

UNIVERSITI TEKNOLOGI MARA

TECHNICAL REPORT

**ASSIGNMENT PROBLEM ON EXAMINERS ALLOCATION
FOR FINAL YEAR PROJECTS STUDENT BY USING
HUNGARIAN METHOD APPROACH**

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ABSTRACT

The final year project is an integral part of the academic curriculum at University Technology MARA (UiTM) and serves as a culminating experience for students pursuing each undergraduate degree. This acts as a capstone opportunity for those seeking undergraduate degrees. It was difficult to allocate examiners based on their areas of expertise; therefore, systematic scheduling was needed to optimize examiners' allocation for the evaluation of final year projects. This study gives the allocation of examiners for final year projects (FYP) in the College of Computing, Informatics and Mathematics at UiTM Seremban. The purpose of this study is to analyze examiners data based on the area of expertise using qualitative analysis and to optimize the allocation of examiners based on their areas of expertise and students' project topics using the Hungarian algorithm. The Hungarian Method was used to find the optimal solution using data from the lecturer's expertise. The results that were obtained from surveying and interviewing lecturers were used to find and rate examiners' expertise and the Hungarian method was formulated. The results were presented in the form of charts that show the expertise of lecturers in five categories which are pure mathematics, mathematics management, applied mathematics, financial mathematics, and fuzzy mathematics. The results were compared to manual results from the previous semester as it showed the accuracy of the mathematical model used. This study was helpful in allocating the right examiners based on their field expertise. Additionally, this study could serve as a guideline for other researchers to study the problem of examiner allocation.