IESE Business School University of Navarra Executive MBA

Decision Analysis (4 ECTS)

Introduction

Making decisions is a crucial element of a manager's job. Good decision-making matters. It matters to the decision maker and his or her surroundings, to other people in the organization and to all of society. This course is designed to help you improve your ability to make good decisions in the context of an uncertain and complex world.

Objectives

Managers often face decisions in a cloud of ambiguity, with uncertain consequences that extend over time. Do managers deal correctly with such problems? Many only use intuition and overall some are successful but many are not. The objective of this course is to foster certain habits and give you a tool-box of methods that lead to well-structured decisions, taking into account human cognitive imperfections. This involves improving analytical skills and educating intuition.

By the end of the course students will be able to: (i) understand the structure of a decision problem; (ii) understand the concepts of sensitivity analysis and the value of information; (iii) be able to apply Monte Carlo simulation to business problems; (iv) understand people's attitudes towards risk and its implications for managers; (v) be familiar with the most frequent psychological biases in the decision making process; (vi) and identify flaws in our spontaneous judgment, that can produce a poor decision.

Content

The course is divided in four parts: (1) Introduction and classical techniques, which include decision structuring, decision under uncertainty, risk attitudes and the value of information (2) Scenario simulation, (3) Production decisions and (4) Group decision-making. Within the parts, we will address both analytical and psychological aspects.

Evaluation

SE3 (Writing exam): 50%
SE4 (Class participation): 50%

Competences

Basic

CB6. Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

CB7. The students know how to apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their area of study.

CB8. The students can integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities linked to the application of their knowledge and judgments.

CB9. Students know how to communicate their conclusions and the knowledge and ultimate reasons that support them to specialized and non-specialized audiences in a clear and unambiguous way.

General

CG2. Identify, address, and resolve interpersonal conflicts promptly and deeply without damaging the personal relationship, both within the organization and in its immediate environment of stakeholders (shareholders, customers, suppliers, etc.)

CG4. Understand and apply the mechanisms that generate an environment of collaboration, communication, and trust between the members of a team or organization.

CG7. Effectively distinguish and categorize relevant information for business decision-making.

CG9. Interpret the global context to analyze and judge the threats and opportunities for the organization.

CG11. Formulate and evaluate business strategies in decision-making, anticipating the economic consequences of action plans.

Specific

CE01. Apply a structured and rigorous process of analyzing business situations that integrates all the business dimensions (personal, strategic, financial, etc.) and concludes with a reasonable and feasible action plan.

CE02. Prepare structured, synthetic, and clear executive reports for the analysis and decision-making of business situations.

CE04. Transfer quantitative optimization tools to unstructured business environments with uncertainty to help decision-making.

CE05. Measure and become aware of the personal attitude towards risk and uncertainty through methodologies to identify risk factors, evaluate them, and study their impact on decisions. Some of the methodologies are based on sensitivity studies, advanced simulations, and scenario analysis.