

## **Abstract**

Timetabling scheduling at university is a complex problem, because of many things that need to be considered such as clashing lecturer, lecturer distribution schedules, class clashes, clashing room, and so forth. There are rules in this case. And these rules are divided into 2 types, namely hardconstraint and softconstraint. Hard constraint is the rule that should not be violated and softconstraint is the rule that should not be violated. Cat Swarm Optimization algorithm is a method of optimization has been used to build a system that can solve the course scheduling problem. In this study, the system discovers best combination for parameters.  $SMP = 6$ ,  $SRD = 0.1$ ,  $CDC = 0.1$ ,  $MR = 0.02$  and  $C1=1$ . Those parameters are being bused with 4 datasets. These various dataset has diffrent value. It means that CSO can produce lower fitness at various dataset, but the result still not produce optimal result (100%).

**Keywords:** university timetabling, Cat Swarm Optimization Algorithm (CSO)