

3.0 credits	22.5 h + 15.0 h	1q
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Teacher(s) :	Moonens Laurent ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Borel-Sieltjes measures. Measurable functions Integrability and integrals Convergence theorems Radon-Nikodym theorem Fubini theorem Lp spaces and their dual Representation theorem of Riesz-Markov.
Aims :	The objective of the course is to introduce the notion of abstract measure space and the corresponding Lebesgue integral, then to rediscover, in this new language, the convergence theorems introduced in the first analysis courses : Fatou's lemma, Lebesgue dominated convergence, etc. After this course, students will be able to use those new tools in the context of the analysis and probability courses. <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>
Other infos :	Prerequisite : MAT 1221: Mathematical analysis 3
Cycle and year of study :	> Bachelor in Mathematics > Bachelor in Economics and Management > Bachelor in Engineering > Bachelor in Physics > Bachelor in Psychology and Education: General > Bachelor in Information and Communication > Bachelor in Philosophy > Bachelor in Engineering : Architecture > Bachelor in Computer Science > Bachelor in Motor skills : General > Bachelor in Human and Social Sciences > Bachelor in Sociology and Anthropology > Bachelor in Political Sciences: General > Bachelor in Biomedicine > Bachelor in Pharmacy > Bachelor in Religious Studies > Master [120] in Statistics: General
Faculty or entity in charge:	MATH