A.Y. 2021/2022

Internal Courses – Class of Natural Sciences

Courses of the 1\textsuperscript{st} year

**CALCULUS**
Prof. Daniela Tonon

**COMPLEMENTS OF ANALYSIS**
Prof. Davide Vittone

**INTRODUCTION TO PROBABILITY MODELS**
Prof. Alessandra Bianchi

**INTRODUCTION TO THERMODYNAMICS**
Prof. Fulvio Baldovin

Courses of the 2\textsuperscript{nd} year

**MEASURE THEORY**
Prof. Paolo Ciatti

**ALGORITHM DESIGN**
Prof. Francesco Silvestri

**FLUID DYNAMICS**
Prof. Roberto Turolla

**OPEN PROBLEMS IN FUNDAMENTAL PHYSICS WITH THE FOUR OPERATIONS**
Prof. Francesco D'Eramo

Courses of the 3\textsuperscript{rd} year

*Upon request, the courses of the 4\textsuperscript{th} and 5\textsuperscript{th} year can be accessed during the 3\textsuperscript{rd} year too.*

**ADVANCED ELECTROMAGNETISM**
Proff. Massimo Passera, Davide Cassani

**ALGEBRAIC COMBINATORICS**
Prof. Pablo Spiga

**AN INTRODUCTION TO FRactal GEOMETRY**
Prof. Stefano Marmi

**PC ARCHITECTURE HANDS ON**
Prof. Andrea Troissi
Courses of the 4th and 5th year

One of the following courses can be replaced by an individual project, under the supervision of a teacher.

INTRODUCTION TO CHAOTIC DYNAMICS
Prof. Angelo Vulpiani

MODELS IN ECOLOGY
Prof. Alberto Barausse

MOLECULAR CHARACTERIZATION OF HUMAN CANCERS: INNOVATIONS IN DIAGNOSTIC APPROACH, PROGNOSTIC STRATIFICATION AND THERAPEUTIC OPPORTUNITIES
Proff. Valentina Guarneri, Maria Vittoria Dieci

MACHINE LEARNING
Prof. Nicoletta Noceti