

# Course Syllabi

**CODE** 106

**NAME** Calculus for Computing

**Credits** 6 ECTS

**Period** Spring Semester

## Course Specifications

The training activities will be based on theory, problems, and practical classes, and on the student's personal work with the exercises and other material provided by the lecturer.

The development of the classes will pursue the continuous interaction of the teacher with the student, seeking a balance between the presentation of the theoretical contents of the subject and the performance of practical activities, encouraging the use of mathematical software as a support tool for the acquisition of the competences of the subject.

During the problem classes in the classroom, the active work of the student will be encouraged to solve the exercises proposed in each of the topics and will carry out practical work with the computer, introducing the use of mathematical software (WA, Geogebra, Maxima, etc.) in the resolution of the exercises.

## Objectives and contents

In this subject, the fundamentals for solving mathematical problems involving knowledge of differential and integral calculus are developed.

Contents

1. Elementary functions. Solving equations and systems. Complex numbers.
2. Differential calculus.
3. Integral calculus.
4. Sequences and series.

## Assessment

The course will follow a continuous evaluation procedure based on the delivery of tasks, which include the practical part of the course, and on the performance of partial evaluation tests. To this end, the contents of the course will be grouped into two blocks: block A (topics 1 and 2) and block B (topics 3 and 4).

For each block, a practical evaluation activity will be required (with a weight of 20%) and a partial test (with a weight of 80%).

At the end of the continuous evaluation process, the student's final mark will be the weighted average of the marks obtained in each of the blocks. The weighting is as follows: 40% for block A and 60% for block B.

Students who have obtained a grade lower than 5 in the weighted average may take an exam on the date set by the ETSII, where they will have the opportunity to improve the mark of one or both blocks in a second chance.

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## SECOND ORDINARY CALL

On the date scheduled by the ETSII, students will take a comprehensive exam of the entire content of the subject. The mark obtained will be included in the minutes.

### **Lecturer**

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