

## GEOMATICS EDUCATION AND TRAINING IN BOTSWANA

L. Maphale\*, M.B. Manisa\*, B. Nkwae\*, C. Ezigbalike\*,

\*Department of Civil Engineering – University of Botswana  
Private Bag 0061 – Gaborone, BOTSWANA

E-mail: [maphalel@noka.ub.bw](mailto:maphalel@noka.ub.bw)), ([manisamb@noka.ub.bw](mailto:manisamb@noka.ub.bw)), ([nkwaeb@noka.ub.bw](mailto:nkwaeb@noka.ub.bw)),  
([dozie@global.bw](mailto:dozie@global.bw))

ISPRS Commission VI Working Group 3

### Abstract

The Diploma in Land Surveying program was established in the then Polytechnic of Botswana in 1993. Prior to that, there was no formal education in land surveying in Botswana. The Polytechnic was amalgamated with the University of Botswana in 1996 as the Faculty of Engineering and Technology, and the Diploma in Land Surveying program continued in the Department of Civil Engineering.

This paper will describe the Diploma in Land Surveying program. The location of the program in the Department of Civil Engineering derives from the fact that the program grew out of service courses in land surveying for the various civil engineering diploma, certificate and, now, degree programs. The paper will describe the dual role of the Surveying Section as a support section for the civil engineering programs and the primary surveying education unit in the country. The curriculum of the main diploma program is presently being reviewed to bring it up to date with developments in the industry. The paper will discuss the proposed new curriculum and the issues considered in its design.

In addition to the land surveying program, there are other programs in the university which contain elements of the expanded geomatics industry. Notable among these are the programs in the Department of Environmental Science (DES) in the Faculty of Science. DES has a postgraduate diploma in geographic information systems (GIS), and a well-developed cartography program. Other components in their vast offerings include photo interpretation and remote sensing. These components will also be described.

In addition to these formal education programs, government departments have in-house training programs, which had provided surveying personnel in the country prior to the introduction of the education programs in the university. The main programs are in the Department of Surveying and Mapping (DSM) and the Department of Town and Regional Planning, in the Ministry of Local Government, Lands and Housing, and the Ministry of Agriculture. This paper will describe the DSM program, being the most developed of the training programs.