Axiomatic set theory and mathematical logic 724 (WTW 724)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
Programmes	BScHons Mathematics
Contact time	1 lecture per week
Language of tuition	Module is presented in English
Academic organisation	Mathematics and Applied Maths
Period of presentation	Semester 1

Module content

Axiomatic set theory, ordinals, transfinite induction and recursion, ordinal arithmetic, the axiom of choice, cardinal arithmetic, the continuum hypothesis. Propositional and first order logic. The completeness and compactness theorems. Decidability, Gödel's incompleteness theorems.