

Task 1 - Bachelor Thesis Requirements

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October 2020

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1 Introduction

We have found the documentation for writing a bachelor thesis on Moodle and the CPHBusiness website. Some PowerPoint slides are available from the previous semester introducing the requirements of the bachelor thesis[1]. Furthermore we will be using the "Curriculum for the Bachelor's Degree Programme in Software Development"[2]. Below we will describe our findings.

2 The Formalities

The maximum size of the bachelor project is 40 normal pages (2400 characters pr. page) pr. report +20 normal pages pr. student, i.e.:

- One student can hand-in up to 60 pages
- Two students can hand-in up to 80 pages, etc

There is no absolute minimum, but teachers and examiners experience it to be short if it is shorter than 2/3 of the maximum.
It can be written by groups as well as individual students.

3 The Project

The bachelor's project must document the student's understanding of and ability to reflect on the practices of the profession and the use of theory and methods in relation to a real-life problem. The problem statement, which must be central to the programme and profession, is formulated by the student, possibly in collaboration with a private or public company. The academy approves the problem statement.

4 The Examination

The exam is executed as an external examination that together with the other examinations in the education should document that the different learning objectives are met. The test consists of a written project and an oral examination that will be evaluated as one grade. The test can only be executed subsequent to a passed internship examination and the previous examinations in the education.

5 Purpose

In their bachelor's project, the student must document the ability to work with a complex and practice-oriented issue in relation to a specific IT project, using an analytical and methodological basis.

6 Learning Objectives

The final bachelor project must demonstrate that the programme's graduation level has been reached. The learning objectives for the study programme are consequently repeated below:

6.1 Knowledge

The student must have knowledge of:

- The strategic role of testing in system development
- Globalisation of software production
- System architecture and its strategic importance for the company's business
- Applied theory and methodology and common technologies within the domain
- Various database types and their applications

6.2 Skills

The student can:

- Integrate IT systems and develop systems that support future integration
- Use contracts as a control and coordination mechanism in the development process
- Assess and select database systems, and design, redesign and optimise databases

- Plan and manage development processes involving many geographically separated project participants
- Plan and implement testing for large IT systems

6.3 Competencies

The student can:

- Identify links between applied theory, methods and technology and reflect on their suitability in various situations
- Engage in professional collaboration to develop large systems by applying common methods and technologies
- Familiarise themselves with new technologies and standards for handling integration between systems
- Through practice, develop their own competency profile from a primarily back-end developer profile to performing tasks as a system architect
- Handle the establishment and realisation of a business and technologically appropriate architecture for large systems

7 Relation to Internship

It is recommended your bachelor project builds on the experiences and the product of your company work. Often the internship report contains descriptions of the company and the work you did. You can reuse those parts if you state it clearly in the bachelor report.

8 Content

The bachelor report must focus on one or more of the mandatory courses of the program:

- System Integration
- Test

- Databases for Developers
- Large Systems Development

The bachelor project is typically centred on the development of a product, the product being a final developed and deployed product, a part of such, or a prototype

The bachelor report should contain:

- A thorough description of the work done
- A thorough evaluation and reflection of that work

References

- [1] CPHbusiness. Bachelor project kick-off spring 2019. <https://datsoftlyngby.github.io/soft2019spring/BAP-Kick-off.pdf>.
- [2] CPHbusiness. Curriculum for the bachelor's degree programme in software development. https://www.cphbusiness.dk/media/78342/pba_soft_cba_curriculum_2017.pdf.