



# Picking up practical skills

Industrial attachment is a crucial component of the Graduate Diploma in Systems Analysis programme offered by the Institute of Systems Science

Mike Lee

AS A specialist training institute of the National University of Singapore, the Institute of Systems Science (ISS) has seen more than 2,000 students graduate over the past 32 years from its Graduate Diploma in Systems Analysis programme.

While designed primarily for non-IT graduates to craft a new career in IT, many IT graduates have also joined the programme to sharpen their skills, notes ISS deputy director Dr Leong Mun Kew.

The continually evolving programme today offers the option to focus on mobile programming and web application development — two areas in

strong demand by Singapore companies.

The curriculum is practitioner-oriented, where lectures are augmented by workshops, laboratory sessions and group projects.

These provide students with the technical and professional grounding for the 20-week industrial attachment (IA) at the end of their 13-month full-time programme.

Says Dr Leong: "The IA is a very important part of the curriculum as the students need to quickly adapt to companies' working environment, pick up new technical skills and domain knowledge, propose feasible IT solutions, and most of all, develop and deliver the solution to the satisfaction of their users."

## Strong industrial support

STMicroelectronics Asia Pacific has supported the internship programme since 2007, and is rated as one of the best companies by interns. In 2009, a project team attached to the company won the Accenture Prize for the best internship project.

Says Dr Antonio Alvarez, human resource director and head of learning and organisation development: "We support the internship programme in Singapore as this provides a reality check for us on the kind of subjects and topics with which NUS prepares future generations of professionals."

"We then strategise on how these generations will be incorporated into the demanding business environment we operate in."

Interns, who are effectively also "academic ambassadors" for the company, receive the same treatment and opportunities as employees, notes Dr Alvarez.

The contact the interns have with the semiconductor industry, considered the "industry of industries", will prepare them to become focused, fast and agile in a demanding field of work, says Dr Alvarez.

Interns are given a sense of belonging and inclusion in a diverse and dynamic environment. ST Microelectronics operates in, with more than 45 nationalities in Singapore, he notes.

"In other words, these 'ambassadors' learn quickly to become a world citizen ready to embrace and respect everyone in the organisation."

Says Dr Alvarez: "STMicroelectronics believes a trustworthy partnership with NUS, in particular with the ISS Graduate Diploma programme, materialises in a win-win situation to profit from 'academics' excelling in their own right, together with the superb technical expertise and human capital our young company has enjoyed for more than 25 years."

## Gaining invaluable experience

Ms Zhou Yimin (below), a current student of the ISS Graduate Diploma programme, is now interning at OCBC Bank, where she designs mobile web applications.

Before taking up the programme, she worked for a year as a search engine optimisation consultant in an international trade e-commerce company. The 24-year-old studied English at Sun Yat Sen University in Taiwan.

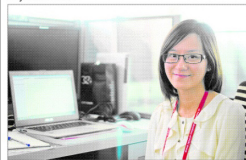


PHOTO: OCBC

"The past three months with the OCBC Technology team have been an enriching and enjoyable experience for me," she says. "There is always something new to be learnt each day and no lack of opportunities for me to get down to work and apply my knowledge."

She adds: "My supervisor and colleagues are approachable and always ready to guide me. Their willingness to involve me in their projects has given me the chance to work with the end-users and experienced what it is like to manage project timelines and user expectations."

It also helps that the bank takes an interest in their career planning, says Ms Zhou. Monthly tea sessions let senior staff share work experiences with the interns.

"As a result, I am now more attuned to my interests and strengths," she says. "This is important to me as it gives me greater clarity on the career path that I want to pursue upon graduation."

Says her supervisor, assistant vice-president of technology solutions, consumer banking, Mr Malie Foo: "Yimin is a quick learner and finishes her tasks at hand quickly. Young and creative, she brings a fresh perspective to the work we do for the bank."

"One of the user-interfaces she designed was so well received by our end-users, we have decided to make it a model user-interface which we will adopt going forward."

Says Ms Zhou, who will graduate in September: "The programme has helped me to enrich my knowledge, upgrade my technical skills and develop professionalism."

"As for the internship, it offers a valuable opportunity to gain hands-on experience. It also helps me to understand my strengths and know which career direction to take."

An internship with the semiconductor industry will enable students to become focused, fast and agile in a demanding field, says Dr Alvarez.  
PHOTO: WEE LY