1 Name, Scope and Level of the Course

The course is provided by the University of Skövde and is named Engineering Project I G1F. It comprises 6 credits and is on basic level. The level of progression of the course is G1F.

2 Objectives

After completed course the student should be able to:

- work efficiently in a project based environment with group dynamics, in which they plan and divide tasks, initiate and participate in meetings and provide constructive feedback,
- make with the help of reference material well-founded design decisions with consideration of sustainability, construction, production, material properties and safety,
- convert a conceptual design into a working model that adequately shows and explains the chosen concept,
- present orally their methods and results,
- write a report in a professional and structured way using logic and critical thinking,
- reflect on and evaluate the performance and delivered quality throughout the project.

3 Course Content

The project starts from a conceptual design stage with a concrete problem. The focus will be on detailed design and implementation. This approach will narrow the project span down and lets students focus on the actual engineering.

Students are divided into groups and have to complete both individual and group tasks to succeed. In this way they will learn how to act in a project based environment (mainly regarding communication), and to take responsibility for their actions.

The project will be divided in several milestones, so it is easier for students to plan accordingly and concentrate on one thing at the time.

The first part of the project is about gathering and analyzing relevant information, and come up with conceptual solutions for the problem at hand.

The second part is about materializing a solution into a (working) prototype and all the challenges involved.

In the third part the model is tested, evaluated and (if possible) improved, before recommendations for continuation are made.

4 Forms of Teaching

The teaching comprises group assignments, supervision, presentations and seminars/group discussions.

The teaching is conducted in Swedish. Some teaching in English may occur.
5 Examination
The course is graded VG (Pass with distinction), G (Pass) or U (Fail).

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project presentation</td>
<td>2 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Written assignment</td>
<td>3 credits</td>
<td>VG/G/U</td>
</tr>
<tr>
<td>Model building</td>
<td>1 credits</td>
<td>G/U</td>
</tr>
</tbody>
</table>

1 Determines the final grade of the course.

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.

6 Admission Requirements
Prerequisite courses for this course are: attended IT136G-Procedural Programming for Engineers G1N and passed IP105G-Product Development and Design I: Fundamentals G1N (or the equivalent).

7 Subject, Main Field of Study and Disciplinary Domain
The course forms a part of the academic subject area of Integrated Product Development. The course is a part of the main field of study in Product Design Engineering at the University of Skövde. The course can also be a part of the main field of study in Mechanical Engineering, Industrial Engineering. The disciplinary domain of the course is Design.

Every course at the University of Skövde belongs to a subject. The division of subjects is used for follow-up and quality assurance. A main field of study is an area in which a degree can be awarded. Disciplinary domain is a division which is used by the government for the allocation of resources for studies at basic level and advanced level.

8 Approval of Course and Course Syllabus
The course was approved by the Curriculum Committee for Engineering Science on 4 June 2018. This course syllabus was approved by the Curriculum Committee for Engineering Science on 6 April 2020. It is valid from 1 July 2020 and replaces the course syllabus approved 4 June 2018.

9 Overlapping with Another Course
This course cannot constitute a part of a degree also containing a course the content of which is totally or partly equivalent to the content of this course.

10 Additional Information
Further information will be available on the university’s website before a course is given.

National and local regulations for higher education are available on the university’s website.

Upon completion of the course there will be a follow-up. The main purpose of this follow-up is to contribute to improvements of the course. The students’ experiences and views constitute one of the criteria for the follow-up and are gathered by means of course evaluations. The students will be informed of the results of the follow-up and any decisions regarding actions that are to be taken.

11 Course Literature and Other Educational Materials