

Operations Research

The course is an introduction to the basic concepts of OR. It provides an understanding of how scientific approaches and tools can be used in real-world problem solving and decision making. The students will be familiarized with the significance as well as the natural importance of restrictions, parameters, variables and objective function. They will learn to formulate, analyze and solve deterministic mathematical models that represent real-world problems in which no uncertainty exists. Upon completing the course, the students will have the skills to build their own formulations, to expand existing formulations, to critically evaluate the impact of model assumptions, to choose an appropriate solution technique for a given formulation, to obtain a solution, to interpret the solution, to perform sensitivity analysis and to implement the solution.