

UNIVERSITAT POLITÈCNICA DE CATALUNYA



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

**Escola Superior d'Enginyeries Industrial,
Aeroespacial i Audiovisual de Terrassa**

**STUDY: ANALYSIS OF PLANETARY SPACECRAFT IMAGES FOR
ATMOSPHERE DYNAMICS STUDIES USING CROSSCORRELATION
TOOLS AND PLANETARY IMAGE NAVIGATION SOFTWARE**

BUDGET

A thesis submitted by Martí Sierra Salvadó for the Bachelor's Degree in Aerospace
Vehicle Engineering

June 10, 2019

Directed by:
Enrique García Melendo

Co-director:
Manel Soria Guerrero

List of Tables

1	Cost breakdown	2
---	--------------------------	---

Budget

In this chapter, the budget for all the work that has been realized to complete the Final Thesis of the Bachelor's Degree in Aerospace Vehicle Engineering is presented in detail.

The costs of this project can be summarized basically in costs related to hours of work and assessment, and in costs due to the consumption of the computers used, as well as to the use of software that requires licenses, such as MATLAB, although for the final solvers open sources such as C and Python have been used.

The following table shows a detail cost breakdown of this thesis:

Concept	Amount	Cost	Attribute
Junior Aerospace Engineer Honoraries	590 h	20 €/h	11800 €
Adviser Honoraries	90 h	40 €/h	3600 €
MATLAB License	1 u.	800 €/u.	800 €
Computers Consumption	65 W for 590 h	0.12 €/kWh	4.60 €
Total Cost			16204.6 €

Table 1: Cost breakdown

The author has assumed the hourly salary of a junior aerospace engineer and of a professional advisor to obtain a first approximation of their honoraries.

Expenses related to transportation have not been included, since most of the project has been carried out from home.