

5.00 credits

30.0 h

Q2

This biannual learning is being organized in 2026-2027

Teacher(s)	Catanzaro Daniele ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	Logic and algorithm <ul style="list-style-type: none"> • Logic, automata and context free languages. • Turing machines. Turing machines build on automata to make it possible to build more elaborate proofs. • Computability and Complexity theory. Does a problem have an answer? Is the problem well formulated? How can we determine a priori the level of difficulty of a problem? • Analysis of algorithms.
Learning outcomes	
Evaluation methods	Continuous evaluation <ul style="list-style-type: none"> • Date: <i>To be specify later</i> • Type of evaluation: <i>continuous assessment not remediable</i> • Comments: <i>In group/individual, written preparations, reading scientific articles, exercises, etc.</i> Evaluation week <ul style="list-style-type: none"> • Oral: <i>No</i> • Written: <i>No</i> • Unavailability or comments: <i>No</i> Examination session <ul style="list-style-type: none"> • Oral: <i>No</i> • Written: <i>No</i> • Unavailability or comments: <i>individual work at the end of the January session which can be represented in case of failure in the second session.</i>
Teaching methods	Methodological and theoretical lectures of teachers, accompanied by empirical studies illustrations, alternate with discussions and applications with participants. Teaching is based on reading of scientific articles and book chapters deemed essential to master qualitative and quantitative research methodologies in Management. Students are expected to summarize and present some of these and to discuss it in groups. The content of this course (for example Quantitative Research Methods) will be adapted to the level of advancement of students in order to follow them in their research projects.
Content	Logic and algorithm <ul style="list-style-type: none"> • Logic, automata and context free languages. • Turing machines. Turing machines build on automata to make it possible to build more elaborate proofs. • Computability and Complexity theory. Does a problem have an answer? Is the problem well formulated? How can we determine a priori the level of difficulty of a problem? • Analysis of algorithms.
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Management	GEST2M	5		