UCL Université catholique de Louvain

LMAT2410

2010-2011

Partial differential equation : heat equation, brownian moves and numerical aspects

5.0 credits	30.0 h + 15.0 h	2q

Teacher(s) :	Magnus Alphonse ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The main topics are : fundamental solution of the heat equation and the maximum principle, resolution of the Laplace equation with brownian motion, energy methods and numerical aspects
Aims :	The student will have to master elementary facts about the heat equation, in particular construction of explicit solutions. He/she will also have to study the links with brownien motion as well as numerical aspects related to these problems. *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Other infos :	Precursorycourses The Laplace and Poisson equations Evaluation Examination
Cycle and year of study :	> Master [120] in Mathematics > Master [60] in Mathematics > Master [120] in Mathematical Engineering > Master [120] in Physics
Faculty or entity in charge:	MATH