

**UNIVERSITI TEKNOLOGI MARA
PERAK BRANCH**

**WATER CONSERVATION AND PURIFIER
TECHNOLOGY SYSTEM**

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Innovation project report submitted in partial fulfilment of the requirements for the
degree of

Bachelor of Science (Hons.) Construction Technology

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AUTHOR'S DECLARATION

I declare that the work in this innovation project report 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 topic has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

In the event that my innovation project report, be found to violate the conditions mentioned above, I voluntarily waive the right of conferment of my degree and agree be subjected to the disciplinary rules and regulations of Universiti Teknologi MARA.

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ABSTRACT

A living and sustainable approach to construction and the environment has been implemented in the current situation. It is abundantly obvious that in order to promote green design and sustainability, a wide range of rules, specifications, methods, and technologies must be used. Humans are losing comfort, social interactions, social networking, environmental advantages, access to natural resources, and many other things every day. Instability is harmful to people, the environment, and the atmosphere. This is including the usage of water efficiency in building and life cycle humans. The fact is that numerous actions must be taken right away due to the threat of water stress and the high level of inefficiency of water usage. There are various ways to fulfill every solution that best involve people, modern technology, and methods. Through the issues, in this case study has developed an innovation by using a digital twin and algae technology for water system to decrease the loss water and achieve a water goal at accommodation student. The case study focused on water conservations and purifier to enhance a performance of water systems and prevent a water crisis problem. Method of analysis is done by qualitative which is using secondary method literature review and view the video or audio for analysis the innovation and data analysis is taken by document review from existing article and journal for concept innovation, product description and performance. Lastly, a simulation method by using a SketchUp to visualized the innovation product for green campus.

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