

UNIVERSITI TEKNOLOGI MARA

**Exam Hall Allocation Using Genetic
Algorithm**

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ABSTRACT

Scheduling the use of the examination hall is very important to ensure that examinations run smoothly. In UiTM Kuala Terengganu the Academic Affairs Division is responsible for creating the examination allocation schedule in every semester. The issues faced in creating the schedule of exam hall allocation are relating to the capacity of exam halls, the number of exam days, the number of students, the number of courses, and the examination constrain that need to take into consideration in assigning a suitable exam hall in the time slot. There are several of objectives for this project, the first objective is to identify problems in developing the exam hall allocation schedule. The second objective is to develop a system to construct the exam hall allocation using a genetic algorithm and the last objective is to evaluate the functionality of the exam hall allocation system. In this project an automated exam hall allocation prototype was developed using the genetic algorithm since this algorithm is commonly used to produce high-quality optimization solutions. The functionality test was conducted after prototype was completed.

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