

# Administrative Decision-Making Model for Faculty Scheduling

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**Abstract:** One decision-making activity in educational institutions is the class scheduling. Previous researches on faculty scheduling showed some weaknesses such as decision variables were limited to two or three factors comprising of the faculty members, courses and time period; faculty members were given predetermined courses as their schedule; and schedule of classes was predetermined by assigning a given day-set and time period for the courses. Given these limitations, the research intends to undertake the following improvements: a) consider four factors in the decision variables such the faculty member, courses, day and time period; b) assigning of time period for scheduling of classes will be determined from the results of the optimization solution using goal programming algorithm; and c) faculty members will not be assigned specific courses to be scheduled but their assignment will come from the results of the optimization solution. Three goal constraints were considered and prioritized. Results of the model were generated using the optimization software. The findings of the study revealed that administrators might find options in dealing with scheduling of faculty members of an educational institution and can provide administrators rationality in decision-making.

**Keywords:** *Faculty scheduling, goal programming, multiple conflicting objectives, decision-making process*