

Budget

In this following chapter, an overview of the budget needed for the realization of this study is performed. The total costs can be broken down in two different areas: human resources and software required.

Regarding to the human resources, the cost of an engineer's hour varies drastically depending on each country. However, as this study has been developed in Spain, the Spanish mean cost of an engineer's hour will be the one chosen. Then, for this work specifically, the engineering work costs around 35 € per hour.

Now, moving to license's theme, most of the technical software used by engineers needs to be paid. During this study particularly, three licenses were needed:

- Microsoft Office 365: essential for using programs such as Microsoft Excel, there are several subscription options. For a 1 year student' subscription, the service costs 69 €. As the service has only been used for 5 months, the final cost is 28.75 € tax not included.
- Solidworks: software used for CAD design. As happened with Microsoft, Dassault Systems offer several Solidworks editions. In this case, the student version costs approximately 150 € [?] and works for one year. Therefore, using it only for 5 months, its cost reduces to 62.5 € tax not included.
- Matlab: required for post-processing and plotting. The student suite license costs 69 € per year. Then, the final cost is 28.75 € tax not included for a 5 months usage.

Once each expense has been detailed, table 1 presents the total budget needed for this work, adding 21% from VAT:

Source	Time (h)	Hourly rate (€/h)	Power (kWh)	Electricity fee (€/kWh)	Cost (€)
Electrical supply	600	-	460.8	0.1199	55.25 €
Human resources	600	35	-	-	21,000.00 €
Software					
Office 365	-	-	-	-	28.75 €
Solidworks	-	-	-	-	62.50 €
Matlab	-	-	-	-	28.75 €
Subtotal (VAT not included)					21,175.25 €
VAT (+21%)					4,446.81 €
TOTAL					25,622.06 €

TABLE 1: Total budget of the study