



## Course syllabus

Faculty of Technology

Kalmar Maritime Academy

1TI05T Tillämpad matematik II, 5 högskolepoäng

1TI05T Applied Mathematics II, 5 credits

### **Main field of study**

Mathematics

### **Subject Group**

Mathematics

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved by Faculty of Technology 2017-12-18

The course syllabus is valid from autumn semester 2018

## Objectives

*Competence and skills*

After completing the course the student is expected to:

- manage and solve mathematical problems using trigonometry
- manage and solve mathematical problems using derivatives
- manage and solve mathematical problems using integrals
- manage and solve mathematical problems using complex numbers

## Content

- Trigonometry
- Derivative and relevant applications
- Integrals and relevant applications
- Complex numbers and relevant applications

## Type of Instruction

Teaching consists of lessons.

## Examination

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

Examination takes the form of:  
Individual written exam

### **Course Evaluation**

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty and at the Kalmar Maritime Academy.

### **Required Reading and Additional Study Material**

Susanne Gennow, IngMari Gustafsson, Bo Silborn, Exponent 4, Gleerups 2013, latest edition (270 of 270 pages)

Månsson J., Nordbeck P. Endimensionell analys, Studentlitteratur, latest edition (100 of 400 pages)

Månsson J., Nordbeck P. Övningar i endimensionell analys, Studentlitteratur, latest edition (50 of 200 pages )

### **Reference Literature**

Corner Kevin, Embleton William, Jackson Leslie, *Mathematics For Marine Engineers*, Bloomsbury 2013, latest edition