

A7: Metaheuristic-Based Intelligent Search

In recent times, a growing interest in developing methods to solve complex optimisation problems has been observed. Following the success of metaheuristics such as evolutionary algorithms, simulated annealing, tabu search and others in the uniojective optimisation area, many researchers have proposed the extension of metaheuristics to the multiobjective field.

The aim of this module is to present the basic lines and some of the recent developments in this field of metaheuristics algorithms for the case of both one and several objectives. We will show that for a given problem there exist alternative methodologies and that the nature of these methods encourages the analyst to modify or adapt any of the approaches that could be chosen, showing that aspects such as particular characteristics of the problem, past experiences and personal preferences are an aid to the final choice.