Grand Experiment

Since 2000, many institutes for geomatics education have struggled to survive because of a low influx of new students (see the series on 'Developments in Geomatics Education' in GIM International between March and August 2007). One of the effects of this global trend was the demise of the BSc in Geomatics in The Netherlands by 2005, after which only an MSc programme remained. As a general rule of thumb, a minimum annual influx of 20 students is required to ensure a sustainable MSc programme. However, such a stable number has never been reached. Why not?

Two main causes of poor influx can be pinpointed. Firstly, for two consecutive decades, technical studies ranked consistently bottom of high-school students' subsequent study programmes, if it featured at all. Instead, young people opted for business, banking and bookkeeping; businesspeople and managers became icons for at least one generation. As soon as they had completed their studies, brilliant physicists and mathematicians were enticed by investment banks to develop innovative financial products based on confusion between value and price, leaving their brains unexplored for helping to produce tangible products which could alleviate poverty or contribute to a sustainable future for all. The rise of the financial crisis has demonstrated that bankers are not wizards possessing the stones of wisdom for everlasting prosperity. As a result, we are now starting to see a reversal of the trend: high-school students are increasingly shunning business, banking and bookkeeping in favour of learning how to create something real and tangible.

However, the geomatics profession is far from tangible, since it produces and uses data and information. That is the second cause of poor influx. Surveyors arrive on site in the morning, position their instruments or look at displays, and when they leave again in the evening, nothing has changed, or perhaps some nails have been hammered into the asphalt at most. How can a profession be promoted without impressive products and appealing icons? Attracting students successfully demands good marketing with, at its core, a simple, consistent and clear message addressing a specific, targeted audience. But students with a BSc degree can enter an MSc geomatics programme from three different general directions: (1) application domains such as civil engineering where one uses GIS and geodata to solve traffic congestion for example, (2) the ICT realm where one manages geoinformation, having specialised in databases, web technology and such like, and (3) the data-acquisition side – surveying, photogrammetry, remote sensing, navigation and so on. How can such diversity of potential influx be adequately addressed?

Delft University of Technology in The Netherlands has adopted a unique solution. Starting in September 2012, undergraduate students with a background in application domains or ICT can join the MSc in Geomatics for the Built Environment, hosted by the Faculty of Architecture, while for those wanting to specialise in data acquisition the Faculty of Civil Engineering and Geosciences offers the MSc track in Geoscience and Remote Sensing. This is a grand experiment centred around students' interests and societal needs – let's cross our fingers that it will succeed.