

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
MAT203	Differential Equations	3	4	0	0	4	7

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Compulsory
Course Level	Bachelor Degree
Objective	To master: Existence and uniqueness of the solution to ordinary differential equation, Lipschitz condition, second-order linear differential equation, linear system of first-order differential equations.
Content	Existence and uniqueness of the solution to ordinary differential equation, Lipschitz condition, second-order linear differential equation, linear system of first-order differential equations.
References	Equations différentielles ordinaires, Etudes qualitatives, Dominique Hulin, Notes de Cours à L'université Paris Sud. Cours de mathématiques, tome 4 : Équations différentielles, intégrales multiples - Cours et exercices corrigés, Jacqueline Lelong-Ferrand et Jean-Marie Arnaudiès, Dunod.

Theory Topics

Week	Weekly Contents
1	experience 1
2	Experience 2
3	Experience 3
4	experience 4
5	Subvariety
6	solution to the algebraic questions
7	Midterm
8	Polynomials
9	Groups
10	Rings
11	Fields
12	complex numbers
13	Stokes theorem
14	Linear mapping