

Academic Year: (2021 / 2022)

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).

Elliptic problems; fluid motion at low Reynolds number; Stoke flows; parabolic problems; porous media and lubrication; hyperbolic problems; fluid motion at high Reynolds number; Euler equations; accoustics; asymptotic techniques; stability; ideal MHD; Grad-Shafranov equation.