Examination timetabling problem like all scheduling problems are NP-hard problems in which the complexity and time needed to solve the problem increase with the problem size. This paper aims to compare Genetic Algorithm and Tabu Search approaches to solve this kind of problem. Both algorithms were tested with regard to the quality of generated timetables and the speed
with which the timetables are generated using collected test data. The test shows that though both algorithms are capable of handling the examination timetabling problem, the Tabu Search approach can produce better timetables than Genetic Algorithm, even at a greater speed.

Reference

Index Terms

Computer Science
Intelligent Systems

Key words

Chromosome
Examination timetabling
Genetic

Algorithm
Tabu Search
Generation