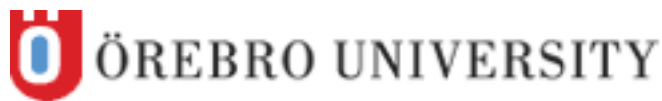

This course syllabus is discontinued or replaced by a new course syllabus.



Course Syllabus

School of Science and Technology

Algorithms, Data Structures and Complexity for MSc in Engineering, 7.5 Credits

Course Code:	DT505G	Subject Area:	Field of Technology
Main Field of Study:	Computer Science	Credits:	7.5
Education Cycle:	First Cycle	Subject Group (SCB):	Computer Science
Established:	2016-06-22	Progression:	G1N
Valid from:	Spring semester 2017	Last Approved:	2016-09-29
		Approved by:	Head of School

Aims and Objectives

General aims for first cycle education

First-cycle courses and study programmes shall develop:

- the ability of students to make independent and critical assessments
- the ability of students to identify, formulate and solve problems autonomously, and
- the preparedness of students to deal with changes in working life.

In addition to knowledge and skills in their field of study, students shall develop the ability to:

- gather and interpret information at a scholarly level
- stay abreast of the development of knowledge, and
- communicate their knowledge to others, including those who lack specialist knowledge in the field.

(Higher Education Act, Chapter 1, Section 8)

Course Objectives

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Main Content of the Course

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Examination Methods

Theory, 4.5 Credits. (Code: 0100)
Written exam.

Laboratory Work, 1.5 Credits. (Code: 0200)
Written report.

Project Work, 1.5 Credits. (Code: 0300)
Written report and oral presentation.

For further information, see the university's local examination regulations (in Swedish).

Grades

According to the Higher Education Ordinance, Chapter 6, Section 18, a grade is to be awarded on the completion of a course, unless otherwise prescribed by the university. The university may prescribe which grading system shall apply. The grade is to be determined by a teacher specifically appointed by the university (an examiner).

According to regulations on grading systems for first- and second-cycle education (vice-chancellor's decision 2010-10-19, reg. no. CF 12-540/2010), one of the following grades is to be used: fail, pass, or pass with distinction. The vice-chancellor or a person appointed by the vice-chancellor may decide on exceptions from this provision for a specific course, if there are special reasons.

Grades used on course are 3, 4, 5 or Fail (U).

Theory

Grades used are 3, 4, 5 or Fail (U).

Laboratory Work

Grades used are Fail (U) or Pass (G).

Project Work

Grades used are Fail (U) or Pass (G).

For further information, see the university's local examination regulations (in Swedish).

Specific entry requirements

Standard university eligibility requirements and Physics B, Chemistry A, Mathematics E (specific entry requirements 9).

or

Standard university eligibility requirements and Physics 2, Chemistry 1, Mathematics 4 (specific entry requirements A9).

For further information, see the university's admission regulations (in Swedish).

Transfer of Credits for Previous Studies

Students who have previously completed higher education or other activities are, in accordance with the Higher Education Ordinance, entitled to have these credited towards the current programme, providing that the previous studies or activities meet certain criteria.

For further information, see the university's local credit transfer regulations (in Swedish).

Reading List and Other Teaching Materials

Required Reading

Cormen, Thomas H., Leiserson, Charles E., Rivest, Ronald L. and Stein, Clifford (Senaste upplagan)
Introduction to Algorithms
 MIT Press, ISBN-10: 0262533057

Additions and Comments on the Reading List

Ytterligare skriftligt material delas ut under kursens gång.