

ABSTRACT

APPLICATION OF PARTICLE SWARM OPTIMIZATION ALGORITHM IN SUBJECT SCHEDULING

The need for good scheduling is in various places, such as factories needing production schedules, schools need learning schedules, while universities need class schedules. Scheduling of lectures is carried out by the head of each study program. After obtaining information from the lecturers, then each study program chairman arranged the class schedule. After that, the schedule of each study program will be combined with other study programs by the Head of Administration of the Faculty of Business and Accounting (Ka Tu Tu FBA). The problems that arise in the process of combining the scheduling of courses at the Faculty of Business and Accounting are teaching lecturers, spaces, and courses that are often scheduled at the same time even known during the period of filling out the study plan by students. This scheduling problem can be made easier if there is a system that can arrange the schedule automatically while taking into account the existing factors. The application of the particle swarm optimization method for scheduling can be one of the solutions to FBA scheduling problems.

Keywords: Scheduling, Courses, Particle Swarm Optimization