




5 credits	30.0 h	Q2
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Teacher(s)	Hainaut Donatien ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Discrete time Martingales (sub-martingales and super-martingales), stationary processes, exchangeable processes, conditionally i.i.d. processes and Markov processes.
Aims	<p>1 Presentation of the main discrete time stochastic processes with an introduction to their statistical analysis.</p> <p>----</p> <p><i>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".</i></p>
Other infos	<p>Prerequisite : The courses MAT1322 Théorie de la mesure and MAT1371 Probabilités are an essential prerequisite.</p> <p>References : NEVEU, J., Martingales à temps discret, Masson, 1972. BREIMAN, L., Probability, Addison-Wesley, 1968. CHOW, Y.S. and M. TEICHER, Probability Theory: Independence, Interchangeability, Martingales, Springer-Verlag, 1987. CHUNG K.L., A Course in Probability Theory. Harcourt, Brace & World Inc., 1968. KARLIN S. and H.M. TAYLOR, A First Course in Stochastic Processes, Academic Press, 1975. Evaluation : Each student receives 5 exercices to solve. He writes up the solutions and orally presents them to the professor. who may ask theoretical questions related to the subject of the proposed exercices.</p>
Faculty or entity in charge	MATH

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Actuarial Science	ACTU2M	5		
Master [120] in Statistics: General	STAT2M	5		
Master [120] in Mathematics	MATH2M	5		
Master [120] in Physics	PHYS2M	5		