Management Engineering

Introduction to the manager and the management process in the context of organizations and society. Focus on effective management of the corporation in a changing society. Action through processes and/or sequences of tasks and activities, which involve dynamically, multiple departments and actors. Analysis of the basic managerial operations namely, planning/design, organization, direction and control of managerial processes. Systems theory and cybernetics in management. Introductory concepts in management: performance measurement and productivity, leadership, communication skills, motivation, management of human resources. Management as art and management as a science: the role of decision-making in managerial tasks. Effective managerial decision-making with the aid of quantitative methods and techniques. Management and the role of uncertainty and complexity. Strategic analysis with the aid of probabilistic decision trees. Introduction to decision analysis for managers: from the concept of the expected monetary value, to utility theory, subjective probability and sensitivity analysis.