

Appendix I - Plan and log

Introduction

This appendix covers the plan made in the beginning of the thesis, as well as a comparison to the actual work hours spent in the different phases. The last section also shows the work records, which has been continuously registered throughout the thesis period.

Plan and comparison

The tables underneath shows the initial plan, compared to the actual distribution.

The plan was made in the first week of the thesis period and shows how the period was scheduled. It describes how the different phases was planned to be distributed. The next page reflects the comparison.

Note: The faint red colour shows that documentation work and report writing is planned to be done along with the concept phase and detailed design, but not as much as in week 16 and further.

Plan		Week no.																				
Phase	Percentage	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Administrative and planning	2 %																					
Business case/cost study	5 %																					
Design basis	10 %																					
Concept phase	15 %																					
Detailed design	40 %																					
Report	25 %																					
Finishing/buffer	3 %																					

(a) Initial plan

Plan		Week no.																				
Phase	Percentage	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Administrative and planning	4%																					
Business case/cost study	2%																					
Design basis	9%																					
Concept Phase	26%																					
Detailed Design	32%																					
Report	24%																					
Finishing/buffer	2%																					

(b) Actual distribution

The list underneath shows the total amount of work hours, while the following table shows how the actual work hours were distributed in the different phases.

Note: The work hours and work records at the next page is registered as a team. In other words, the two students have registered a eight hour workday as eight hour per student.

- Allocated workload in the "Bachelor thesis" subject: **540 hours per student**
- Actual workload after completed subject: **636 hours per student**

	Adm. Plan	Design basis	Business case	Concept phase	Detailed design	Report	Finishing
Actual workhours	28	57	10	167	205	155	14

The percentages in the comparison is based on the values above. The following list reflects the comparison.

- **Administrative and planning**
Small deviation from the plan
- **Business case/cost study**
Small deviation from the plan
- **Design basis**
Small deviation from the plan
- **Concept Phase**
A deviation from the plan. This is due to the students choice of extending their concept phase, as they considered this as an important and crucial phase for the final solution. Finding a high potential concept and eliminate as much uncertainty as possible was a high priority for the students.
- **Detailed Design**
Some deviation from the plan. The reduced detailed design phase is a consequence of the extended concept phase.
- **Report**
Small deviation from the plan.
- **Finishing/buffer**
Small deviation from the plan

Working records

See the following pages.

Date	Adm. Plan	Design basis	Business case	Concept phase	Detailed design	Report	Finishing	Log
17/12	5							First visit at Tranby. For details, see meeting report.
7/1	3							Discussion of different concepts. Tour in workshop
8/1	4							Tranby. Startup PC and HSE course. Make a plan
9/1	4	4		1				Plan finished. Meeting with Sverre and Daniel. Started on Design Basis.
								Draw several suggestions for lifting solutions
10/1	4	2	1	2				Meeting with Lars, Ravi, Dag and Lilja.
11/1	1	2	2	1				Meeting with Goran, Daniel and Sverre
14/1		3	3					Endphase of business case. Half way trough design basis
15/1	2	5	1					Problem with SW, helpdesk involved.
21/1		4	3					Almost finished with Business case.
22/1		4		2				Working with Design basis and Concept phase side by side
23/1		4		3				Meeting with Caroline Gulliksen.
28/1		2		5				Working with Design basis and Concept phase side by side
29/1		4		4				Nothing special
30/1	2	3		2				SW problems, IT support. First milestone presentation.
1/2				4				Concept design - 3D
4/2				3				Concept design - 3D
5/2		3		4				Concept design and Design basis
6/2		4		3				Concept design and Design basis
7/2	2	1		5				Status meeting with Sverre for two hours
8/2		2						Skype meeting w/ivars. Working with a different subject
11/2		7						Design basis
12/2		3						Design basis
14/2				8				Concept phase. Meeting with Navid
18/2				6				Making more concepts

Date	Adm. Plan	Design basis	Business case	Concept phase	Detailed design	Report	Finishing	Log
19/2				6				Making PowerPoint and meeting with supervisor at NTNU
20/2				5				Making PowerPoint
21/2				8				Making PowerPoint
22/2				6				Finalizing concepts
25/2				8				Finalizing PowerPoint
26/2				7				Finalizing and sending PowerPoint
27/2				6				Writing and preparing for concept design review
28/2				8				Concept desing review, brainstorming and meeting report.
1/3				8				Concept phase 2 - Meeting with Sverre and Ivars
4/3				8				Concept phase 2 - Brainstorming
5/3				8				Concept phase 2 - Brainstorming
6/3				4				Concept phase 2 - Quick concept calculations
7/3				3				Concept phase 2 - Quick concept calculations
10/3				2				Concept phase 2 - Modeling new concepts
11/3				4				Concept phase 2 - Making presentation
12/3				7				Concept desing review 2
13/3				4	4			Starting detailed design
14/3				4	4			Finished concept phase
15/3					4	4		Detailed design and report-writing/documentation
16/3					4	4		Detailed design and report-writing/documentation
17/3					4	4		Detailed design and report-writing/documentation
18/3					4	4		Detailed design and report-writing/documentation
19/3					4	4		Detailed design and report-writing/documentation
20/3	1				2	3		Meeting with supervisor. Milestone 2 presentation
21/3					4	4		Detailed design and report-writing/documentation

Date	Adm. Plan	Design basis	Business case	Concept phase	Detailed design	Report	Finishing	Log
22/3					4	4		Detailed design and report-writing/documentation
25/3					4	4		Detailed design and report-writing/documentation
26/3					4	4		Detailed design and report-writing/documentation
27/3					4	4		Meeting with supervisor. Detailed design and report-writing/documentation
28/3					5	3		Detailed design and report-writing/documentation
29/3					6	2		Meeting with Sverre and Jon Elfridsson.
30/3					4	3		FEA and report
1/4					5	3		FEA and report
2/4					5	3		FEA and report
3/4								Industri 4.0
4/4								Industri 4.0
5/4								Industri 4.0
8/4					6	2		Calculation report and report-writing/documentation
9/4					6	2		Calculation report and report-writing/documentation
10/4					6	2		Calculation report and report-writing/documentation
11/4					6	2		Calculation report and report-writing/documentation
12/4					6	2		Calculation report and report-writing/documentation
15/4					6	2		Calculation report and report-writing/documentation
16/4					6	2		Calculation report and report-writing/documentation. Meeting with Sverre
23/4					6	2		Editing 3D models. Writing report.
24/4					6	2		FEA and report
25/4					6	2		Calculation report and meeting with supervisor
26/4					4	4		Calculation report
27/4					2	2		Calculation report
28/4					4	4		Calculation report

Date	Adm. Plan	Design basis	Business case	Concept phase	Detailed design	Report	Finishing	Log
29/4					2	2		Calculation report
30/4					2	2		Calculation report
1/5					4	4		Calculation report
2/5				4		4		TRT concept and report-writing/documentaiton
3/5				4		4		TRT concept and report-writing/documentaiton
4/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
5/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
6/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
7/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
8/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
9/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
10/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
11/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
12/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
13/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
14/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
15/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
16/5					4	4		Final design/manufacturing drawings and report-writing/documentaiton
17/5						4	4	Finishing
18/5							8	Finishing
19/5							1	Finishing
20/5							1	Admission of bachelor thesis