

**UNIVERSITI TEKNOLOGI MARA**

**TECHNICAL REPORT**

**OPTIMIZATION OF ALLOCATION OF  
DRIVERS IN TRANSPORTATION USING  
LINEAR PROGRAMMING**

**P4M19**

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IN THE NAME OF ALLAH, THE MOST GRACIOUS, THE MOST MERCIFUL

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## **ABSTRACT**

The scheduling of workers is very important in any organization. In addition, proper scheduling of workers will enhance the outcome of the company. In this paper, the scheduling of drivers for a bus company in Segamat, Johor is considered. By using linear programming, the objectives of this research which are the allocation of number of bus drivers needed in each day for a week and each shift in a day was calculated. In this study, the problems were executed using LINGO 18.0 software. Here the constraints considered include the minimum number of bus drivers required for each day and in each shift, number of days the bus drivers should be working in a week and the amount of shift that the bus drivers need to cover for each day. The optimal number of bus drivers for each day in a week and each shift in a day was obtained after executed using LINGO 18.0. The result obtained is then validated by comparing the result with the actual datas collected from the bus company in which the result fulfils the company's requirements.