



ROMÂNIA
MINISTERUL EDUCAȚIEI ȘI CERCETĂRII
UNIVERSITATEA DIN CRAIOVA
FACULTATEA DE INGINERIE ELECTRICĂ

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NUMELE DISCIPLINEI: BAZELE COMENZILOR HIDRAULICE SI PNEUMATICE DE BORD II	COURSE NAME: BASICS OF HYDRAULIC AND PNEUMATIC COMMANDS ON BOARD II
DATE GENERALE	GENERAL INFORMATION
Program de studii: ECHIPAMENTE SI INSTALATII DE AVIATIE Anul: III Semestrul: II Credite ECTS: 3 Tipuri de activități: Curs, Laborator Tip evaluare: Examen Titular: Conf.dr.ing. Liviu Dincă	Study Program: AVIATION EQUIPMENTS AND INSTALLATIONS Year: III Semester: II ECTS Credits: 3 Types of activities: Lecture, Laboratory Assessment: Exam Lecturer: Conf.dr.ing. Liviu Dincă
SCOPUL DISCIPLINEI	COURSE PURPOSE
Studentul trebuie sa isi insuseasca principalele aspecte teoretice si practice legate de actionarile hidraulice si pneumatice ale comenzilor de zbor	The student has to know the main theoretical and practical aspects related to the hydraulic and pneumatic drives of flight controls
CERINȚE PREALABILE	PREREQUISITES
Analiză matematică, Matematici speciale, Fizica, Mecanica, Mecanica fluidelor	Mathematical analysis, Special Mathematics, Physics, Mechanics, Fluid Mechanics,
OBIECTIVE	OBJECTIVES
• Obiectiv 1: Cunoșterea tipurilor uzuale de servovalve si servoactuatore hidraulice • Obiectiv 2: Cunoașterea modelelor matematice ale servoactuatorelor si servovalvelor uzuale • Obiectiv 3: Dobândirea de abilitati de a rezolva probleme practice de complexitate medie legate de servoactuatorele comenzilor de zbor	• Objective 1: Knowledge of the common hydraulic servo-valves and servo-actuators • Objective 2: Knowledge of the mathematical models for the common servo-valves and servo-actuators • Objective 3: Acquiring skills to solve practical applications with medium complexity concerning the flight controls servo-actuators
CONȚINUT CURS	LECTURE CONTENT
1. Distribuitoare hidraulice de reglare 2. Servovalve hidraulice 3. Servo-actuatore hidraulice si pneumatice	1. Control hydraulic distributors 2. Hydraulic servo-valves 3. Hydraulic and pneumatic servo-actuators
METODE DE EVALUARE	EVALUATION METHODS
Examen	Exam
COMPETENȚE DOBÂNDITE	ACQUIRED COMPETENCIES
• Studentul cunoaște structura si modelele matematice ale servo-valvelor si servo-actuatorelor uzuale • Studentul are capacitatea de a utiliza practic dispozitivele hidraulice studiate • Studentul poate evalua critic diferite situatii practice	• The student knows the structure and the mathematical models of the common servo-valves and servo-actuators • The student has the skills use in practice the presented hydro-pneumatic devices • The student has the competence to critically evaluate some practical situations
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