

## Nuclear Physics and Fusion

Academic Year: ( 2023 / 2024 )

Review date: 16-03-2021

Department assigned to the subject: Physics Department

Coordinating teacher:

Type: Electives ECTS Credits : 3.0

Year : 2 Semester : 1

## DESCRIPTION OF CONTENTS: PROGRAMME

All courses are expressed in the mathematical language typical of physics: differential calculus in one and several variables, complex numbers, algebra and statistics. They also include basic and advanced concepts of modern Physics (Mechanics, Thermodynamics, Electromagnetism and Quantum Mechanics), Engineering and Technology.

Nuclear properties; alpha, beta and gamma radioactivity; models for nuclear structure; nuclear reactions; fusion and fission processes; controlled fusion and fission reactions.