

Syllabus

Behavioral and Digital Economics for Effective Management (BDEEM)

Course title	Cooperative Game Theory
Teacher	Sylvain Beal
shared course	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, with
Hourly volume	15 HCM
Evaluation methods	Written exam
Course summary	The course aims at introducing the model of a cooperative game. This model allows to study various real-life situations of arbitration in which a joint cost or benefit has to be shared. The main solution concepts will be presented: the Shapley value and the Core.
Course knowledges	At the end of the course, a student should be able to: <ul style="list-style-type: none"> – model an economic problem by means of a cooperative game; – propose a relevant allocation method; describe the axiomatic method and its contribution to cooperative game theory.
General skills	Set Theory
Specific skills	Shapley value, Core, Equal Division, Equal Surplus Division, Equal Allocation of non-Separable Costs, Marginal Vector, Imputations, Axiomatic Method.