



## Course syllabus

Faculty Board of Science and Engineering  
School of Computer Science, Physics and Mathematics

4ME102 Grunderna i IT-baserade medier, 7,5 högskolepoäng  
Foundations of Computational Media, 7.5 credits

**Main field of study**

Media Technology

**Subject Group**

Media Production

**Level of classification**

Second Level

**Progression**

A1N

**Date of Ratification**

Approved by the Board of the School of Computer Science, Physics and Mathematics  
2010-12-10

The course syllabus is valid from autumn semester 2011

**Prerequisites**

22.5 credits at G2F level in Media Technology or the equivalent.

### Expected learning outcomes

Upon completion, the student should be able to:

- understand and explain different abstract representations of media
- understand and explain different techniques for creation, persistence, delivery, and playback of all media types
- use current tools for manipulation of media
- understand and explain the Internet infrastructure necessary for distribution of media.

### Content

Recent developments in digital technologies have transformed the Internet from a predominantly text-based medium to one comprising all forms of media, including, images, animations, audio and video. Active participation in this new world requires an understanding of the fundamentals of the new media types and enabling technologies and tools for media manipulation. The course will give students the theoretical and practical foundation for all forms of computational media.

The course comprises:

- Presentation and discussion of different approaches for abstract representation of media.
- Presentation and hands-on work with different techniques for creation, persistence, delivery and playback of media.
- Presentation and discussion of different technologies for using the Internet as a platform for distribution of media.
- Investigation and discussion of legal consequences related to digital media on the Internet.

## Type of Instruction

Lectures, seminars and workshops.

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.

Assessment in this course will be comprised of: written and/or oral examinations, assignments as well as mandatory seminar work. At the beginning of the course it will be decided on what types of assessment will be used.

Students who do not pass the regular examination are given the opportunity to do a reexamination shortly after the regular exam.

## Course Evaluation

A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

## Other

Upon request, a Swedish University course certificate will be awarded upon successful completion of the course.

## Required Reading and Additional Study Material

### Required Reading

Burg, J. (2008). *The Science of Digital Media*. Prentice Hall. Latest Edition. 512 (512) pages.

DFM, *Distributed materials*, 400 pages.