

Designing an integrated teaching and learning of mathematics and image processing in engineering technology

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Abstract

Engineering technology subjects require some mathematical applications as the foundation to succeed **in** the subjects. However, students find the theoretical subjects like **mathematics** as unattractive and difficult. This happens due to the inability of **engineering technology** students to link between mathematical knowledge and technological applications. Furthermore, students are unable to understand the importance of **mathematics in engineering technology** subjects which consequently contribute to their poor academic performance. The current **teaching** approach which separates the **teaching** of **mathematics** from **engineering technology** subjects does not encourage students' understanding **in** both subjects. **In** this paper, the focus has been given to the development of an **integrated teaching and learning** module of **mathematics** and **image processing** subjects known as Maths-IP Room. It has the purpose to increase students' understanding **in** both subjects. This proposed module will be designed using ADDIE model. Web-based application and M-**learning** system will be used as the platforms for the proposed module. This module is hoped to make the acquisition of knowledge **in mathematics** and **image processing** can be enhanced.

Author keywords

Image processing; Instructional design; **Mathematics**; **Teaching** and **learning**

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