




Syllabus of discipline  
**"FUNDAMENTALS OF CARGO AIRCRAFT  
 DESIGN AND ITS EQUIPMENT"**  
 Specialty: 134 Aviation and Rocket-Space  
 Engineering  
 Field of study: 13 Mechanical Engineering



<b>Higher Education Degree</b>	First (Bachelor)
<b>Discipline status</b>	Academic discipline of the selective component of the professional cycle
<b>Semester</b>	Spring
<b>Discipline volume, ECTS credits/total amount of hours</b>	4/120
<b>Language</b>	English
<b>To be studied (study subject)</b>	Design of serial cargo aircraft and its equipment, functional systems of modern cargo aircraft. Cargo equipment
<b>Why is it interesting and must be learned? (purpose)</b>	Course will be introducing students to a lot of new terms that are constantly referred to when describing the various operations of cargo aircraft and its equipment. The purpose of the course is to study design of serial cargo aircraft which are in civil aviation operation, study devices and functional systems, cargo equipment.
<b>What is studied? (learning results)</b>	<ul style="list-style-type: none"> <li>- Technical characteristics of modern cargo aircraft;</li> <li>- design features of the cargo aircraft and its main components;</li> <li>- design and principle of operation of cargo aircraft functional systems;</li> <li>- design and principle of operation cargo equipment.</li> </ul>
<b>How is it possible to use the gained knowledge and skills? (competencies)</b>	The course is designed to reveal the modern cargo aircraft and its equipment as well as their functional systems design features.
<b>Academic logistics</b>	<p>Course content: Flight and technical characteristics and operational limitations of modern cargo aircraft. Design of fuselage, landing gear, wings tail unit and powerplant. The principle of operation and design features of functional systems of modern cargo aircraft. Cargo equipment.</p> <p><b>Kind of lessons:</b> lectures, laboratory classes.</p> <p><b>Education methods:</b> educational discussion, online</p> <p><b>Mode of study:</b> full-time</p>
<b>Prerequisites</b>	General and professional knowledge in the field of aviation, obtained at the first (Bachelor) level of higher education.
<b>Post-requisites?</b>	Knowledge of the discipline can be used in disciplines related to cargo aircraft design and operation, as well as in writing a master's thesis
<b>Information support from the fund and repository of NAU library</b>	<p><b>NAU library:</b>          Commercial Airplane Design Principles (Elsevier Aerospace Engineering) 1st Edition</p> <p><b>Репозитарій НАУ:</b>  <a href="https://er.nau.edu.ua/handle/NAU/31759">https://er.nau.edu.ua/handle/NAU/31759</a></p>
<b>Location and logistics</b>	11.126, projector, computer room

<b>Semester control, examination techniques</b>	module tests
<b>Department</b>	Department of Aircraft Structure
<b>Faculty</b>	Aerospace Faculty
<b>Lecturer(s)</b>	 <p><b>ZAKIEV VADIM ISLAMOVICH</b>  <b>Position:</b> Associate Professor  <b>Scientific degree:</b> PhD  <b>Teacher profile:</b>  <a href="http://www.lib.nau.edu.ua/naukpraci/teacher.php?id=11162">www.lib.nau.edu.ua/naukpraci/teacher.php?id=11162</a>  <b>Phone.:</b> 406-71-71  <b>E-mail:</b> vadym.zakiev@npp.nau.edu.ua  <b>Workspace:</b> 11.121</p>
<b>Originality of the discipline</b>	Author's course, teaching in English
<b>Link on discipline</b>	<a href="https://classroom.google.com/u/2/c/MTMyNzA2NDE1MTc1">https://classroom.google.com/u/2/c/MTMyNzA2NDE1MTc1</a>