

# **INNOVATIVE TEACHING METHODS IN REMOTE SENSING EDUCATION AT UNIVERSITI TEKNOLOGI MALAYSIA FOR SUSTAIN**

**Hashim Mazlan, Devi Kanniah Kasturi**

Department of Remote Sensing, Faculty of  
Geoinformation Science & Engineering Universiti Teknologi  
Malaysia

Education plays a pivotal role for achieving environmental awareness, values, attitudes, skills and lifestyles required for a sustainable development. In this way, education not only directs us towards acquiring knowledge on the concepts and principles of sustainability but also it teaches us how to make decisions concerning the long term future of the world as a whole. In Malaysia efforts to embed awareness on environment and sustainability began in the Third Malaysia Plan (1976-1980) and progressed through out its every 5 years National Plans. In the latest Eight Malaysia Plan (2001-2004), an emphasis was given to the use of remote sensing technology in operational applications as it can doubtlessly assist in promoting environmental and sustainability issues. The establishment of Malaysian Centre for Remote Sensing in 1989, has increased the application of remote sensing technology in government departments and other sectors. The ever increasing demands in the technology however, arose problems when the demands were not accompanied by proper trained personals in order to fulfill both the short and long term demands. As a result a four year B.Sc degree in Remote Sensing was offered for the first time in May 1997 upon the request of National Remote Sensing Committee to increase professional manpower in that field. So, the objective of this paper is to examine the B.Sc. (Remote Sensing) course in UTM from the following perspectives: (i) The curriculum, (ii) The application of variety of pedagogic approaches such as problem oriented and project based learning (iii) The utilization of information and communication technology in the generation, acquisition and dissemination of knowledge. In the conclusion, a SWOT ( ) analysis result is presented to reveal the Strength, Weakness, Opportunity and Threats of the existing curriculum and both teaching and learning methods adopted. This study addresses the conference theme of Section A (Education, Training and Institutional Enablers) to see how well the current curriculum and innovative teaching methods within B.Sc (Remote Sensing) course in UTM promotes the sustainable building.

keywords: Sustainable buildings, education, remote sensing, innovative teaching methods, curriculum