



TRANSLATION FROM SWEDISH

## COURSE SYLLABUS

# Technical Leadership A1N

6 credits

**Course code:** VP714A

**Version number:** 6

**Valid from:** 1 July 2022

**Ratified by:** Curriculum Committee for Engineering Science

**Date of ratification:** 6 December 2021

## 1. General information about the course

The course is provided by the University of Skövde and is named Technical Leadership A1N (Tekniskt ledarskap A1N). It comprises 6 credits and is a second-cycle course. The level of progression is A1N.

The course is a part of the main field of study in Virtual Product Realization. The disciplinary domain of the course is Technology.

## 2. Entry requirements

A Bachelor's degree equivalent to a Swedish kandidatexamen of 180 credits, within the main fields of integrated product development, production engineering, automation engineering, mechanical engineering or information technology (or the equivalent).

A further requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6. This is normally demonstrated by means of an internationally recognized language test, e.g. IELTS or TOEFL.

## 3. Course content

The course focuses on leadership in technical organizations and the requirements stated on the leadership for being able to adopt to and make benefit from the digital transformation of industry. In detail, different concepts and aspects of technical leadership, such as leadership capabilities, leadership styles and managerial techniques, are covered and discussed, as well as how the digitalization of industry imposes new demands on leaders in technical organizations. In addition, studies of scientific and more practice-based literature are conducted to create a deeper understanding of the circumstances and challenges under which a technical leader is acting and will be acting. Finally, the course also gives a deeper understanding concerning how an increased digitalization and globalization changes the responsibilities put on technical leaders in relation to ethics, diversity and sustainability.

## 4. Objectives

After completed course the student should be able to:

- explain and discuss, in detail, important concepts, approaches and leadership styles within technical leadership,
- explain and discuss, in detail, important managerial techniques and leadership capabilities relevant for leading digital transformation of industry,
- present and critically discuss research articles within the areas of technical leadership,
- extensively assess and discuss how technical leaders may foster innovation based on novel digital solutions,
- extensively assess and discuss how an increased digitalization and globalization changes the responsibilities put on technical leaders in relation to ethics, diversity and sustainability.

## 5. Examination

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

The examinations of the course consist of the following modes of assessment:

- **Unsupervised written examination**  
3 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Oral presentation**  
1 credit, grades: G/U
- **Individual assignment**  
2 credits, grades: G/U

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

## 6. Types of instruction and language of instruction

The teaching is comprised of lectures, seminars/group discussions and presentations.

The teaching is conducted in English.

## 7. Course literature and other educational materials

According to the teacher's reference.

## 8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

## 9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.