

Driving innovations in business

NUS' Institute of Systems Science has been grooming infocomm leaders for over 30 years

Douglas Chew

THE Institute of Systems Science (ISS), a premiere institute of the National University of Singapore (NUS), conducts graduate education and professional development courses to groom infocomm leaders and drive business and organisational innovation.

Since its establishment in 1981, ISS has seen over 70,000 people from 138 countries enrolling in its programmes. Its graduates can be found at all levels in the industry from chief information officers and IT directors to project manager, quality managers, IT architects, system designers and programmers.

ISS offers two graduate programmes focused on the practical aspects of IT.

The Graduate Diploma in Systems Analysis offers graduates the opportunity to move into the rapidly advancing field of IT, while the Master of Technology programme emphasises state-of-the-practice technology and internationally recognised methodologies, allowing IT professionals to upgrade their skills while pursuing their careers.

Ms Alphy Thomas Kanatt, who has completed the graduate diploma, is now a student on the part-time master's programme. "I really like the way ISS structures the course. There are lots of hands-on sessions and it really helped in boosting my confidence and knowledge," she says.

The 13-month graduate diploma programme has a business oriented design, equipping students with the latest technical knowledge and enabling them to analyse, design and implement IT solutions on mobile, wireless and Internet platforms. It also includes a five-month industrial attachment, where students gain experience from working in an IT organisation.

Ms Alphy did her attachment at Singapore Airlines, which recommended her to Ufis Airport Solutions, where she works as a senior system analyst.

She applies what she learns in the classroom in her job. For instance, an ISS module on developing a software system using an agile SCRUM methodology proved useful, as her company also follows it. "The lessons learned from the module helped me to give constructive feedback to my company and make necessary improvements," she says.

"I have chosen the modules which spark my interest and are also useful in my job. I share my knowledge and take-away from the course with my team in the office and try to implement and practise the things I learned, in my work."

Ms Alphy enjoys the team discussions during the course, as the different domain experiences and expertise levels of her classmates enrich their collaborative work.

"Actively participating in discussions and class activities helps to gather different ideas, express them and get constructive feedback. This helps to enhance our knowledge and thinking process."

Quoting one of America's founding fathers Benjamin Franklin, Ms Alphy says she believes that "investment in knowledge pays the best interest".

"If we want to meet the emerging needs and challenges in the fast-paced working environment, we need to upgrade ourselves with all the new developments and knowledge," she adds.

The master's programme she is currently pursuing is offered jointly by ISS, NUS' Department of Electrical and Computer Engineering and the NUS School of Computing.

The course offers specialisation in either software engineering or knowledge engineering and is designed to meet the needs of IT professionals and managers, with its emphasis on understanding and exploiting advanced technologies and management disciplines. It focuses on the practical application of innovative techniques and develops the IT professional's capability for innovation.

The degree will take between two-and-a-half years to five years for part-time students, while full-time students can complete it in a minimum of one-and-a-half years.

"This course is ideal for those who have a strong passion for learning and also for those who want to brush up their technical skills to meet the emerging needs in industry. ISS always updates the modules according to industry demand," says Ms Alphy.

As a part-time student with a full-time job, she often has to sacrifice her weekends to study. She is thankful for the support of her company, family and friends. "With proper time management and dedication, it is possible to pursue studies while holding a full time job. It provides us financial security and helps to maintain the job and to get away from the stress of finding a job after the course," she says.

She is confident the master's degree will equip her to take on more challenging roles in her organisation and to do her job more effectively.

After completing the Graduate Diploma in Systems Analysis at the Institute of Systems Science, Ms Alphy is now pursuing the Master of Technology programme at the same institute.

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