



MEDIA RELEASE

SMU's computing school heralds a fresh chapter with new name to project its expanded aspirations and role

School of Computing and Information Systems aims to nurture talent trained in computing technology as well as practical solution development

SINGAPORE, 15 January 2021 (Friday) – The Singapore Management University (SMU) today announced that its School of Information Systems (SIS) has been renamed School of Computing and Information Systems (SCIS) to project the expanded aspirations and role of the School beyond Information Systems to include computing which encompasses Computer Science, Computer Engineering and Software Engineering.

The new name, which came into effect on 1 January 2021, was unveiled today at a ceremony attended by SMU's Board of Trustees, senior management, SCIS Board of Advisors, faculty, staff, students as well as industry partners.

Explaining the rationale for the School's renaming, Professor Pang Hwee Hwa, Dean of School of Computing and Information Systems, said "The change of the School's name is timely and necessary. Over the last few years, in response to changes in technologies, nature of jobs and market demands, we have been refreshing and augmenting our undergraduate and postgraduate education programmes to go beyond Information Systems, particularly in the science of computing, hard-core programming, and technology development.

"To contribute to SMU Vision 2025's strategic priority of Digital Transformation, the School has identified 9 technology areas in which to go more deeply, the vast majority of which are in the Computer Science field. In addition, two-thirds of our faculty are computer scientists, and the School has developed a research profile with a strong emphasis on Computer Science. SMU is also moving to formalise Computer Science as a faculty discipline under the School, in addition to the existing Information Systems discipline.

"Hence, the new name reflects our inherent strengths as well as our direction of growth. It will place the School on an even stronger footing to attract prospective students, faculty and research funding."

SCIS' development strategies

The renaming of the School is in line with SMU Vision 2025's three Strategic Priorities - Digital Transformation, Sustainable Living, and Growth in Asia - which serve as cross-disciplinary focal areas that cut across the schools at SMU and focus the University's efforts on areas of particular economic and social relevance to Singapore and the region.

Digital Transformation involves spearheading cutting-edge ideas to digitally transform the private and public sectors and develop robust insights into the impact of digitalisation on customer and citizen experience. SCIS will contribute to this strategic priority through three School strategies:

(1) Focus on intelligent collaborative systems

The main enablers of digital transformation are commonly identified as solutions involving technologies such as artificial intelligence, robotics, automation. For many jobs and tasks, the future lies in humans and machines working in partnership. Hence, intelligent collaborative systems will be essential. Such systems require three clusters of capabilities, namely, intelligence, collaboration and systems.

- Intelligence will derive from Artificial Intelligence and Data Science, which cover data management and analytics, planning and optimisation, as well as machine learning and intelligence.
- The second cluster centres on human-machine collaboration, which entails sensing and multimedia processing, as well as human-machine interaction designs.
- Expertise in building computing systems is the third cluster. It includes software engineering to create correct and scalable systems, cybersecurity to safeguard privacy and security, and managing information systems.

Going forward, SCIS will focus its faculty hiring to enhance research capabilities in the high-growth fields of Computer Science in:

- Data Management & Analytics
- Intelligent Systems & Optimization
- Machine Learning & Intelligence
- Pervasive Sensing & Systems
- Multimedia
- Human-Computer Interaction
- Software Engineering
- Cybersecurity

(2) Cutting-edge research that emphasises academic scholarship alongside practice scholarship

Digital transformation happens only when computing technology is put into practical application; this involves practice scholarship.

The second School strategy is to cultivate the twin pillar of academic scholarship in computing technology, and practice scholarship in solution development. The application domains that SCIS is strong at include Urban Systems & Operations (such as maritime traffic management and crowd management), Active Citizenry & Communities (such as understanding job and skills requirements), and Safety & Security (such as police patrol and ambulance placement).

(3) A transformative education in computing technology and solution development

Through its comprehensive portfolio of degree programmes, SCIS aims to produce graduates who are not only trained in computing technology, but also practical solution development.

In recent years, the School has evolved its education programmes by:

- Launching interdisciplinary programmes that combine computing with disciplines in other SMU schools. These include:
 - BSc (Computing & Law) degree with the SMU School of Law to train students with the skillsets to protect technology innovation, comply with pertinent legal and regulatory requirements, as well as manage the technology and business risks posed by innovation.
 - Smart-City Management & Technology major under the BSc (Information Systems) degree. The major seeks to cultivate skills in our students to harmonise social, economic, business, environmental and technology concerns to develop smart city solutions.
- Creating new programmes that train students in deep technical skills. These include:
 - BSc (Computer Science) degree, which emphasises strong technical skills in translating scientific principles to usable computing technologies and solutions, as well as the management skills needed to navigate complex software development and system deployment concerns.
 - Artificial Intelligence track in the Master of Information Technology in Business (MITB) degree. The first of its kind in Singapore and Southeast Asia, the track grooms professionals to build AI tools, and implement adaptive closed loop solutions for a myriad of business problems.
- Modernising the Digital Transformation major in BSc (Information Systems) degree to equip students with the business and technology skills to create value for businesses and society by applying emerging technologies to develop end-to-end IT solutions. These include Business Analytics, Digitalisation & Cloud Solutions, Financial Technology. Correspondingly, a fourth track in Digital Transformation will be added to the MITB degree in August 2021 to equip graduates with the blend of information and communications technology knowledge and skills to strategise and execute digitalisation in complex organisations.
- Introducing the PhD in Computer Science programme alongside the PhD in Information Systems programme, and the Doctor of Engineering programme to cultivate practice scholarship.

SCIS, along with the other SMU schools, will continue to create more pathways for its students to supplement depth in computing with breadth in business and social science disciplines, such as the second major in Digital Business that will commence in August 2021. There are also plans for students from other schools at SMU to acquire computing skills that are essential for their professions.

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About Singapore Management University

A premier university in Asia, the Singapore Management University (SMU) is internationally recognised for its world-class research and distinguished teaching. Established in 2000, SMU's mission is to generate leading-edge research with global impact and to produce broad-based, creative, and entrepreneurial leaders for the knowledge-based economy. SMU's education is known for its highly interactive, collaborative, and project-based approach to learning.

Home to over 11,000 students across undergraduate, postgraduate professional and postgraduate research programmes, SMU comprises six schools: School of Accountancy, Lee Kong Chian School of Business, School of Economics, School of Computing and Information Systems, School of Law, and School of Social Sciences. SMU offers a wide range of bachelors', masters', and PhD degree programmes in the disciplinary areas associated with the six schools, as well as in multidisciplinary combinations of these areas.

SMU emphasises rigorous, high-impact, multi- and interdisciplinary research that addresses Asian issues of global relevance. SMU faculty members collaborate with leading international researchers and universities around the world, as well as with partners in the business community and public sector. SMU's city campus is a modern facility located in the heart of downtown Singapore, fostering strategic linkages with business, government, and the wider community. www.smu.edu.sg

About School of Computing and Information Systems

Real-world industry sectors provide our School of Computing and Information Systems (SCIS) with a testbed and laboratory for experimentation, as well as a fertile breeding ground for new ideas. Our faculty and students apply their research results to solve real problems in a variety of industry settings and to create IT applications and systems. At the same time, our faculty actively publish in top-quality Computer Science and Management Science conferences and journals. Our research areas include Cybersecurity; Data Management & Analytics; Human-Computer Interaction; Information Systems Management; Intelligent Systems & Optimization; Machine Learning & Intelligence; Multimedia; Pervasive Sensing & Systems; Software Engineering & Systems.

SCIS offers a suite of degree programmes. Our BSc (Information Systems), BSc (Computer Science) and BSc (Computing & Law) have been remarkably successful in demonstrating educational innovations and creating a culture of learning, establishing external linkages and partnerships with industry, government and the social sector, and with job placement. We run a highly ranked Master of IT in Business degree, with specializations in Analytics; Artificial Intelligence; Digital Transformation; and Financial Technology & Analytics. Our doctoral degrees, including PhD (Computer Science), PhD (Information Systems) and Doctor of Engineering, have produced graduates who joined highly sought organisations in academia and industry.