

## ***ABSTRACT***

*Subject scheduling in schools is a complex challenge in education management, especially at the junior high school level. Manual processes are often time-consuming and error-prone, which can reduce learning efficiency. This study aims to optimize subject scheduling at SMP Negeri 2 Juntinyuat by developing a web-based academic information system using a genetic algorithm. This algorithm was chosen because of its ability to find optimal solutions through selection, crossover, and mutation mechanisms to meet various criteria, such as avoiding schedule clashes, adjusting the teacher's teaching load per week, and placing heavy lessons at optimal hours. This study uses the waterfall method to analyze, design, design and implement the system. The academic information system built facilitates centralized and real-time management of schedule data, allowing schools to manage schedules more efficiently. In addition, the implementation of the academic information system can improve the efficiency of schedule management, provide a better learning experience for students, and facilitate academic administration.*

*Keywords: information system, subject scheduling, genetic algorithm, web*