Goal programming approach for course-timeslot timetabling problem

ABSTRACT

The aim of this study is to develop a goal programming model for course-timeslot timetabling problem. Constructing a timetable is considered as a difficult task. This is because it considers multiple decisions and objectives such as the institution's availability, objectives, timeslots, and capacity of classrooms. Therefore. this study will develop a course-timeslot timetable in Faculty Science and Natural resources (FSSA), Universiti Malaysia Sabah. The models seek to assign courses with allocated timeslots. In addition, with the aim of finding the optimization solution, the models are solved by using a software, called LINGO. The results shows that the model has the capability to solve the coursetimeslot timetabling problem by satisfying all the constraints with regard to the courses offering and timeslots availability so that every course can be assigned to the most suitable timeslots.