

PROGRAMME BENEFITS

The course improves competitive capabilities via faster project execution and decision making. It identifies the key areas that require cultural and organisational transformation that will facilitate higher agility and stronger efficiency using lean methods and DevOps. As it offers an easy to follow methodology that will start the projects on a right path, by incorporating

security designing as the core of strong system architecture, it reduces both project risks and costs. In gist, it facilitates smart procurement and shows how to maintain highly effective cyber defences without stoppages, despite fast changing technologies. Importantly, the course also shows how to fight off high level state-sponsored cyber attackers and criminals, as it

focuses on how to build cyber defences comprehensively; hence getting organisation and senior managers ready for Smart Nation, as we face its impending pervasive computing and IoT roll-outs. This will be especially pertinent for those operating Critical Infrastructure.

TOPICS COVERED

- Introduction to Innovation with Security
- The new disruptions from Cloud, IoT, Fintech, Big Data and Mobile Systems
- Driving and seeding corporate innovation and partnership
- Risk taking as a science and as an art
- Agile development and DevOps
- Case studies based on past large projects
- Technical examples: Hybrid Cloud, Big Data and real-time intelligence
- Bring Your Own Device (BYOD) mobile system challenges
- Maintaining and upgrading cyber defences as technology changes
- Security by Design
- Defeating advanced attacks
- Critical infrastructure issues, including Privacy and Resiliency by design
- Smart procurement
- Human resource development & talent management
- People issues of cyber security and Shadow IT
- Security awareness user training, made easy

SPEAKER



Prof Yu Chien Siang

Prof Yu Chien Siang is the Chief Innovation Officer (CIO) of Certis Cisco and previously, of a department in the Ministry of Home Affairs. Prior to this, he was the most senior Computer Security Consultant at the Singapore Singapore government. He was awarded the Carl Duisberg Gesellschaft Scholarship to pursue his studies at a German university and graduated as

a Data Systems Engineer. During his study, he received training at the Siemens Research Laboratory and IBM R&D Laboratory in Boblingen. He has been working in the Civil Service since 1981 and was awarded National Day Honours, the Public Administration Medal (Silver) (Silver) in 1993 and (Silver) Bar in 2004.

He has been active in the fields of IT leadership, innovation development and its related cultural transformation and IT Security for more than 30 years. During this time, he led numerous national-level IT projects in information security such as the Electronic Road Pricing (ERP), Standard Operating Environment (SOE) etc., IoT security via the ANSES project and homeland security, developing workflow and people identification operational systems. He was instrumental in evolving many advanced systems architecture used in the public service and the fundamental mechanisms

required for their large systems rollout. He invented unique low cost smart card readers, strong cryptographic systems, more efficient protocols and fault tolerant designs.

In addition, he teaches the course on "Introduction to Cyber Crime", but now renamed as "Introduction to Cyber Security" in his capacity as Adjunct Associate Professor at the Department of Mathematics of the National University of Singapore. He was an ex-President of the Singapore Microcomputer Society, a pioneer in the exploitation of microcomputers and a regular speaker at government events, being the founder of the Governmentware show. He has also been one of the judges for the RSA Innovation Sandbox since 2014. He is currently a member of ITSC, worked on ISO security standards and was involved in the early days of the AISP.