Towards a Modern Surveying Engineering Curriculum: Case presented is Surveying Engineering Program at King Saud University

Ismat Elhassan (Saudi Arabia)

Key words: Curricula; Education; Engineering survey; GNSS/GPS; History; Land

management; Photogrammetry; Remote sensing

SUMMARY

Towards a Modern Surveying Engineering Curriculum:

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ABSTRACT

Surveying or geomatics is the science of measuring and mapping the face of the earth. A surveying engineer is responsible for the collection, representation, analysis, management and modelling of spatial data. The science includes positioning of natural and man-made features, developing control point network, compiling three dimensional digital terrain models, marking property boundaries and relocating them, controlling and monitoring infrastructure: roads, bridges, tunnels, dams and structures and mapping seabed and coastlines.

Advances in technologies (electronics, satellites and laser) have changed the nature of surveying.

To achieve these learning outcomes a curriculum for a baccalaureus degree at King Saud

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University, Riyadh, Saudi Arabia, has passed several improvements since its first initiation in the late 1980s to serve all gulf countries.

This paper outlines the important aspects of the program history and the latest version that has been accredited by National Saudi Accreditation Association (NSAAA) for the period 2016-2920.

Key words: Surveying, Geomatics, Curriculum, Accreditation, Courses, Program

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