



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

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

Disseny d'un petit coet reutilitzable amb aterratge vertical - Design of a reusable model rocket with vertical landing.

Document:

Budget

Author:

Èric Montserrat Robles

Director /Co-director:

Jaume Solé Bosquet / Oriol Casamor Martinell

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BACHELOR FINAL THESIS

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Design of a reusable model rocket with vertical landing.

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ESEIAAT - Polytechnical University of Catalonia — BarcelonaTech

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This document contains: **BUDGET**



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Budget

In this document the budget of the project is presented. It has taking into account the costs generated for its proper development but not for future improvements.

Four departments can absorb the major expenses. The engineering department refers to all "office" work: design, compute, simulate, code and report. The Materials sector encompasses the economic impact of acquiring all the hardware needed. The Software division includes the two licenses of the programs used, there are more that have been consulted, but they were Open-Source. Finally, the Tests department allocates the costs of trialling the systems with everything that it implies (travel, safety measures, additional hardware, logistics, etc).

Cost type			
Engineering			
	Hours	Cost/hour	Total €
Salary	600	27	16200
Cost type			
Materials			
	Units	Cost/unit	Total €
Flight Computer	2	65	130
Batteries	8	3	24
Klima Motors	6	5	30
Rocket frame	12	2	24
Paint sprayer	5	5	25
3D-printer	1	220	220
PLA (printing material) [kg]	1	32	32
			485

Cost type			
Software			
	Unit	Cost/unit	Total €
Matlab	1	2000	2000
SolidWorks DS	1	3995	3995
			5995
Cost type			
Tests			
	Attempts-Units	Cost/attempt	Total €
Satic fire	2	10	20
Landing test	1	25	25
Aux. Lifting Vehicle	1	300	300
Drop mechanism	1	30	30
Trip expenses	1	70	70
			445

Total development project cost = 23125 €

