

# Master the data

New degree in business analytics provides a career springboard

Mike Lee

PROFESSIONALS with business analytics skills are in rapidly increasing demand globally. The McKinsey Global Institute forecasts a 50 to 60 per cent gap between supply and demand; up to 190,000 positions will be unfilled in the United States alone by 2018.

A 2010 survey by Frost & Sullivan predicted Singapore will need at least 4,300 such trained professionals by 2015. Today, the shortfall lies especially in data visualisation and reporting specialists, with just 29 per cent of the 3,293 needed available.

Come January next year, the Institute of Systems Science (ISS) of the National University of Singapore (NUS) will launch its Master of Technology (MTech) in Enterprise Business Analytics, which has been designed to address this shortfall of data scientists here and in the region.

Deputy director of graduate programmes Dr Leong Mun Kew says ISS expects to draw entry-level business analytics practitioners who want to move up to a specialist-level position. It also targets professionals in related fields who want to acquire business analytics skills to enhance their current role or switch to a data scientist position.

## Programme structure

The programme is offered by ISS in collaboration with the Department of Industrial and Systems Engineering and the Division of Engineering and Technology Management of the Faculty of Engineering of NUS.

Graduates will be awarded a master's degree by NUS. The programme is available both full-time and part-time. There are 15 technical courses and a team-based practicum project.

"The MTech curriculum is prac-



ISS deputy director of graduate programmes Dr Leong Mun Kew (left) and MTech pioneer graduate Alvin Khoo. PHOTOS: ISS

itioner-oriented where lectures are augmented by workshops, laboratory sessions and group projects. The students can expect to learn from enterprise practitioners, with case studies and learning points that working students can relate to," says Dr Leong.

"Students will participate in a mandatory team-based project where they work with sponsoring organisations to apply what they have learnt."

Says Ms Janet Ang, managing director, IBM Singapore: "Gaining business insight through Big Data and analytics is critical and the demand for talent to help companies succeed in this increasingly digital and data-driven world will only continue. In Singapore, data analytics has also been identified

as an important growth sector."

Says Dr Leong: "The programme is a passport and a springboard to a new career in enterprise business analytics."

"The students can also tap a pool of about 1,800 Master of Technology alumni from the Software Engineering and Knowledge Engineering degrees for networking and mentoring opportunities."

ISS also offers MTech programmes specialising in software engineering and knowledge engineering.

To Mr Alvin Khoo, a pioneer graduate of the MTech programme, his goal was simple: to survive the programme, juggling study and other commitments.

He is glad he managed to stick it out. "For instance, when my managers were looking at certain software to maximise our company's manufacturing process, I knew what they were talking about and could offer them suggestions."

The management electives he took also gave him a solid foundation. In his eight years at global science-based company DSM, he built a high performance IT team that has rolled out huge projects at low cost for the entire Asia-Pacific region. Today, he is regional IT director (Asia Pacific) at the company.

## ISS MTECH IN ENTERPRISE BUSINESS ANALYTICS COURSE PREVIEW TALK

**Venue:** Cliftons, Level 11, The Finexis Building, 108 Robinson Road

**Date:** July 20, 2013

**Time:** 2pm to 4pm

Register online at [www.iss.nus.edu.sg](http://www.iss.nus.edu.sg)