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

Course title	Theory and Practice of Auctions and Procurement
Teacher	François Maréchal and Karine Brisset
shared course	No X Yes, with Master e-achat
Hourly volume	24
Evaluation methods	Written exam
Course summary	This course provides a comprehensive analysis of firms' A huge volume of economic transactions is conducted through auctions. Governments use auctions to sell treasury bills, foreign exchange, mineral rights including oil fields, and other assets such as firms to be privatised. Government contracts are also typically awarded by procurement auctions, and firms buying inputs or subcontracting work often use procurement auctions. Different auction mechanisms are used in practice (oral auctions, sealed-bid auctions). This course presents the benefits and drawbacks of the different auction mechanisms, in terms of expected costs and efficiency as well as the vulnerability to collusion. Different environments are considered, such as single or multi-unit auctions and multi-attribute auctions.
Skills	At the end of the class, the student will be able to: Define the optimal bidding strategies of firms in different procurement auctions in order to compare the main auction mechanisms in terms of expected revenue and efficiency Analyze the impact of auction rules (e.g. reserve price, buy it now, fixed vs extended ending rule) in order to design an "optimal" auction Learn how to design auction rules Undersand the lessons from practical auction designs such as the FCC spectrum auctions in USA. Learn how to organize a multi-attribute procurement auction Learn how to organize a combinatorial procurement auction Learn how behavioral biases can have an impact on bidder's strategy in different auction designs