

Echipamente si sisteme giroscopice I

Gyroscopic equipment and systems I

Obiectiv principal

Disciplina contribuie la formarea viitorilor ingineri de profil aerospacial, având drept obiectiv cunoasterea de catre studenti a elementelor constructive si functionarea principalelor echipamente si sisteme giroscopice, cu aplicatii la stabilizarea, navigatia si dirijarea aparatelor de zbor.

Course Objective

The discipline contributes to the training of future aerospace engineers, having as objective the knowledge by students of the constructive elements and the operation of the main gyroscopic equipment and systems, with applications to stabilize, navigate and direct the aircraft.

Curs

2 ore pe săptămână, total 28 ore

- Elemente de teoria giroscopului
- Girocoape de viteza si girocoape integratoare
- Giroscopul astatic rapid in suspensie cardanica exterioara
- Echipamente giroscopice de verticala
- Echipamente giroscopice si sisteme complexe pentru determinarea directiei de zbor
- Giroscopul astatic rapid in suspensie cardanica interioara

Course

2 hours weekly, total 28 hours

- Elements of gyroscope theory
- Speed gyroscopes and integrating gyroscopes
- Fast astatic gyroscope in external gimbal suspension
- Vertical gyroscopic equipment
- Gyroscopic equipment and complex systems for determining the direction of flight
- Fast astatic gyroscope in internal gimbal suspension

Laborator & Seminar

3 ore pe săptămână, total 42 ore

- Studiul giroscopelor (trunctoarelor) de viteza DUS-155K si DUS-155T.
- Studiul indicatorului de viraj si glisada EUP-53.
- Studiul intrerupatorului giroscopic de corectie de tip VK-53 RV.
- Studiul giroorizonturilor de tip AGI-1.
- Studiul giroorizonturilor de tip AGD-1.
- Studiul compasului giromagnetic cu teleindicare de tip DGMK-3 (girobusola).
- Studiul sistemului de curs de tip KSI.

Laboratory & Seminar

3 hour weekly, total 42 hours

- Study of DUS-155K and DUS-155T speed gyroscopes.
- Study of the turn indicator and the EUP-53 slide.
- Study of the VK-53 RV type gyroscopic correction switch.
- Study of AGI-1 type gyro-horizons.
- Study of AGD-1 type gyroorizons.
- Study of the giromagnetic compass with teleindication type DGMK-3 (gyro).
- Study of the KSI type course system.