A.Y. 2023/2024

Internal Courses – Class of Natural Sciences

Courses of the 1\textsuperscript{st} year

**COMPLEMENTS OF ANALYSIS (6 CFU)**
Prof. Roberto Monti

**COMPLEMENTS OF MECHANICS (6 CFU)**
Prof. Francesco D'Eramo

**COMPLEMENTS OF MATHEMATICS (6 CFU)**
Prof. Giulio Giuseppe Giusteri

**COMPLEMENTS OF PHYSICS (6 CFU)**
*To be defined*

Courses of the 2\textsuperscript{nd} year

**MEASURE THEORY**
Prof. Paolo Ciatti

**PHYSICS LABORATORY**
Prof. Giampaolo Mistura

Courses of the 2\textsuperscript{nd}/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. Luca Vecchi, Marco Zanetti

**ALGORITHM DESIGN**
Prof. Francesco Silvestri

**DATA ANALYSIS**
Prof. Marco Grassi

**FUNCTIONAL METHODS IN POLYMER STATISTICAL MECHANICS AND STOCHASTIC**
Prof. Enzo Orlandini

**INTRODUCTION TO GROUP REPRESENTATION THEORY**
Proff. Andrea Lucchini, Giovanna Carnovale
One of the following courses can be replaced by an individual project, under the supervision of a teacher.

**BLACK HOLES**  
Prof. Davide Cassani

**FUNDAMENTALS OF EVOLUTIONARY BIOLOGY**  
Prof. Gil Guastoni Rosenthal

**INTRODUCTION TO ELLIPTIC CURVES AND MODULAR FORMS**  
Prof. Adrian Iovita

**MACHINE LEARNING APPROACHES TO INFERENCE**  
Prof. Carlo Albert, Jeff Byers

**TOPOGRAPHIC AND DISSECTIVE ANATOMY**  
Prof. Andrea Porzionato