

EMBA-2325-126-Business Analytics		
Name of lecturer(s) & Email Gisèle Hites ghites@gmail.com	Level/Semester, Status, Timing Level 3 Elective Course Between 05-12-2024-08-12-2024	ECTS*, CH & SDL** 3 24 66
Description of the course The future is uncertain. But a little data collection and a little data analysis can help a whole lot in managing the risks that the future holds in store for us. This course focuses on those quantitative methods that can concretely assist managers in making decisions under uncertainty. This is not a theoretical course. All quantitative methods are presented using concrete business scenarios and are implemented using tools available within the Excel environment. The objective is to equip managers with simple tools that they can easily implement to improve decision-making.		
Course units • Spreadsheet modeling and analysis • Monte Carlo simulation and risk analysis • Linear optimization		
Course Learning Outcomes (CLOs) 1. Use data-driven approaches to develop predictive analytical models 2. Develop, implement and analyze Monte Carlo simulation models 3. Set up and solve linear optimisation problems 4. Build linear optimisation models for a variety of applications 5. Use the following Excel tools to implement the methodologies mentioned above: Goal Seek, Regression, Risk Solver Platform, Scenario Manager, Solver, Trendline, XLMiner		
Teaching Activities (TAs) Interactive Lecture	Learning Activities (LAs) Readings, Lectures, In-class exercises, Group work on textbook problems, Case study	
Contribution to Programme Learning Objectives (PLOs)*** <ul style="list-style-type: none"> • Learning Objective 11: Reinforcement • Learning Objective 12: Introduction • Learning Objective 2.1: Not Covered • Learning Objective 2.2: Introduction • Learning Objective 3.1: Reinforcement • Learning Objective 3.2: Not Covered 	Assessment methodology / Learners Use of Time and Load Class Participation and preparation <ul style="list-style-type: none"> • weight 10% • workload estimated = 20 hours • due 08-12-2024 Group assignment <ul style="list-style-type: none"> • weight 40% • workload estimated = 20 hours • due 22-12-24 Individual assignment <ul style="list-style-type: none"> • weight 50% • workload estimated = 50 hours • due 12-01-25 	
Evaluation scale 0-20		
Contribution to the Environmental, social and governance (ESG) Course Contribution to ESG: No		
Readings Required Business Analytics: methods, models, and decisions (Global edition, 3rd edition) James R. Evans Optional Naked Statistics: stripping the dread from the data, by Charles Wheelan; Big Data: a revolution that will transform how we live, work, and think, by Viktor Mayer-Schonberger & Kenneth Cukier; The Signal and the Noise: the art and science of prediction, by Nate Silver		
Other Learning Material(s) Required (Available on your Coursera for Campus) Set up google analytics for a single page website; Create an A/B web page marketing test with Google Optimize; Building Custom Regional Reports with Google Analytics		

Notice: The information available in the course outline is subject to change. Please keep yourself informed at all times by regularly checking Canvas.

*ECTS - European Credit Transfer and Accumulation System (1 ECTS = 30 hours of learning)

**CH - Contact Hours in class or online, SDL - Self-Directed Learning including readings, homework, group work, preparation to assessment, etc

***PLO - Programme Learning Objectives are available on the curriculum page