Abstract—Thesis examination is one of the requirements to complete a graduation course. At the Department of Informatics Engineering Universitas Surabaya, thesis examination begins with organizing the exam timetable to determine the time, examiner, and room by using traditional scheduling system. The disadvantage of the system is that the process takes a relatively long time, which is influenced by factors such as the lecturer's work schedule and the availability of the room. Program coordinator responsible for the organization of the thesis timetable must perform a thorough analysis so that the schedule does not clash with the teaching schedule and the availability of the room. In addition, the number of lecturers as examiner between one and the other has to be distributed equally. To facilitate the program coordinator, a web-based system using genetic algorithm was developed for the efficiency of thesis examination timetabling. Testing and evaluation process are conducted by taking a random respondent in accordance with the user category. The results show that the system developed can improve the efficiency of time, effort, and cost.

Keywords— Genetic Algorithm, Thesis Examination Timetabling.