

Dealing with Informational Complexity

Courses of the Module

Managing Complex Decisions (Saturday-Monday)
Knowledge Management (Tuesday-Thursday)

Contact Hours: 48 hours
6 ECTS

Module Objectives

The goal of GGS's MBA programme is to provide knowledge and skills from different academic disciplines so that students are equipped to manage businesses in a global environment successfully and in a socially responsible way. The current module serves the goal of the MBA programme by teaching students knowledge and skills in **dealing with informational complexity**.

The module consists of two courses. The course on **managing complex decisions** focuses on several commonly applied decision making tools in everyday business that can be used to improve the quality and reliability of management decisions. Topics include the interpretation and assessment of information to solve complex problems using quantitative methods such as linear programming for decisions under certainty, tables and trees for decisions under certainty, and scheduling and simulation techniques for the management of complex projects. In the **knowledge management** course, students will learn about the creation and communication of knowledge both within and across organisations, the sharing of product development expertise, improving competitor intelligence and the dissemination of best practices.

Learning Goals Contributing to MBA Qualification

Upon completion of this module, students will have the following competencies and skills:

Knowledge and Understanding

Students will have demonstrated knowledge and understanding of the significant roles that the management of knowledge and applied quantitative tools from the decision sciences play in maintaining an organisation's competitive edge.

Application Skills

Students will be able to assess and contribute to the design of a knowledge management system in an organization. Students will also be able to use quantitative tools to solve problems and make decisions.

Systems Skills

Students will be able to integrate disparate knowledge and complex information about knowledge management and quantitative decision-making tools. Students will be able to formulate judgements with incomplete or limited information and to reflect on the social and ethical implications of the applications of their knowledge and judgements. In addition, students will be able to autonomously acquire new knowledge and skills, and independently perform research-oriented or application-oriented projects relating to knowledge management and the management of complex decisions.

Communication and Social Skills

Students will be able to clearly communicate their conclusions about situations which involve knowledge management, the management of complex decisions and the underlying knowledge and rationales of their conclusions to specialist and non-specialist audiences. In team contexts, students will function effectively in leadership as well as in supporting roles.

Module Content

Main topics to be covered in the Managing Complex Decisions Course

The Big Picture

- Operations Strategy: Process Selection
- Process and Capacity Analysis
- Facility Location and Layout

Making Decisions under Uncertainty

- Decision Analysis (Tables and Trees)
- Decision Analysis and Simulation
- Analytical Hierarchy Process

The Management of Projects

- Introduction
- Project Management Techniques
- Project Management Simulation

Within this framework you will learn about:

- Analytical Hierarchy Process
- Decision Analysis
- Capacity Decisions
- Facility Location
- Facility Layout
- Multi-criteria Decision Making
- Process Analysis and Selection
- Project Management (PERT/CPM)
- Root Cause Analysis
- Simulation
- Waiting Lines

Topics to be covered in the Knowledge Management Course

- Introduction to Knowledge Management
- The Knowledge Management Cycle
- Knowledge Management Models
- Knowledge Capture and Codification
- Knowledge Sharing and Communities of Practice
- Knowledge Application
- The Role of Organizational Culture
- Knowledge Management Strategy
- The Value of Knowledge Management
- Organizational Learning and Organizational Memory
- The Knowledge Management Team