GRAU EN ENGINYERIA EN TECNOLOGIES AEROESPACIALS

TREBALLS FI DE GRAU LLEGITS – CURS 2015/16

1. Design of ducted fan for stratosphere operating under low reynolds
2. Design and Performance Analysis Study of a Hall Effect Thruster
3. Study for the computational resolution of conservation equations of mass, momentum and energy. Possible application to different aeronautical and industrial engineering problems: Case A.
4. Estudio experimental para la caracterización y sincronización de la dinámica de láseres de semiconductor bajo retoalimentación e inyección óptica.
5. Proyecto de un helipuerto hospitalario elevado
6. Study of Aerodynamic forces on a Formula student car: CFD and track data correlation
7. Feasibility study and definition of implementation plan fo introducing Smart Technologies in Barcelona Airport
8. Design and Performance Analysis Study of an Ion Thruster
9. Study of the model-order reduction of the aerolastic behavior of a wing
10. TFG: Study for the computational resolution of conservation equations of mass, momentum and energy. Possible application to different aeronautical and industrial engineering problems: Case 1.
11. Study of aircraft performance in electric aviation
12. Estudi per la millora operativa dels recursos aeris gestionats per bombers de la Generalitat de Catalunya
13. Hybrid mesh generation and adaptation for compressible two-dimensional flows
14. Low Re number wake flow behind the thick disk
15. Study of the aeroacoustics of small UAV propellers
16. Conceptual design of multicopters to optimize their endurance (a viability study)
17. Design of a system for measuring the weight and balance of sailplanes
18. Experimental study on the baroclinc flow around oceanic ridges

19. Estudio cualitativo de percepción de seguridad del pasajero en relación a las aerolíneas
20. Study of a feasible solution for a specific mission with an unmanned air vehicle (UAV/RPAS)
21. Proyecto de un helipuerto comercial de superficie
22. Study of end-of-life disposal options for highly-inclined geosynchronous satellites.
23. Orbit determination of resident space objects with a multibeam radar
24. Estudi de la reducció de soroll en els cremadors de globus d'aire calent
25. Study of feasibility of a light aviation aerodrome
26. Numerical Analysis Study of the Reacting Flow in a Scramjet Airbreathing Engine
27. Fluid-dynamic study of a mini-gear pump by using OpenFOAM
28. CFD Study on a Tube Impeller Pump
29. Study of potential capacities for a 3D printed light aircraft
30. Analytical and Numerical Modeling of the Pressure Drop through a Rotating Cylindrical Restrictor
31. Estudi de viabilitat d?un avió supersònic
32. Estudi d?una planta propulsora elèctrica d?enlairament per a aero-planejadors
33. Study of the B-17 Flying Fortress structure and reproduction of a 1:50 scale model
34. Study of heat and mass transfer applications in the field of engineering by using OpenFOAM
35. Proyecto preliminar de una antena ranurada para RADAR de Basura Espacial
36. Estudi d'elaboració de pla d'empresa d'un negoci de construcció i lloguer de UAV's per vigilànca interiors.
37. ADCS Visualization
38. Simulation of a fiberglass spinning process
39. Computational Model of a Hybrid Propulsion System on a Robotic Lunar Lander
40. Design and Performance Analysis Study of a Magnetoplasmadynamic Thruster
41. Project for the design of a vibration energy harvesting system to be used as a remote smartphone energy supply
42. Study of the optimal location of wing sensors using model-order reduction
43. Evaluating Optimization Methods for a Mars Entry Trajectory for a Mars Entry Trajectory Planner
44. Study of the collapse produced during the eruption of the Eyjafjallajökull volcano in Iceland during April 2010

45. Design and Performance Analysis Study of a Nuclear Thermal Rocket for Space Applications
46. Permeability of fibrous reinforcements used in aeronautical composites
47. Study about strenght performance of adhesive metal-composite joints
48. Study of the MQ-1 Predator structure and reproduction of a 1:50 scale model
49. Study of the ISS structure and reproduction of a 1:50 scale model
50. Projecte de disseny i implementació del control d'orientació d'una maqueta d'aerogenerador.
51. Report confidentiality
52. Design of an applicable methodology for flight number assignment and management in China
53. Study for the numerical resolution of conservation equations of mass, momentum and energy to be applied in different engineering problems: case 3.
54. Study of the structural behavior of a UAV'S composite wing using the finite element method
55. Study of the robustness of the air transport network using an inverted adoptive strategy
56. Study of operational requirements in hostile and congested areas with unmanned air vehicles (UAV/RPAS)
57. Study of Earth-to-Jupiter transfers with gravity assist at Mars using the C3 matching technique