

Course Syllabi

CODE 210

NAME Automata Theory and Formal Languages

Credits 6 ECTS

Period Spring Semester

Course Specifications

The course is mainly based in lectures in which student participation is encouraged through the presentation of exercises, individual work, and group work. Extra activities include writing essays and solving proposed exercises.

Objectives and contents

The course gives a basic introduction to the classic and contemporary theory of formal languages and automata theory.

Contents

Include the following topics: Mathematical preliminaries, Alphabets and Grammars, Regular Expressions, Finite automata, Regularity conditions, Context Free Languages, Introduction to computation, The Turing Machine, Recursive functions, The "While" language, Equivalence theorem, Universality, Formal limits of computation.

Assessment

The course contents will be evaluated in blocks. A minimum of 5 is needed in each of the blocks to pass the course, and to achieve this, the students have one opportunity during the continuous evaluation and a second and third ones in the two ordinary final exams calls. The final grade will be obtained by averaging the best grades obtained from each of the blocks plus some extra points from proposed activities. The number of blocks into which the subject will be divided will be between 2 and 4.

Lecturer

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