

# Mathematics II

ETH Zurich 406-0252-AAL

Lecturer: Ana Cannas

## Abstract

This course has main focus on *multivariable calculus* and is a continuation of Mathematics I.

## Content

- V. Functions of Several Variables and Partial Derivatives
- VI. Multiple Integrals
- VII. Integration of Vector Fields and Integral Theorems
- VIII. Introduction to Partial Differential Equations

## Main Bibliography

For course parts V-VII:

Thomas, G. B.: *Thomas' Calculus*, Part 2, Pearson Addison-Wesley.

For course part VIII: two chapters from

Kreyszig, E.: *Advanced Engineering Mathematics*, John Wiley & Sons.

**Assistance** (October - December and March - May):

Tuesdays and Wednesdays afternoon; please see website below for room and times.

## Suggested Readings and Exercises

[people.math.ethz.ch/~acannas/Teaching/mathematics\\_II.html](http://people.math.ethz.ch/~acannas/Teaching/mathematics_II.html)

This self-study course in English is parallel to the ETH course in German 401-0252-00L.