Calculus in One Variable I

Programme course

6 credits

Envariabelanalys I

TNIU22

Valid from: 2017 Spring semester

Determined by
Board of Studies for Mechanical Engineering and Design

Date determined
2017-01-25

Main field of study
Mathematics, Applied Mathematics

Course level
First cycle

Advancement level
G1X

Course offered for
- Civil Engineering, B Sc in Engineering

Entry requirements
Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites
Introductory course in mathematics

Course content
Functions and their graphs. Elementary functions: logarithm-, exponential- and powerfunctions, trigonometric and inverse trigonometric functions. Komplex exponential functions. Definition of limit and standrad limits. Continuous functions. Derivative. Rules of differentiations. Higher derivatives. Primitive functions.

Teaching and working methods
The course is given in a sequence of whole math-days containing lectures, tutorials, self-studies and mentor time.

Examination

KTR1	An optional written Test	0 credits	U, G
TEN1	Written Examination	6 credits	U, 3, 4, 5

Grades
Four-grade scale, LiU, U, 3, 4, 5

Other information
Supplementrary courses: Calculus in one variable II

Department
Institutionen för teknik och naturvetenskap

Director of Studies or equivalent
George Baravdish

Examiner
Peter Holgersson

Course website and other links

Education components
Preliminary scheduled hours: 66 h
Recommended self-study hours: 94 h

Course literature

Additional literature

Books

Göran Forsling, Mats Neymark, *Matematisk analys. En variabel*
ISBN: 978-91-47-10023-1

Compendia

Göran Forsling, Övningar i analys i en variabel

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://styrdokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.