

Course: Mathematics 5

credits: 2

Course code	WBVH8WIS5	Modes of delivery	Education
Name	Mathematics 5	Assessments	Mathematics 5 - Written, organised by STAD examinations
Study year	2022-2023		
ECTS credits	2		
Language	English		
Coordinator	C. Ultzen		

Learning outcomes

The student can, without using a calculator:

- derive differential equations for practical situations
- determine the direction field for a first order differential equation
- solve separable first order differential equations
- solve non-separable first order differential equations using the "variation of constants" method
- solve second order differential equations, whereby it must be possible to calculate with complex numbers

Content

The course Mathematics 5 follows the course Calculus. The content of this course is therefore assumed to be known.

Within the Mathematics 5 course, students learn to derive differential equations for practical situations, to determine the direction field for a first-order differential equation, to solve separable differential equations, to solve non-separable differential equations using the "variation of constants" method and to solve second order differential equations.

Included in programme(s)

Mechanical Engineering
Mechanical Engineering VWO a 3-year variant

School(s)

Institute of Engineering