ABSTRACT

To obtain a bachelor's degree from a college, a student must complete several requirements, one of these requirements is to develop a final project. The final project will be tested in a final trial that will be tested by several lecturers. From the large number of students at a university, then final assembly timetabling problem becomes a complex problem faced by the university. Some common problems are influenced by several factors, namely the number of final job titles listed in one period of the trial, scheduled lecturers, selection of the appropriate examiner for the final project to be tried, schedule the examiner, and the slot time and room available. In this final project this time will be used Ant Colony Optimization to schedule a final project in the trial period. Ant Colony Optimization will represent scheduling as a graph, and an ant in this method will result in a solution of each iteration schedule. The tests will be performed on this method is to find the best parameters α and β to obtain optimal solutions.

Keywords : final assembly timetabling, ant colony optimization, graph, ant.