tariffs, services (departments) of aviation in the national economy, special transport, department of organization of aviation transportation etc.

With the bases of practice, which meet the requirements of the program, the university in advance concludes agreements on its conduct. The HEB also has the right to independently, with the permission of the Department of Aviation Transportation, to find a place for practicing.

Distribution of Heb by bases and objects of practice and the appointment of its leaders is carried out by the Department of Aviation Transportation and is issued by all types of practice by the order of the rector of the University, submitted by the Department of Faculty not later than one month before the practice of practice.



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#### 3. GOAL PRACTICES

As a result of the Major-related Training, higher education benefits **should know**:

- state and international normative documents regulating the activities of enterprises involved in the organization of air and mixed transportation;
  - basic concepts and approaches of logistics operations in transport;
  - methods of organizing safe activities in the field of transport systems and technologies;
  - principles of organization of customs affairs in Ukraine;
- modern technologies (technical, information, communication, etc.) for the organization of air transportation;
  - rational methods of organizing loading and unloading operations

As a result of the passage of Major-related Training, higher education benefits **should be able** to:

- to make independent decisions during specific work in real production conditions;
- to apply the practical skills of acquired knowledge on the organization of transportation and management of transport with the provision of flight safety;
- to apply the theoretical baggage of knowledge and practical skills in the study of customs regimes that apply to goods and vehicles that move across the customs border of Ukraine;
- apply modern computer-integrated technologies for the organization of international transportation;
- to implement methods of developing technological schemes for passenger service in air transport;
- to collect statistical materials for writing a report on the organizational and technological practice of applicants and for an individual task.
  - to be able to work in a team;

### 4. PURPOSE OF PRACTICE

The purpose of Major-related Training is to consolidate theoretical knowledge of higher education and acquire practical skills in the organization and technology of transportation at various enterprises, institutions, organizations engaged in the provision of transport services, the formation of skills in the organization and management of loading and unloading operations and warehouse operations in transport, operational traffic management transport flows, safety of transport activities, making management decisions regarding the improvement of transport systems and processes.

The results of the Major-related Training are the acquisition of general and professional competencies, skills and abilities to apply modern information and communication technologies to solve tasks related to the organization of transportation and transport technologies; research transport processes, experiment, analyze and evaluate the parameters of transport systems and technologies; manage the movement of transport flows, assess and ensure the safety of transport activities, organize international transportation, organize the interaction of modes of transport, know the organization and management of loading and unloading operations and warehouse operations on transport..

### 5. GENERAL COMPETENCE

As a result of completed of organizational and technological practice, higher education has to acquire such general competencies:

### general competence:



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- GC 1. The ability to realize one's rights and responsibilities as a member of society, to realize the values 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.
  - GC 5. Skills in using information and communication technologies.
  - GC 6. Ability to conduct research at an appropriate level.
  - GC 7. The ability to generate new ideas (creativity).
  - GC 9. Skills of performing safe activities.
- GC 12. Knowledge and understanding of the subject area and understanding of professional activity.

#### 6. PROFESSIONAL COMPETENCE

As a result of the study of academic discipline, higher education is to acquire such **professional competencies:** 

- FC 1. The ability to analyze and forecast the parameters and indicators of the functioning of transport systems and technologies, taking into account the influence of the external environment.
- FC 3. Ability to apply modeling and optimization methods for effective management of complex technological and organizational-technical transport complexes.
- FC 7. The ability to optimize logistics operations and coordinate orders for the transportation of goods from the manufacturer to the consumer, comply with laws, regulations and requirements of quality management systems.
- FC 9. The ability to evaluate the operational, technical, economic, technological, legal, social, and environmental components of the transportation organization.
  - FC 11. Ability to assess and ensure the safety of transport activities.
  - FC 12. Ability to organize international transportation.
- FC 13. The ability to evaluate plans and proposals for the organization and technology of transportation made by other entities, and to make the necessary changes based on the technical and operational parameters and principles of operation of objects and devices of the transport infrastructure, vehicles (vessels).
- FC 20. Ability to manage the quality of air transport enterprises, identify and prevent possible risks.
- FC 22. The ability to use professional knowledge and practical skills of technology, organization and management of air passenger transportation to solve engineering problems in production.

### 7. ORGANIZATION OF PRACTICE

The admission to Major-related Training receive those beneficial benefits that do not have academic debt.

The Major-related Training by higher education beneficiary of the education-al degree "Bachelor" for specialty 275 «Air Transport Technologies», Specialization 275.04 "Air Transport Technologies" of educational-professional program" Organization of transportation and management in transport (air) is held within two weeks.

The organizational and methodical leadership of the practice of HEB is carried out by teachers of the department as well as specialists from enterprises, organizations and institutions that are the basis of practice.



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In the process of preparing for practice, HEB should familiarize themselves with the program and tasks of practice, procedure for the practice, reporting requirements.

Teachers who manage practice are conducted with HEB instructions and consultations, in which they provide clarification on all issues of practice and monitor the work of higher education for higher education during this period.

A prerequisite for starting practice is the presence of an order of the rector "On the organization of organizational and technological practice".

During the practice of practice HEB adheres to and carry out all requirements operating in the enterprise, rules of internal labor regulations.

HEB that has failed to comply with organizational and technological practices and received a negative job response is unsatisfactory assessment when protecting the report is sent to practice reor deducted from university.

In case of violation of the HEB labor discipline and the rules of internal regulations on the submission of the head of the unit and the leader of practice from the practice base

It can be detached from the practice of being reported Dean of the Faculty of Transport, Management and Logistics and the head of the Air Transportation Management Department. On their proposal, the rector can consider the question of deductions of Heb from an educational institution.

Practitioners must manifest the initiative in the study of professional issues, collecting the necessary materials that can be used to write coursework, articles and abstracts of reports.

HEB Duties, Practice Manager from the University and the Practice Base are highlighted in Section 4 Regulations on the organization of practices of higher education of the National Aviation University QMS NAU P. 03.01(20)-02-2021.

Operational control is carried out by the head of practice from the enterprise, periodically - the head of the practice from the university.

For violations established on the basis of the practice of internal regulations, labor protection, fire safety and production sanitation of higher education, administrative liability.

In the case of absence on practice for a valid reason, the HEB is obliged to warn about the practices of the university and the practice of practice.

#### 8. THEMATIC PLAN OF PASSING PRACTICES

Themes dealing with practice:

- Studying the state of the air transport enterprise acquiring knowledge and skills in analyzing quantitative and qualitative information
  - Forecasting the development and effective use of the economic potential of the enterprise.
  - Organization and technology of air passenger and cargo transportation.
  - Organization and technology of sale and reservation of transportation
  - Determining the quality of service for passengers and cargo clientele.
- Mastering the information technology and communications system of the air transport enterprise.
- Acquisition of skills in modern technologies of passenger, baggage, cargo and mail service by air carriers and airports.
  - Organization of cargo transportation of special types of cargo by types of transport.
  - Acquisition of skills in processing transport documentation.
  - Conducting an analysis of the company's activity indicators.

The content of the Major-related Training is determined by its purpose, tasks and specified by the individual task of the practice manager. It also depends on the specifics of the work of the practice base.



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HEB, arriving at the Practice Base, must first familiarize themselves with the enterprise as a whole, its activities, provisions in the market of transport services, structure of management and management of processes of transportation of passengers, mail, cargoes. For this purpose, a guide lecture can be read from the practice lecture, a tour of the main structural subdivisions provided by the materials of an advertising and informational nature.

When passing practices in the structural subdivisions of the practice bases (in departments or services related to the organization or service of the Transport Process), it is recommended to students first familiarize themselves with the provisions of the structural subdivision, its tasks, personnel job descriptions, indicators of the evaluation of the operation of the unit, etc.

Next, the HEB should receive practical skills in the organization and management of loading and unloading work and warehouse operations on transport, organization of interaction between types of transport, organization and management of passengers and luggage (by means of transport), operative management of motion transport flows, evaluated and ensuring transportation of transport activities, organization of international transportation. At the same time, the HEB must familiarize themselves with the regulatory documentation, instructions on the organization of individual technological processes, the rules of registration of transport documents.

the results obtained by the HEB during individual tasks may be subsequently used when performing coursework, abstracts, other purposes. The head of practice from the university at its results shall submit the head of the department with a written report with remarks and proposals for improving the organization and conducting of students' practice.

Practice report is checked and approved by its leaders from bases of practice and university, complemented by the characteristic from the practice base and returns to the HEB to prepare for protection.

The results of practices are discussed at the meeting of the Air Transportation Management Department.

### 9. RESULTS OF PRACTICE

As a result of practice, a higher education beneficiary must achieve such learning results:

- PRC 1 Take responsibility, show public awareness, social activity and participation in the life of civil society, think analytically, critically understand the world.
- PRC 5. Apply and use modern information and communication technologies to solve practical tasks related to the organization of transportation and design of transport technologies.
- PRC 6. Research transport processes, experiment, analyze and evaluate the parameters of transport systems and technologies.
- PRC 9. Develop, plan, implement methods of organizing safe activities in the field of transport systems and technologies.
  - PRC 12. Find solutions for rational methods of organizing loading and unloading operations.
  - PRC 13. Organize and manage cargo transportation in various connections.
  - PRC 17. Develop supply chains and evaluate their effectiveness.
- PRC 19. Explain operational, technical, economic, technological, legal, social and environmental efficiency of transportation organization.
  - PRC 21. Implement methods of organizing safe transport activities.



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#### 10. INFORMATION SOURCES

- 1. Picone M., Busanelli S., Amoretti M., Zanichelli F., Gianluigi F. Advanced Technologies for Intelligent Transportation Systems. Intelligent Systems Reference Library, 2015. 238 p.
- 2. John J. Coyle, C. John Langley, Robert A. Novack, Brian Gibson. Supply Chain Management. A Logistics Perspective. Cengage Learning; 010 edition, 2016. 672 p.
- 3. Anna Gustafson. Automation of Load Haul Dump Machines Comparative performance analysis and maintenance modeling. Universitet stryckeriet, Luleå, 2013. 130 p.
- 4. Francis T., Hurdle D. Road Passenger Transport Management: Planning and Coordinating Passenger Transport Operations 1st Edition. Kogan Page, 2020. 352 p.
- 5. Joyce A. Curtis, Joseph S. Dailey, Daniel D'Angelo and more Steven D. DeWitt, Michael J. Graf. Transportation Risk Management: International Practices for Program Development and Project Delivery. International Technology Scanning Program, 2012. 84 c.
- 6. Safety Procedures and Guidelines Manual. Human Resources Division Safety and Health Services Office, 2022. 266 p.
- 7. Internal documentation of the enterprise.

#### 11. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

Report on Major-related Training is checked and evaluated head of Practice from University According to the provision on the rating system of assessing knowledge and practi-cal skills acquired by higher education, during the passage of economic practice.

During the protection of the HEB report, it is necessary to describe personally performed work, show knowledge of theory and practice of organizing work on the basis of practice.

Assessment of certain kinds of tasks of organizational and technological practice is carried out in points in accordance with Table. 1.

Table 1
Assessment of certain kinds of tasks of organizational and technological practice

|                     | Assessment of certain kinds of tasks of organizational and technological          | Max.          |
|---------------------|---|---------------|
| $N_{\underline{0}}$ | Types of work module  | Number scores |
| n/o                 |   |               |
| 1                   | Familiarity with program practices, assembling and agreed with Head               | 10            |
|                     | plan-graphics and an individual task.   | 10            |
| 2                   | Passing instructions on labor protection. Acquaintance with the                   | 10            |
|                     | structure, and the main transport units of the Practice Base                      | 10            |
| 3                   | Preparation, registration, and submission report to the department                | 10            |
|                     | within a set time   | 10            |
| 4                   | Protection of the report in which should be presented:                            |               |
|                     | <ul> <li>structure of the enterprise, and its main transport divisions</li> </ul> |               |
|                     | - analysis of the production and economic activity of the                         |               |
|                     | enterprise and transport work.  | 70            |
|                     | - analysis of the network of airspaces and park aircraft.                         | 70            |
|                     | - collection of statistical data for the diploma project.                         |               |
|                     | - implementation of the individual task of the manager.                           |               |
|                     | approbation of project proposals.   |               |
|                     | Total   | 100           |

To admit to protect the student practice, a student has not less than 42 points



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The evaluation of the results of the implementation and protection of the report from Majorrelated Training is carried out by the commission headed by the head of the department. The commission includes practitioners from the university as well as teachers of the department that taught disciplines under the practice program.

The type of educational work is credited to the HEB, if he received a positive estimate for a national scale.

In the event of an unsatisfactory assessment for the implementation and protection of the practice report on its re-assembly, it is solved in the established manner.

Referring a positive scoring for a purpose to raise it is not allowed.

The final semester rating assessment from practice is equal to the amount of estimates for all types of work, provided by the Practice Program, and the Practice Report Protection, and recalculated scores on a national scale and a scale ECTS.

The final modular rating obtained by the student based on the results of the course defense and defense in points, on the national scale and ECTS scale is entered in the module control, as well as in the study card, individual student curriculum and Diploma Supplement, for example, as follows: 92 / Excellent / A, 87 / Good / B, 79 / Good / C, 68 / Sat./D, 65 / Sat./E, etc..



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### АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

| <b>№</b><br>прим. | Куди<br>передано<br>(підрозділ) | Дата<br>видачі | П.І.Б. отримувача | Підпис<br>отримувача | Примітки |
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АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ

|           | АРКУШ ОЗНАЙОМЛЕННЯ З ДОКУМЕНТОМ |                                 |                           |          |  |  |  |  |
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| №<br>пор. | Прізвище, ім'я, по батькові     | Підпис<br>ознайомленої<br>особи | Дата<br>ознайом-<br>лення | Примітки |  |  |  |  |
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### АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

| №<br>пор. | Прізвище, ім'я, по батькові | Дата ревізії | Підпис | Висновок щодо<br>адекватності |
|-----------|-----------------------------|--------------|--------|-------------------------------|
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### АРКУШ ОБЛІКУ ЗМІН

| <u>№</u><br>зміни |           | № листа    | (сторінки) | Підпис особи,     | Дата                | Дата<br>введен-   |             |
|-------------------|-----------|------------|------------|-------------------|---------------------|-------------------|-------------|
|                   | Зміненого | Заміненого | Нового     | Анульо-<br>ваного | яка<br>внесла зміну | внесення<br>зміни | ня<br>зміни |
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### УЗГОДЖЕННЯ ЗМІН

|           | Підпис | Ініціали, прізвище | Посада | Дата |
|-----------|--------|--------------------|--------|------|
| Розробник |        |                    |        |      |
| Узгоджено |        |                    |        |      |