

UNIVERSITI TEKNOLOGI MARA

**IMPLEMENTATION IN MONITORING OF AN
UiTM BUILDING BY USING GNSS & TOTAL
STATION TO ENSURE THE SAFETY OF FUTURE
GEOMATIC LABORATORY**

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Thesis submitted in fulfillment
of the requirements for the degree of
Bachelor Science of Geomatics

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AUTHOR'S DECLARATION

I declare that the work in this thesis/dissertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

Deformation monitoring is method to identify the safety of engineering structures. It is very important because of every year new engineering structure has been built. The purpose of this study is to investigate the status of the existing building. The area of study is take place in UiTM Perlis at Al-Farabi 3 Block B. Basically, monitoring can be done by conventional geodetic method which by using Total Station. Besides that, GNSS technology also be apply during this monitoring is perform. GNSS capable to offer three-dimensional results compare conventional. Both are need to establish control points to ensure the measurement is verify with reference points. Plus, establishing target points are also needed for conventional observation made by Total Station. After manage to observe both techniques, the results achieved and can be compare to identify the differences for both results. Therefore, result of redundant readings of observation from conventional and modern method are manage to conclude that whether the building is safe to be occupy.

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