



**CENTRE OF STUDIES FOR QUANTITY SURVEYING
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**THE COMPETENCY OF QUANTITY SURVEYOR'S
GRADUATE SKILL IN UTILIZING BIM BASED COST
ESTIMATION SOFTWARE IN CONSTRUCTION INDUSTRY**

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SKILL IN UTILIZING BIM BASED COST ESTIMATION
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Dissertation submitted in partial
fulfilment of the requirement for the
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DECLARATION

"I declared that this dissertation is the result of my own research and that all sources are
acknowledged in the references

Student's signature :.....

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Date :.....

ABSTRACT

This research investigates how Quantity Surveyor (QS) graduates use Quantity Takeoff (QTO) and takeoff software in the construction industry. As technology becomes increasingly important in construction, tools like QTO and takeoff software are essential for cost estimation, measurement, and project control. However, recent QS graduates often struggle with these tools due to a lack of advanced skills, particularly in project management and technical analysis. This skills gap poses a challenge for construction firms that require technologically proficient staff to manage projects effectively. The study aims to achieve two objectives: first, to identify the most popular takeoff software among QS graduates, and second, to evaluate their operational expertise with these tools in real-world situations. To gather data, questionnaires were distributed to QS firms in Selangor, targeting both recent graduates and experienced professionals. The findings revealed that while QS graduates possess basic software skills, they struggle with more advanced features, particularly for complex project tasks. The research highlights that this skill gap stems from insufficient training during academic programs and limited exposure to real-world applications through internships. Consequently, the study suggests that educational institutions and professional organizations should enhance the training provided to QS students. Recommendations include updating the QS curriculum to include more comprehensive training on advanced software features and ensuring continuous professional development to keep up with technological advancements in the construction industry.

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