

Abstract

Lectures timetabling is one of problems that often faced on every universities. Each universities have their own policy on forming lecture timetables, and each universities consider different problems. In the case of scheduling optimization, the most popular method used is the heuristic methods such as genetic algorithms. On this research discussing about implementation of hybrid adaptive genetic algorithm with artificial bee colony algorithm method to solve the lectures timetabling problems in Telkom University Bandung. The data that used on this research is first year student's courses data as well lecturers lecturing timetable for first year's courses in Telkom University Bandung's Faculty of Engineering. Based on testing, from the implementation of hybrid genetic algorithm with artificial bee colony algorithm method resulted fitness value and reached solution(timetable without conflict) of 0.0021 and 87.67%, respectively. Those results are better than using genetic algorithm method resulted fitness value and optimal solution of 0.0013 and 76.67%, respectively.

Keywords : adaptive genetic algorithm, artificial bee colony algorithm, timetable, hybrid