

# Dadi Institute of Engineering & Technology



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## **Optimal Time Table Generation Using Genetic Algorithm**

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**Abstract.** This paper is regarding generating class time tables using Genetic Algorithms at schools, colleges or Universities. The idea of this project is to introduce Genetic Algorithm first and secondly, to apply it to solve the problem of timetable arrangement. The idea is to define what Genetic Algorithms is and how it is performed in generating optimal time table, and to make a prototype of an automated timetable scheduling system without using the classical method but by using the approach of Genetic Algorithm method. The uses of this method are simplified design and reduced development and maintenance times in the face of dynamically evolving environments.

**Keywords::** Population, Fitness function, Crossover Evolution, Mutation, Genetic Algorithm, Timetable Generator, Heuristic approach.