A.Y. 2021/2022

Internal Courses – Class of Natural Sciences

Courses of the 1\textsuperscript{st} year

\textbf{CALCULUS}
Prof. Daniela Tonon

\textbf{COMPLEMENTS OF ANALYSIS}
Prof. Davide Vittone

\textbf{INTRODUCTION TO PROBABILITY MODELS}
Prof. Alessandra Bianchi

\textbf{INTRODUCTION TO THERMODYNAMICS}
Prof. Fulvio Baldovin

Courses of the 2\textsuperscript{nd} year

\textbf{MEASURE THEORY}
Prof. Paolo Ciatti

\textbf{ALGORITHM DESIGN}
Prof. Francesco Silvestri

\textbf{FLUID DYNAMICS}
Prof. Roberto Turolla

\textbf{OPEN PROBLEMS IN FUNDAMENTAL PHYSICS WITH THE FOUR OPERATIONS}
Francesco D'Eramo

Courses of the 3\textsuperscript{rd} year

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

\textbf{ADVANCED ELECTROMAGNETISM}
Prof. Massimo Passera

\textbf{ALGEBRAIC COMBINATORICS}
Prof. Pablo Spiga

\textbf{AN INTRODUCTION TO FRACTAL GEOMETRY}
Prof. Stefano Marmi

\textbf{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