



# DM1580 Video Technology 6.0 credits

Videoteknik

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

Course syllabus for DM1580 valid from Spring 2019

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

First cycle

## Main field of study

Technology

## Specific prerequisites

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After the course the student should be able to:

- choose and motivate different solutions for digital video systems
- seek and value technical information
- estimate required information volumes, bandwidths and transfer time for transmitting video at different quality levels
- understand how to develop equipment and applications in the area of digital TV
- communicate with experts.

## Course contents

This course will cover the technical aspects of the process from capturing, coding to distribution. Here are some of the topics:

- video and video signals
- video capturing
- information theory
- sampling and quantization
- video compression
- digital video standards
- display
- storage and distribution.

## Course literature

To be announced at least 4 weeks before course start at course web page.

## Examination

- PRO1 - Project, 1.5 credits, grading scale: P, F
- TEN1 - Exercise, 3.0 credits, grading scale: A, B, C, D, E, FX, F
- LAB1 - Laboratory Work, 1.5 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

In this course all the regulations of the code of honor at the School of Computer science and Communication apply, see: [http://www.kth.se/csc/student/heder-skodex/1.17237?l=en\\_UK](http://www.kth.se/csc/student/heder-skodex/1.17237?l=en_UK).

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.