1 Name, Scope and Level of the Course
The course is provided by the University of Skövde and is named Quality Technique for Technicians G1F. It comprises 7.5 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:

- use statistical measurements, tables, charts and indexes to illustrate collected data,
- know key concepts in probability theory,
- describe common standards for quality assurance, such as ISO 9000,
- describe basic methods of quality engineering, risk analysis and root cause analysis,
- follow instructions for a quality system in order to collect data and evaluate a process,
- search, gather and analyse data from a quality perspective in an organisation.

3 Course Content
The course is divided into two parts for quality development.

Statistical techniques
This part contains an overview of different statistical areas and tools such as data collection, descriptive statistics and probability theory.

Quality Engineering
The quality part covers key concepts and methods of quality engineering, machine and process capability, risk analysis, root cause analysis and quality management systems mainly quality assurance standard ISO 9000.

4 Forms of Teaching
For distance courses/programmes, the teaching comprises lectures, supervision, laboratory sessions and group assignments.

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>Supervised examination(^1)</td>
<td>written 3.5 credits</td>
<td>VG/G/U</td>
</tr>
<tr>
<td>Laboration</td>
<td>2 credits</td>
<td>G/U</td>
</tr>
<tr>
<td>Written assignment</td>
<td>2 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: passed MA102G-Mathematics T G1N and attended FY103G-Physics for Technicians 2 G1N.

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 course can also be a part of the main field of study in Mechanical Engineering. 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 5 February 2018. This course syllabus was approved by the Curriculum Committee for Engineering Science on 5 February 2018. It is valid from 1 July 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
Main literature

Lecture notes for Statistics and Quality topics.

Reference literature