



## Course syllabus

Faculty of Technology

Department of Computer Science and Media Technology

2DV605 Parallel Computing, 7,5 högskolepoäng

Parallel Computing, 7.5 credits

### Main field of study

Computer Science

### Subject Group

Informatics/Computer and Systems Sciences

### Level of classification

First Level

### Progression

G1F

### Date of Ratification

Approved by Faculty of Technology 2014-10-03

The course syllabus is valid from autumn semester 2015

### Prerequisites

Operating Systems 7.5 credits (1DV512), and Programming and Data Structures 7.5 credits (1DV507) or equivalent.

## Objectives

Upon completion of the course the student should:

- understand the fundamentals of parallel computing systems
- understand the fundamentals of programming models and languages for parallel computing
- be able to write programs that run efficiently on parallel computing systems

## Content

The course consists of:

- introduction to parallel computing architectures
- programming models for parallel computing
- programming languages for parallel computing
- hands-on experience of parallel computing

## Type of Instruction

Teaching consists of lectures and practical work. Practical work is carried out individually.

## Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the examination must be passed.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Written examination and/or assignments which are presented orally and/or in written form. The assessment method is decided at the start of the course.  
Students who do not pass the regular examination are given the opportunity to do a resit examination shortly after the regular examination.

### 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.

### Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: 2DV105 Parallel Programming in Distributed Systems, 7.5 credits

### Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

### Required Reading and Additional Study Material

#### **Required reading**

DFM, *Distributed material*. Pages 150.