ABSTRACT

SCHEDULING OF GRAPH COLORING WITH WELCH POWELL ALGORITHM IN COURSES

(Case Study at Faculty of Sciene and Technology Katolik Musi Charitas University)

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The problems faced by FST UKMC Palembang is no constraint in scheduling courses. During the course prepared by trial and error. Schedule try these results make a loss on the part of students. Students should be able to take 24 credits, due to conflicting schedules so they could not take while 24 credits. It is intended the clash, lecturers, space, and time slots on the schedule drawn up by trial and error. To answer these problems do scheduling with graph coloring method using Welch algorithm Powell. The data used in the study are the data subjects Prodi afternoon classes the first semester Industrial Engineering, Information Technology, and Information Systems. The results obtained with the scheduling of graph coloring method using Powell Welch algorithm generates optimal schedules more than the previous method, in which the lecture schedules optimized on Monday until Saturday did not clash. Results obtained in the form of a course schedule table neatly arranged and no subjects that have the same lecturer, has the same classroom, and are in a semester that collide.

Keywords: scheduling, lecturers, courses, indoor, graph coloring algorithm powell welch