



UNIVERSITAT POLITÈCNICA DE CATALUNYA
BARCELONATECH

Departament d'Arquitectura de Computadors

Suitably impressive thesis title

Your Name

Universitat Politècnica de Catalunya — BarcelonaTech (UPC)
Departament d'Arquitectura de Computadors (DAC)

Research plan

4th October 2024

Supervisors: First Supervisor Name
Second Supervisor Name



**Barcelona
Supercomputing
Center**

Centro Nacional de Supercomputación

Contents

1	Background	1
1.1	Introduction	2
1.2	Motivation	2
2	Objectives	3
2.1	First objective	3
2.2	Second objective	3
3	Methodology	5
3.1	Methods and techniques	5
3.2	Facilities	6
4	Programme schedule	7
4.1	Timeline	7
4.2	Budget	7
Appendices		
A	Second year update	11
A.1	Progress done	11
A.2	Future work	11
	References	13

1

Background

You should establish the context to, and rationale for, your research based on a reading of the relevant academic literature. Where possible, cite relevant authors and their studies, and explain how this research builds on your previous academic work. You should discuss the intellectual importance of your work, its contribution to your subject area and its originality.

Some tips for the chapter Background include the following:

- Describe the current state of the art. Why is this research needed?
- Outline previous work in this field (i.e., literature search).
- How would the results of the proposed research fill this need and be beneficial?
- Do not forget to cite all your references, for example Ref. [1].

You can further subdivide this chapter in two sections: e.g., Introduction and Motivation.

Finally, remember that sometimes a figure can be used to better illustrate and summarise an abstract concept (see Fig. 1.1).



Figure 1.1: Example of figure.

1.1 Introduction

1.2 Motivation

2

Objectives

Mention the objectives of this research project. If you feel it necessary, add a section for each research objective in order to provide more details. Remember to set out the central aims and research questions that guide your research:

What hypothesis or argument are you trying to explore and what questions are you trying to answer?

Set out your terms of reference clearly and precisely. These may cover what you intend to achieve by the research in general and, more specifically, how the research fits the background and the outcomes from the project.

2.1 First objective

2.2 Second objective

3

Methodology

This section needs to answer self-imposed questions and should reflect that you have a good understanding of the problem and the barriers that you may find in the path.

Some of the questions that should be answered include:

- What are the projects constraints (if any)?
- What are the technical challenges and uncertainties?
- What is your preferred approach and why?
- Explain your methodology to conduct the research and to obtain the stated objectives.

When relevant, you can have a section dedicated to the methods and techniques and another to the facilities that you expect to use during your studies.

3.1 Methods and techniques

Explain how your approach to collecting and analysing information will help you satisfy your aims and objectives. Potential data collection methods and possible analytical techniques give a sense of the direction of your research. Explain the choices behind case study organisations or locations, as well as sampling strategies or particular computer-based techniques.

3.2 Facilities

Explain the facilities to be used. Some examples include:

- Is all the necessary hardware/software in place?
- If not, how will it be acquired and how long will it take to put everything in place?
- Does it have any budget implications? Are they covered by PhD fundings?

If budget is important for your research project, then I recommend you to dedicate a section to it within Chapter 4 (see Section 4.2).

4

Programme schedule

You do not need to produce a detailed time plan because research projects always tend to evolve. However, it is extremely useful to explain in general terms what you are proposing to do, and when, in order to get a sense of the scale of the task. This is especially important if you are proposing to undertake case study work or fieldwork.

Remember that you will be expected to submit your thesis within three years (six years for part-time students) so it is important to show a feasible timeline.

You can divide this chapter into two sections if necessary: e.g., Timeline and Budget.

4.1 Timeline

You can include a Gantt chart like the one shown in Fig. 4.1. It will be very much appreciated by your examiners.

4.2 Budget

If budget is not key within your project, you can eliminate this section and leave one entire chapter dedicated to the description of your project timeline.

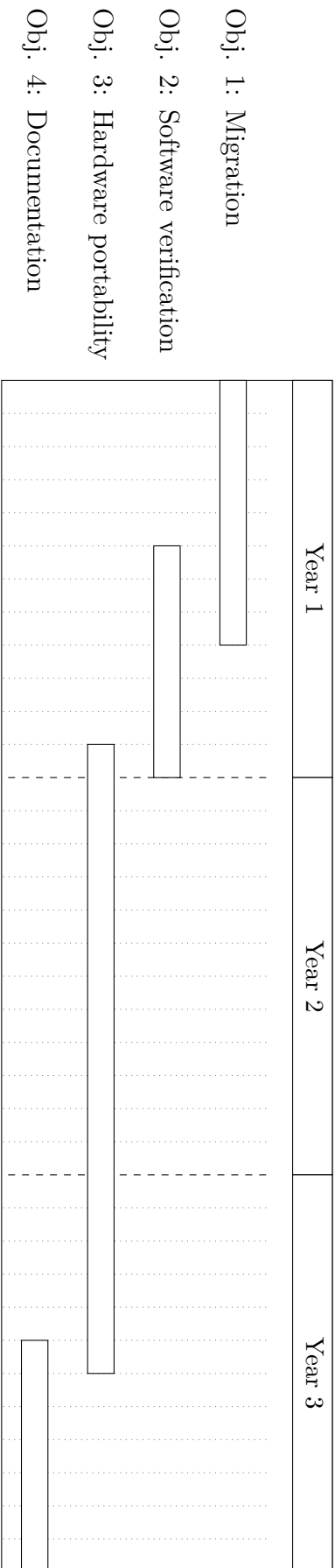


Figure 4.1: Example of a Gantt chart.

Appendices

A

Second year update

At the beginning of your second year of doctoral studies, you will need to defend your first research plan publicly, in front of a committee. The committee will assess it and provide extensive feedback, suggestions as well as modifications. After this very first review, the research plan will be updated yearly.

My *suggestion* is that you add each new update as an *appendix* to your first year, already validated research plan. However, you are also free to consider this chapter as a regular one and forget about appendices.

This *first* appendix is to describe what you have done at the end of your *second* year of doctoral studies. Hopefully, at the end of the third year of your doctoral studies you will just be writing your PhD thesis.

You can divide this chapter into two sections to explain, separately, the work that you have completed during the second year and what you expect to do the next year, respectively.

A.1 Progress done

A.2 Future work

References

- [1] David K. Foot et al. “Demographics and cardiology, 1950–2050”. In: *Journal of the American College of Cardiology* 35.4 (Mar. 2000), pp. 1067–1081. URL: [http://dx.doi.org/10.1016/S0735-1097\(00\)00561-1](http://dx.doi.org/10.1016/S0735-1097(00)00561-1) (visited on 12/24/2014).