



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

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

Universitat Politècnica de Catalunya · BarcelonaTech

DEGREE: *Aerospace Engineering*

Bachelor's thesis

COMPUTATIONAL STUDY OF A SUPERSONIC NOSE CONE

Budget

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DIRECTOR: Robert Castilla López

Terrassa
June 10, 2018

Budget

Table 1: Budget table

Group	Concept	Product cost (€)	Hours (h)	Labor cost (€)
Mesh	Learn Python		30	750
	Build script		25	625
	Optimise mesh and domain limits		25	625
	Subtotal		80	2000
Simulations	Assign boundary conditions		15	375
	Choose solver		10	250
	Choose turbulence model		10	250
	Prepare simulations		15	375
	Simulation time		150	3750
	Workstation	2500		
	Subtotal	2500	200	5000
Data postprocess	Aerodynamic study		30	750
	Nose cone shape study		30	750
	Length optimisation study		30	750
	Turbulence study		30	750
	Subtotal		120	3000
Project delivery	Project charter delivery		30	750
	Report delivery		150	3750
	Project exhibition		20	500
	Subtotal		200	5000
TOTAL		2500	600	15000