

Proiectarea asistata CAD

Computer-aided Design

Obiectiv principal

Cunoasterea principiilor de proiectare si fabricatie asistata de calculator. Sunt prezentate module ale sistemului integrat de proiectare si fabricatie asistata CATIA. Sunt evaluate cunosterea conceptelor si metodelor de proiectare si fabricatie asistata, capacitatea de a crea modele virtuale ale corpurilor sau ansamblurilor si de utilizare a modulelor de fabricatie asistata in CATIA.

Course Objective

Knowing the principles of computer-aided design and manufacturing. Modules of the integrated CATIA design and manufacturing system are presented. The knowledge of concepts and methods of assisted design and manufacturing, the ability to create virtual models of bodies or assemblies and the use of assisted manufacturing modules in CATIA are evaluated.

Curs

2 ore/săptămână, total 28 ore

- Proiectarea CAD/CAM/CAE. Principii si particularități.
- Prezentare generala CATIA.
- Modulul Sketcher
- Modulul Part Design
- Modulul Assembly
- Modulul Drafting
- Modulul Generative Shape Design
- Modulul DMU
- Modulul NC Manufacturing
- Module CATIA de analiza si fabricatie asistata

Course

2 hours weekly, 28 hours total

- Design of CAD / CAM / CAE. Principles and particularities.
- Overview CATIA.
- Sketcher Workbench
- Part Design Workbench
- Assembly Workbench
- Drafting Workbench
- Generative Shape Design Workbench
- DMU Workbench
- NC Manufacturing Workbench
- CATIA aided analysis and manufacturing workbenches

Laborator

2 ore/săptămână, total 28 ore

- L1 Modulul CATIA Sketcher- elemente generale
- L2 Desenarea în Sketcher
- L3 Operații și constrângeri în Sketcher
- L4 Modulul Part design - elemente generale
- L5 Bara de instrumente Sketch-based features
- L6 Bara de instrumente Dress-up features
- L7 Bara de instrumente Transformation features
- L8 Optiunile Rib, Slot si Stiffener
- L9 Modulul CATIA Drafting
- L10 Modulul Assembly Design
- L11 Modulul NC Manufacturing

Laboratory

2 hours weekly, 28 hours total

- L1 CATIA Sketcher Workbench - General Elements
- L2 Drawing in Sketcher
- L3 Operations and constraints in Sketcher
- L4 Part Design Workbench - General Elements
- L5 Sketch-based features toolbar
- L6 Dress-up features toolbar
- L7 Transformation features toolbar
- L8 Rib Options, Slot and Stiffener
- L9 CATIA Drafting Workbench
- L10 Assembly Design Workbench
- L11 NC Manufacturing Workbench