

**MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE**  
**NATIONAL AVIATION UNIVERSITY**  
 Faculty of Transport, Management and Logistics  
 Management of Foreign Economic Activity of Enterprises Department

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 «\_\_\_» \_\_\_\_\_ 2021

APPROVED  
 Vice-Rector for Academics

\_\_\_\_\_ A. Polukhin  
 «\_07\_» \_\_10\_\_\_\_\_ 2021



Quality Management System

**COURSE TRAINING PROGRAM**  
 on  
**"Aviation industry"**

Educational and professional program: «Management of Airlines and Airports»


Field of study 07 «Management and Administration»

Specialty: 07 «Management»

Form of study	Semester	Total (hours / ECTS credits)	Lectures	Practicals	Self-study	HW/CGP/C	TP/CPr	Form of semester control
Full-time	3	120/4,0	34	17	69	-	-	Graded Test 3 s.

Index: CB -7-073-5 / 21-3.2.

**QMS NAU CTP 19.06-01-2021**

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The Course Training Program on "Aviation Industry" is developed on the basis of the Educational and Professional program "Management of Airlines and Airports", Bachelor Curriculum № CB-7-073-5/21, Bachelor Extended Curriculum № ECM -7-073-5/21 for the Specialty 073 "Management" and corresponding normative documents.

Developed by:

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The Course Training Program was discussed and approved by the Graduate Department for Educational and Professional Program "Management of Airlines and Airports", Specialty 073 "Management" – Management of Foreign Economic Activity of Enterprises Department, Minutes № \_\_\_\_\_ of " \_\_\_\_\_ " \_\_\_\_\_ 2021.

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Head of the Department \_\_\_\_\_ O. Kyrylenko


Vice Rector on International  
Collaboration and Education

\_\_\_\_\_ Zarubinska I.  
« \_\_\_\_ » \_\_\_\_\_ 2021.

Document level – 3b


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## INTRODUCTION

The Course Training Program (CTP) on "Aviation Industry" is developed on the basis of "Guidelines for developing and designing a working program of full-time and part-time study", approved by the order of the rector № 249/од. of 29.04.2021 and corresponding regulatory documents.

### 1. EXPLANATORY NOTES

#### 1.1. Place, objectives, tasks of the subject

The subject "Aviation Industry" is a theoretical and applied basis of the set of knowledge and skills that form the management profile of a specialist in the field of airline and airport management.

**The purpose of** teaching the discipline is to form in future managers of airlines and airports thinking and system of special knowledge about the functioning of the aviation industry, its structure, regulatory mechanisms, relationships with the environment, related industries, and development factors, economic and social importance of the aviation industry.

**The tasks of** studying the **subject** are:

- acquaintance with the general tendencies of development of the world and domestic aviation industry;
- study of stages of historical development of air transport;
- acquaintance with the structure of the aviation industry and the existing relationships between its elements;
- to get acquainted with the peculiarities of the activities of airlines and airports of aircraft manufacturers and to understand the relationship between them.
- acquaintance with types of aviation and related business;
- study of the basics of aviation industry regulation;
- understanding of the external environment of the aviation industry and the economic significance of the latter.

#### 1.2. Learning outcomes that the subject makes it possible to achieve.


As a result of studying the subject, the student must achieve the following **learning outcomes**:

- demonstrate knowledge of the historical development of air transport,
- distinguish the components of the structure of the aviation industry;
- know and use in practice the features of airlines and airports; aircraft manufacturers and understand the relationships between them.
- provide a description of aviation enterprises (by type of economic activity)
- to assess the key features of the current state of air transport
- to be able to analyze the volume and cost indicators of the aviation industry;
- know the basics of aviation industry regulation;
- distinguish elements of the external environment of the aviation industry;
- understand the economic and social significance of the aviation industry.

#### 1.3. Competences the subject makes it possible to acquire.

As a result of studying the discipline, the student must acquire the following **competencies**:

- definition of functional areas of airlines, airports and their interaction;
- ability to identify and describe the characteristics of the organization;
- ability to analyze the results of the organization, compare them with the factors of external and internal environment;
- ability to determine the prospects for the development of the organization;
- ability to determine the functional areas of the organization and the links between them;

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- ability to analyze and structure the problems of the organization, to form sound decisions.
- ability to solve a wide range of problems and tasks in the field of airline management by understanding their fundamentals and using both theoretical and practical methods.
- the ability to search from various information sources, use this information to make decisions and develop alternatives based on the use of information systems and computer technology.

#### **1.4. Interdisciplinary connections.**

The discipline "Aviation Industry" is the basis for the study of such disciplines as: "Aviation Policy", "EU Transport Policy", "Business Process Management of Airlines", "Management of Airlines and Airports".

## **2. COURSE TRAINING PROGRAM ON THE SUBJECT**

### **2.1. The subject content**

Training material is structured on a modular basis and consists of one training **module №1 "Aviation Industry"**, which is a logically complete, independent, integral part of the curriculum, the assimilation of which involves a modular test and analysis of its results.

### **2.2. Modular structuring and integrated requirements for each module**

#### **Module № 1 "Aviation Industry"**

**Integrated requirements of module «1:** understand the historical development of air transport, distinguish the components of the structure of the aviation industry; know the features of airlines and airports; aircraft manufacturers and understand the relationship between them; be able to characterize and disclose the features of air transport; be able to analyze the volume and cost indicators of the aviation industry; know the basics of aviation industry regulation; distinguish elements of the external environment of the aviation industry and understand its economic significance.


#### **Module 1. "Aviation industry"**

##### **Topic 1. Historical development of air transport**

Stages of aviation development. Technical development 1783–1929. Political development 1929–1944. Development of quality and value 1945–1973. Deregulation of American air transport. Deregulation of European air transport. Differences between European and American markets. Networks, unions and low-cost airlines 1974-1990. New perspectives - consumer value 1991–2010. Development of air transport of Ukraine: stages and specifics. Integration processes in the aviation industry.

##### **Topic 2. The structure of the aviation industry.**

Aviation industry system. Elements of the aviation industry system. Airline. Airport. Aircraft manufacturing. Social system. Ecological environment. Technological environment. Economic environment. Government influence and legal regulation. Fundamental features of the aviation industry. Cyclical development of the aviation industry. The value chain in the aviation industry. Sectorial structures of competition.

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### **Topic 3. Aircraft manufacturing.**

Characteristics of aircraft manufacturing as a branch of mechanical engineering. Integration in the field of aircraft manufacturing. Features of creation and activity of foreign and international aviation consortia of China, the Russian Federation, France, Germany, Italy, Great Britain, the United States of America, Canada, Brazil, etc. Development of aircraft construction in Ukraine: stages and specifics.

### **Topic 4. Characteristics and features of air transport.**

Economic characteristics of air transportation. Airlines and airports as the two main actors in the aviation industry. Integration processes in air transport. The most common business models of airlines. Liberalization of airspace. Bilateral open skies agreements. The practice of commercial cooperation of airlines in the framework of marketing, strategic and global alliances. Prospects for the integration of Ukraine's air transport system into EU airspace. Strategic and marketing alliances for airlines. Global aviation alliances of airlines.

### **Topic 5. Volume and cost indicators of the aviation industry.**

Volume indicators of the aviation industry. Performance indicators of airlines, airports. Passenger kilometers, passenger turnover, freight turnover, cargo kilometers. Volumes of cargo shipment. Number of departing / arriving passengers from / to airports. Operating income and expenses. Geographical distribution of passenger flows. Trends and forecasts for changes in the estimated indicators of the aviation industry. The main factors in the development of the aviation industry.

### **Topic 6. Fundamentals of aviation industry regulation.**


Subject and objects of state regulation in the field of civil aviation and usage of the country's airspace. Directions of state regulation of activities in the field of civil aviation. Directions of state regulation on using the airspace of Ukraine. International Conventions, organizations and agreements on the regulation of aviation activities. Goals and objectives of the International Civil Aviation Organization (ICAO). ICAO Convention. Areas of influence and activities of the International Air Transport Association.

### **Topic 7. Surrounding environment of the aviation industry**

Environmental requirements and impact on the development of the aviation industry. EU practice in implementing environmental standards in the aviation industry. Additional and related industries to the aviation industry. Aviation leasing business. Domestic and international leasing, financial and operational leasing of aircraft. Catering business. Specifics of non-aviation services of airports. Aerotropolis. Travel business.

### **Topic 8. The economic importance of the aviation industry**

The economic impact of the aviation industry on the economic development of the region, country and world. Direct, indirect, induced and catalytic effects of aviation. The social effect of the aviation industry. Environmental effects of aviation and sustainable development. Framework for sustainable development.

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### 2.3. Training schedule of the subject

№	Topic (thematic section)	Total, hours			
		Total	Lectures	Practicals	Self-study
1	2	3	4	5	6
<b>3 semester</b>					
<b>Module № 1 “Aviation industry”</b>					
1.1.	Historical development of air transport	19	2 2 2	2 2	9
1.2.	The structure of the aviation industry	14	2 2	2	8
1.3.	Aircraft manufacturing	15	2 2	2	9
1.4.	Characteristics and features of air transport	19	2 2 2	2 2	9
1.5.	Volume and cost indicators of the aviation industry	14	2 2	2	8
1.6.	Fundamentals of aviation industry regulation.	14	2 2	2	8
1.7.	Surrounding environment of the aviation industry	12	2 2	-	8
1.8.	The economic importance of the aviation industry	10	2	-	8
1.9.	Module test № 1	3	-	1	2
<b>Total for the module № 1</b>		<b>120</b>	<b>34</b>	<b>17</b>	<b>69</b>
<b>Total for 3 semester</b>		<b>120</b>	<b>34</b>	<b>17</b>	<b>69</b>
<b>Total for the subject</b>		<b>120</b>	<b>34</b>	<b>17</b>	<b>69</b>


## 3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT

### 3.1. Teaching methods

Methods of the discipline "Aviation Industry" are ways of joint activities and communication between teacher and students, providing positive motivation for learning, mastering the system of professional knowledge, skills, formation of scientific worldview, development of cognitive forces, culture of mental work of future professionals in specialty 073 "Management".

Depending on the source of knowledge, during training sessions, both practical and lecture, the following teaching methods are used: verbal (explanation, conversation, discussion, dialogue), visual (demonstration, illustration, case, presentation), practical (problem solving, business games, brainstorming).

By the nature of cognitive activity in the study of the discipline "Aviation Industry" are used: explanatory and visual problem statement; partial search and research methods.

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### 3.2. List of references

#### Basic literature

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#### 3.3. Internet information resources


3.3.1. The economic & social benefits of air transport. URL: [https://www.icao.int/Meetings/wrds2011/Documents/JointWorkshop2005/ATAG\\_SocialBenefitsAirTransport.pdf](https://www.icao.int/Meetings/wrds2011/Documents/JointWorkshop2005/ATAG_SocialBenefitsAirTransport.pdf).

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3.3.9. IATA. Офіційний сайт Міжнародної асоціації повітряного транспорту: Режим доступу - <http://www.iata.org/>

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

4.1. Grading of different kinds of academic activities performed by a student and obtained knowledge and skills are realized in values in line with Table 4.1.

Table 4.1

	Maximum Grade Values
<b>Kind of Academic Work</b>	<b>Module № 1</b>
	<b>3 semester</b>
Carrying out test tasks on practicals	10 points × 5 = 50
Surveys, solving situational problems on practicals	11 points × 2 = 22
For admission to complete module test №1, a student must receive not less than	47
Carrying out Module Test №1	28
<b>Total by the Module №1</b>	100
<b>Total by the subject</b>	<b>100</b>

The credit rating is determined (in balls and on a National Scale) based on the results of all types of educational work during the semester.

4.2. The completed curricular activity is accounted enrolled student if the student received for them a positive rating.

4.3. The sum of grades received by the student for certain types of completed educational work is the Current Module Grade, which is entered into the Module Register.

4.4. The Total Semester Grade is entered into the Examination Register, educational cards and into a student's record book in values, National Scale grades, and ECTS Scale grades, for example: *92/Excellent/A, 87/Good/B, 79/Good/C, 68/Sat./D, 65/Sat./E*, etc.

4.5. The Total Grade is equaled the Total Semester Grade. The Total Semester Grade is entered into 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 ознайомлення	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	Анульованого			

(Ф 03.02 – 32)

### УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				
Узгоджено				
Узгоджено				