1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Industrial Engineering G1N. It comprises 6 credits and is on basic level. The level of progression of the course is G1N.

2 Objectives
After completed course the student should be able to:

- demonstrate knowledge about the area of Industrial Engineering,
- describe how requirements from the manufacturing process can affect the product design from a financial, quality and technical perspective,
- demonstrate understanding for the importance of a holistic perspective during development- and changes of products and processes with the lean philosophy as a starting point,
- describe and analyse a value stream,
- use basic improvement- and analysis tool within industrial engineering,
- describe the basis in production logistics.

3 Course Content
The course describes the relation between product design and manufacturing and how it affects the product development. Process planning is described on a generic level and examples are given for how different selections affects manufaturability. The course highlights the importance of a holistic approach during the product realisation based on the lean philosophy. The different parts of a production system is described based on the value stream combined with with logistical principles and terminology. The course presents a structured method for problem solving together with relevant tools which the the student applies in a case which shall be documented and presented.

4 Forms of Teaching
The teaching comprises lectures and seminars/group discussions.

Depending on the study period, the language of tuition may be Swedish or English. Even if the teaching is conducted in Swedish, some English may still occur.

5 Examination
The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

The final grade determines by the weighing of the results of the two examinations, were the respective examination are assigned the same weight. The final grade is issued only when all course units have been passed.

Registration of examination results:

<table>
<thead>
<tr>
<th>Name of examination</th>
<th>Credits</th>
<th>Grading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written examination</td>
<td>3 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
<tr>
<td>Written assignment</td>
<td>3 credits</td>
<td>A/B/C/D/E/F</td>
</tr>
</tbody>
</table>

Students with a permanent disability who have been approved for special educational support may be offered adapted or alternative examinations.
6 Admission Requirements
The special prerequisites for this course, besides basic eligibility for university studies, are the following upper secondary school courses Mathematics B or Mathematics 2a / 2b / 2c (or equivalent).

7 Subject, Main Field of Study and Disciplinary Domain
The course forms a part of the academic subject area of Industrial Engineering. The course is a part of the main field of study in Industrial Engineering at the University of Skövde. The disciplinary domain of the course is Technology.

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 December 2017. This course syllabus was approved by the Curriculum Committee for Engineering Science on 8 June 2020. It is valid from 1 January 2021 and replaces the course syllabus approved 3 February 2020.

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