

# Syllabus

## Behavioral and Digital Economics for Effective Management (BDEEM)

Course title	Non Cooperative Game Theory
Teacher	Sylvain beal
shared course	No    X Yes
Hourly volume	15
Evaluation methods	Written exam or project
Course summary	<p>This course introduces the main tools of non-cooperative game theory. It starts by defining non-cooperative games and makes distinction between static and dynamic games, between games with complete and incomplete information. Then, some solution concepts are presented: strictly dominated actions, Nash equilibrium (in pure and mixed actions), subgame perfect Nash equilibrium. Economic examples, sometimes borrowed from other courses, are often used to illustrate these concepts. These includes market competition, negotiation, etc.</p>
Skills	<ul style="list-style-type: none"><li>- Be capable of distinguishing between static and dynamic games, as well as games with complete and incomplete information.</li><li>- Be capable of modeling economic and business situations as non-cooperative static games.</li><li>- Be proficient in constructing decision trees, including those with imperfect information.</li><li>- Be adept at computing the primary solution concepts in numerical examples.</li></ul>

