

Syllabus

Behavioral and Digital Economics for Effective Management (BDEEM)

Course title	Theory and Practice of Auctions and Procurement
Teacher	Francois Maréchal / Karine Brisset
shared course	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes, with E-achat, "Procurement E-auction: Theory and practices"
Hourly volume	21HCM + (3HCM with Mrs. Karine Brisset non-shared with E-achats)
Evaluation methods	Written exam and oral presentations
Course summary	<p>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 privatized. Government contracts are typically awarded by procurement auctions, and firms buying inputs or subcontracting work often use procurement auctions. In 2002, the French procurement regulation introduced the possibility of awarding the contracts by means of electronic reverse auctions. This course presents the benefits and drawbacks of electronic reverse auctions, 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. We emphasize that the optimal design of electronic reverse auctions is very sensitive to details. Then, we learn how to carefully design these auctions.</p>
Course knowledges	<p>Compare the main auction mechanisms.</p> <p>Compute the optimal bidding strategies of firms in different procurement auctions.</p>



	<p>Analyze the impact of auction rules (reserve price, buy it now, fixed vs extended ending rule...)</p> <p>Analyze the benefits and drawbacks of electronic reverse auctions</p> <p>Organize a multi-attribute electronic reverse procurement auction</p> <p>Organize a combinatorial electronic reverse procurement auction</p>
General skills	Auctions mechanisms, bidding strategies, auctions rules
Specific skills	Electronic reverse auctions, procurement auctions, multi-attribute auctions, collusion in auctions