

THESIS TITLE	AUTOMATIC SCHOOL TIMETABLE SCHEDULING USING GENETIC ALGORITHM
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### **ABSTRACT**

The timetable is one job in the school by using more experience people in scheduling for checking many constraints and conditions. This thesis presents the automatic school timetable scheduling that automatic generates the timetable and checks each predefined condition. It applies Genetic Algorithms to emulate the natural biological evolution of natural selection and employ the genetic operation theories. In this application, the timetable parameters; teachers, classes and periods of teaching are coded into the chromosome structure. The initial chromosomes are generated for natural selection to calculate the fitness value by checking all of the constraints in each chromosome table and select the high fitness value for genetic operation. The recombination of chromosomes will create the new group for each generation. The evolution processes will generate the better chromosome timetable.