





5.00 credits	30.0 h	Q2
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Teacher(s)	Ducarroz Caroline ;Sinigaglia Nadia ;
Language :	French
Place of the course	Mons
Prerequisites	/
Main themes	This course does focus on advanced quantitative methods and models that can help face Marketing issues. Starting from these specific issues that a company/organization may face, a set of statistical/econometric methods and models are thoroughly presented. Case studies are linked to digital marketing.
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>Competencies Given the « competencies referential » linked to the LSM <i>Master in Sciences de Gestion et in Ingéniorat de Gestion</i>, this course mainly develops the following competencies:</p> <ul style="list-style-type: none"> • 2. Knowledge and reasoning • 3. Scientific and systematic approach • 5. Work effectively in an international and multicultural environment • 6. Teamwork and leadership • 7. Project management <p>1 Learning outcomes At the end of this class, students will be able:</p> <ul style="list-style-type: none"> • Identify the type of method/model that is adequate for a specific Marketing issue; • Understand the mechanisms behind the methods; • Model the issue; • Master a wide range of advanced statistical/econometric methods and tools that can be used to collect and analyze primary and secondary data. Students will be able to apply each of the methods/models to a real case (by using a software specialized in quantitative methods, SAS Enterprise Guide), and then to interpret the results and formulate managerial recommendations to the company/organization. • Work in an international setting, with US native speakers and practice online collaboration.
Evaluation methods	<p>Students are evaluated by:</p> <ul style="list-style-type: none"> • a written exam (50% of the final grade - during the exam session - open questions) mixing theoretical methodological questions and deep thinking on a real issue linked to digital marketing (case on computer – SAS Enterprise Guide software) ; during the exam session • their report on the group project (Virtual Exchange – US and Belgian students mixed groups - 40% of the final grade - in English - to be handed in before the exam session); • their individual report (Virtual Exchange – 10% of the final grade - in English - to be handed in before the exam session) <p><u>More information on the Virtual Exchange (group project report and individual report) will be provided during the first class session.</u></p> <p><u>In case the student fails the course, only the "written exam" part can be improved (the grades linked to the group project and the individual report remain unchanged for all exam sessions of the current academic year).</u></p> <p>In case the Virtual Exchange cannot be implemented, the student's final grade will be made of a written exam only (mixing theoretical methodological questions and deep thinking on a real issue (use of SAS Enterprise Guide software).</p> <p>In case of exceptional circumstances given the sanitary crisis, the professors reserve the right to transform the exam methods (for example, switch from written to oral exam). Also, the professors may transform the written exam in an oral exam if less than 4 students are registered to the exam.</p>

Teaching methods	<p>Teaching methods and learning activities of this course are oriented toward: (i) learning the methodological rigor essential to use advanced statistical and econometric methods and models (rigorous knowledge and know-how); (ii) facing companies/organizations' reality through real case studies; (iii) facing challenges related to online collaborating with students from another country (USA), in a common project (virtual exchange).</p> <p>In concrete terms, sessions alternate lectures, discussions and case studies on real data linked to digital marketing. Each session is devoted to a specific model. From an issue faced by an existing company, a theoretical lecture is done and followed by an application on real data (case study and learning by problems), where students follow the process from A through Z (analyzing the issue, filtering useful information, choosing the method/model, analyzing data with SAS Enterprise Guide, analyzing results and making recommendations to the company). A last theoretical reminder is done</p> <p>Our collaboration with the Appalachian State University (North Carolina, USA) will have the students, grouped in mixed Belgian-US groups, work on a common project (Virtual Exchange) around the methods and models covered in class, in the context of a market study. New technologies will help them communicate. <u>Students are expected to be available to communicate with US students, also outside classical class schedules (given US time difference) and during Easter weeks.</u></p> <p>This course will be mainly taught on site, with some remote teaching activities though. The professors reserve the right to completely switch to remote teaching, following the sanitary situation</p>
Content	<p>This course makes students thoroughly think about how to model issues linked to marketing, and more specifically to digital marketing.</p> <p>More precisely, the main themes (which might slightly vary from one year to the next) are:</p> <ul style="list-style-type: none"> • Measurement tools in Marketing <p>* <i>Principal Component Analysis</i></p> <p>* <i>Reliability analysis of a measurement scale</i></p> <ul style="list-style-type: none"> • Customer segmentation <p>* <i>Clustering</i></p> <p>* <i>Discriminant analysis</i></p> <ul style="list-style-type: none"> • Probability of belonging to a group <p>* <i>Logistic regression (modelling)</i></p> <ul style="list-style-type: none"> • Perceived similarities between brands (in the context of a brand image study) <p>* <i>Multi-dimensional scaling techniques (MDS)</i></p> <ul style="list-style-type: none"> • Experimentation in Marketing (design and data) <p style="padding-left: 40px;">* <i>ANOVA analysis (with moderation effects)</i></p>
Inline resources	Moodle (Student Corner)
Bibliography	<p>Support de cours</p> <p>Le matériel pédagogique, à disposition des étudiants sur Moodle (Student Corner), est composé de :</p> <ul style="list-style-type: none"> • Slides (écrans Power Point) • Etudes de cas • Informations nécessaires au Virtual Exchange <p>Références bibliographiques recommandées, lectures conseillées :</p> <p>[1] CHURCHILL G., IACOBUCCI D. (2009), Marketing Research: Methodological Foundations, 10th ed., South-Western.</p> <p>[2] D'ASTOUS A. (2019), Le Projet de Recherche en Marketing, 6ème Edition, Chenelière Education.</p> <p>[3] EVRAD Y., PRAS B. et ROUX E. (2009), Market: Fondements et Méthodes des Recherches en Marketing, 4ème Edition, Dunod, Paris.</p> <p>[4] C. DUCARROZ, I. PONCIN, A. JOLIBERT (2021). Chapitre 9 – Les analyses de variance univariée et multivariée. In Delacroix, E., Jolibert, A., Monnot, E., & Jourdan, P. (Eds.), Marketing Research (2nd Ed., pp 269-298). Dunod</p> <p>[5] I. PONCIN, N.SINIGAGLIA, A. JOLIBERT, P. JOURDAN (2021). Chapitre 11 – L'analyse typologique et l'analyse discriminante. In Delacroix, E., Jolibert, A., Monnot, E., & Jourdan, P. (Eds.), Marketing Research (2nd Ed., pp 321-356). Dunod.</p> <p>[6] MALHOTRA N.K., NUNAN D., and BIRKS D. F. (2017), Marketing Research: An Applied Approach, 5th Edition, Pearson Education Limited.</p> <p>[7] VERNETTE E., FILSER M., et GIANNELLONI J-L. (2008), Etudes Marketing Appliquées, Dunod, Paris.</p>
Faculty or entity in charge	CLSM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] : Business Engineering	INGM2M	5		
Master [120] in Management	GEST2M	5		
Master [120] in Business Management	GENT2M	5		
Master [120] in Management	GESM2M	5		
Master [120] : Business Engineering	INGE2M	5		