



SC

**MATH2450 Logique mathématique**

[45h] 4.5 credits

This course is taught in the 1st and 2nd semester

**Teacher(s):** Jean-Roger Roisin  
**Language:** french  
**Level:** 2nd cycle course

**Aims**

To allow the mastering student to acquire the basic tools in one of the fundamental fields of mathematical logic.

**Main themes**

This course is for students in their first or second masters' year in mathematical science. It supposes a reasonable knowledge in elementary logic such as the one given in the "Notions of mathematical logic" course (SC1110, 2nd year). The content of the course follows a three-year cycle corresponding to three main orientations of mathematical logic: 1) The group theory (Zermelo-Frankel axioms, ordinals, relative constistance proff, etc.). Planned for 2002-2003. 2) The notions of calculability and incompleteness theorems (Turing machines or the like, recursive functions, Gödel and Tarski results, etc.). Planned for 2003-2004. 3) Model theory (completion, axiomability, type omission, countable models, etc.), planned for 2001-2002).

**Other credits in programs**

<b>INFO22</b>	Deuxième année du programme conduisant au grade d'ingénieur civil informaticien	(4.5 credits)
<b>MATH21/G</b>	Première licence en sciences mathématiques (Général)	(4.5 credits)
<b>MATH22/E</b>	Deuxième licence en sciences mathématiques (Economie mathématique)	(4.5 credits)
<b>MATH22/G</b>	Deuxième licence en sciences mathématiques	(4.5 credits)
<b>MATH22/S</b>	Deuxième licence en sciences mathématiques (Statistique)	(4.5 credits)