

DESCRIPTION OF ELECTIVE COURSE

Name of the school : Haute école de gestion de Genève	Academic Year: 2022-2023

FIRST PART: DESCRIPTION OF THE MODULE		
1. Domain	Business and Services	
2. Department	International Business Management	
3. Course name	Business Decision Support	
4. Code	30913 + 30923	
5. Type of education	 ☑ Bachelor ☐ Master ☐ MAS ☐ ☐ DAS / CAS / single days 	
6. Number of ECTS Credits	9 per semester for each biannual module	
7. Prerequisites	 ✓ Validation of the modules in semesters 1 and 2 ✓ Attendance of the modules in semesters 3 and 4 for full-time students, and semesters 5 and 6 for part-time students ✓ 	
8. Teaching language	☐ French ☐ German ☑ English ☐ Other:	
9. Objectives	As a future Business Professional, you will play a key role in the strategic decisions that shape the direction and success of your organization. Gain the advanced skills needed to define and execute business strategies effectively: The course is split into 4 parts:	
	Fall semester - Design Thinking and Creativity	
	Design Thinking can be used to optimize, transform or create products, services and processes alike. Practiced in multi-disciplinary and non-hierarchical teams, Design Thinking also enables organizations to collaborate better and more in-between departments, and to become more agile overall. When used regularly, Design Thinking tools bring a change of mindset to an organization and contribute to its increased adaptation to our VUCA (volatile, uncertain, complex, ambiguous) world.	
	During the course, we will cover the underlying principles and key steps of the DesignThinking approach, and take a deep-dive into each of its four phases: Discovery, Definition, Ideation and Prototyping. Thanks to a mix of theory and	



practice, participants will learn how to understand user needs in-depth, using different elicitation techniques, before moving to solutions. Participants will then learn how to come up with innovative solutions using structured brainstorming and idea prioritization techniques, before testing these ideas with users.

The course equips participants with the concrete tools to tackle complex by taking all stakeholders into account, which will serve them well for their career, independently of the path chosen (business analysis, project management, general management, entrepreneurship, etc.)

At the end of this course, students should be able to:

- Understand the overall approach and underlying principles of the Design Thinking approach.
- (Re)frame challenges and issues in a human-centered way.
- Gain a deep understanding of users' needs before moving to any solution.
- Acquire a tool box of different elicitation techniques (user journeys, observations, in-depth interviews, etc.)
- Alternate different ideation techniques (analogous, asynchronous, constraint, crazy, 6-3-5 brainstorming, de bono hats, SCAMPER method)
- Know how to create and test a solution prototype via different techniques (storyboard, role plays, wizard of oz, etc.)
- Understand its links with sister approaches (Value Proposition Design, Lean, Scrum, Design Sprints, Business Model Canvas, etc.)

Fall Semester - Business Agility

Agility is a concept that is very often used (in the corporate world, in the media, etc.) but not always well understood, and even less often fully applied. The purpose of this course is to cover the different aspects of Business Agility and what they mean for an organization, and for the participants as professionals.

"Resilience, stress tolerance and flexibility" are among the top 10 skills the World Economic Forum anticipates to be critical by 2025. The reason is very simple: our world has become VUCA (volatile, uncertain, complex and ambiguous) and the level of agility of an organization can very well decide its fate. For instance, out of the 500 large companies composing the Fortune 500 index in the USA when it was created in 1965, only 12% of them were still in the same index 60 years later. This course will give you concrete tools to be agile, both at individual and organizational levels.

The learning will be based on a mix of theory, interactive discussions and exercises, and will have a strong component of teamwork.

Spring semester – Data analysis and forecasting

As a future business professional, you will play a key role in the strategic decisions that will shape the direction and success of your organization. Whether you will be aiming at becoming a Business Consultant, a Business Analyst, a Manager or an Entrepreneur you'll need to be able to make the best decisions for your organization, based on data. As the production of new data follows an exponential growth data analysis and forecasting skills are becoming a key requirement for future



professionals. This is why the goal of this elective is to give you a toolbox of methods that will serve you throughout your career and will help you:

- Assess data quality, identify validation rules and understand its structure to prepare it for further analysis;
- Extend the knowledge that can be derived from a database by combining it with third party data sources in the same analysis model;
- Extract information from geographical datasets;
- Analyze with appropriate statistical techniques the characteristics of a company;
- Forecast quantities relevant to the future of the company activity;
- Design a business dashboard; extract the information, present results to various stakeholders, define indicators for several internal or external purposes;
- Prepare, manipulate and present data with Excel, Tableau Desktop and Tableau Prep.

In order to reach these objectives, the course will focus on practical use and interpretation of statistical and visualization methods. Based on use cases, students will learn which tool and method to apply to each situation.

Spring semester - Applied Business Analysis and Problem Solving

This course will provide students with the opportunity to apply and deepen three domains that are key for your future professional success as decision-makers, be it as a Business Consultant, a Business Analyst, a Manager or an Entrepreneur:

- 1) Business Agility
- 2) Design Thinking
- 3) Business Analysis (based on the BABOK reference book)

Many of these practical works will be carried in teams, allowing you to practice teamwork and leadership, to experience divergent thinking and to discover the fun and power of collaborative work.

10. Contents

(General themes and descriptions, the accurate content may change)

Fall Semester – Design Thinking and Creativity

- Introduction
- Discovery Phase, including elicitation techniques
- Definition Phase
- Ideation Phase
- Prototyping and testing Phase
- Links with sister approaches

Fall Semester - Business Agility

- Introduction
- A perpetually changing business environment
- Business agility definition and principles
- Organizational alignment



- Management styles
- Business analysis
- Project management
- Managing a change

Spring semester – Data analysis and forecasting

This part of the module will start with data preparation. Tableau Prep will be used to automate a data transformation process combining different sources of information into a clean dataset ready for analysis. Then the analytical part will focus on the use of Tableau Desktop's latest features to build models based on geolocated datasets and interactive dashboards.

The statistics section of the module will be mainly focused on building a time-series forecast using real data from a SME in the distribution business. The forecast project will involve data analysis and cleaning, preparing and organizing the data in Excel, calculating the forecast and setting stock levels for every product.

Spring semester - Applied Business Analysis and Problem Solving

- Practical exercises and short cases based on the IIBA (International Institute
 of Business Analysis) internationally recognized content. HEG is an official
 partner of the IIBA, and as such, students have the option to take the ECBA
 (Entry Certificate in Business Analysis) exam at the end of the semester, if
 they wish to do so.
- Over the course of the semester, students will acquire the fundamentals of Business Analysis, learn the common language of this discipline, discover the reference guide in Business Analysis (BABOK 3.0), and understand of the main activities, techniques, tools and behaviors of the Business Analyst function.
- In addition, students will practice their business agility, design thinking and business analysis skills in a semester-long real-life application case that will be provided by one of the HEG partner organizations. It is an unparalleled opportunity for students to step into the shoes of external consultants for a client with a real business challenge to be solved, and their acquired experience is recognized by a work certificate at the end of the semester, awarded by the client organization.
- Participants shape and structure the problem and its solution(s) by identifying
 and applying the appropriate tools and techniques. At the end of the
 semester, they present their findings and recommendations to a professional
 jury to receive feedback, on top of submitting a written report.

11. Evaluation

The grading of the module shall be based on:

- A written exam in week 16 of the semester; and/or
- Mid-term assessments during weeks 1 to 15 according to the decision of the instructor.

(The methods and weightings are communicated by the instructor before the evaluations)



12. Remediation/repetition	 ☑ Compulsory remediation if the module grade is between 3.5 and 3.9 / 6. When subject to a remediation, only the grade of the remedial exam will be taken into account (maximum grade 4.0). A repeated module cannot benefit from a remedial exam. ☐ No remediation 	
13. Coordinator / main instructor	Alexandra Marcoin-Karacsonyi	
SECOND PART: LOCATION OF THE MODULE IN THE STUDY PLAN		
14. Level	 ☐ Basic module ☐ Advanced module ☑ Specialized module ☐ Other: 	
15. Characteristics	Module is mandatory (which could lead to final dismissal from the program, cf. art.15, al.1, « Statut des étudiant-e-s bachelor »)	
16. Type		
17. Time organization	 ✓ Module over 1 semester ✓ Module over 2 semesters ✓ Spring semester ✓ Fall semester ✓ Other 	