

CERTIFIED 5G FOR MANAGEMENT MASTERCLASS

Future-proof yourself with a globally-recognized certification that will put you miles ahead in your career trajectory and help you prepare your organization with a practical approach for 5G adoption.

4-5 March 2024 Hotel Maya, Kuala Lumpur

Endorsed By:













INTRODUCTION

5G (from "5th Generation") is the latest generation of cellular mobile communications. It succeeds the 4G (LTE-A, WiMax), 3G (UMTS, LTE) and 2G (GSM) systems. 5G performance targets high data rates, reduced latency, energy saving, cost reduction, higher system capacity, and massive device connectivity.

This certified training course provides an overview of 5G technology, use cases, services, products, and solutions for those who want to understand the impact of 5G technology on the socio-economics of any country. It helps participants understand effective strategies, planning, procurement, management, and deployment.

The course covers a wide area of Management of 5G in terms 5G products, segments, services, role of cloud computing and Edge computing. It also introduces the frequency range used, millimeter wave, range and Health related issues from EMF radiation. The course will also review the 5G deployment in Malaysia.









WHO IS IT FOR?

Suitable for CXOs, Government Officials, Managers and nonengineers including sales, marketing, business development, analysts, finance, HR, procurement, and other disciplines who need a clear picture of 5G technology. The course is also useful for those who have experience with 5G but have never had any formal training.

RELEVANT INDUSTRIES

- Transport
- Video Surveillance
- Financial Services& Banking
- Media &
 Entertainment
- Public Safety

- Healthcare
- Automotive
- IoT & Fleet
 Management
- Smart
 Manufacturing
- Energy & Utilities

TRAINERS & SPEAKERS



Prof Emeritus Dr Sureswaran Ramadass

PROFESSOR EMERITUS
Malaysia University of
Science & Technology



Dr Navaneethan C Arjuman

EXPERT
International
Telecommunication Union



Prof Dr Omar Amer Abouabdalla

DEPUTY VC LimKokWing University







TRAINERS & SPEAKERS



Prof Emeritus Dr Sureswaran Ramadass PROFESSOR EMERITUS Malaysia University of Science & Technology

Professor Emeritus Dr Sureswaran Ramadass is Professor Emeritus at the Malaysian University of Science and Technology (MUST). His current area of focus includes IPv6 and 5G. His last position was as the Chairman of the ITU/UN (International Telecommunications Union) IPv6 and IOT Center of Expertise. Prior to this, he was the founding Director and Professor at the National Advanced IPv6 Centre of Excellence (NAV6), Universiti Sains Malaysia. As the Director of Nav6, he was instrumental in the successful implementation of IPv6 in Malaysia. He obtained his BsEE/CE (Magna Cum Laude) and Masters in Electrical and Computer Engineering from the University of Miami in 1987 and 1990 respectively. He graduated top student in the College of Engineering. He obtained his PhD from Universiti Sains Malaysia (USM) in 2000 while serving as a full time faculty.

Some of his recognitions include being awarded :-

- The "Anugerah Tokoh Negara" (National Academic Leader) for Innovation and Commercialization in 2008 by the Minister of Higher Education. This award is given in recognition to contributions to Innovation and commercialisation in the area of science and technology
- Emeritus Chair, IPv6 Forum Education Programme.
- The Wireless World Research Forum Fellow in April 2010. This fellowship award was presented in recognition to his contribution in the area of Next Generation Networks and IPv6
- Malaysian Innovation Award by the Prime Minister in 2007 and again by the Minister of Science and Technology in 2009. These Awards were given in ecognition for his contribution towards innovations in the areas of Multimedia Conferencing Systems and Real-time Advanced Security Monitoring.





TRAINERS & SPEAKERS



Dr Navaneethan C Arjuman EXPERT International Telecommunication Union

Dr. Navaneethan C. Arjuman is currently an Expert at the International Telecommunication Union (ITU), a United Nations agency. He is also the Director of NLTVC Education Sdn Bhd. He was a Senior Trainer/Researcher with the ITU/UN IPv6 and IOT Centre of Expertise at the Malaysian University of Science and Technology (MUST). He holds a PhD in the field of Plug and Play Networking Components (Cyber Security) from the National Advanced IPv6 Centre, University Science Malaysia. He holds a 1st Class Honours degree in Communication and Signal Processing from Staffordshire University in the United Kingdom. He was awarded the IPv6 Evangelist by the IPv6 Hall of Fame in the year 2020. He is also the Global Coordinator of the Global IPv6 Forum's IPv6 Education Certification Logo Program.

He presently serves as co-chair of the Asia-Pacific Advanced Network's (APAN) IPv6 Working Group. He also holds the titles of Certified Network Engineer for IPv6 (CNE6), Certified Security Engineer for IPv6 (CSE6), Certified Network Programmer for IPv6 (CNP6), Certified System Administrator for IPv6 (CSA6), and Certified 5G Deployment Engineer for IPv6 (C5GDE6), all of which are recognised by the IPv6 Global Forum. For courses like Certified IOT Fundamental, Certified IPv6 Fundamental, Certified IPv6 Deployment for 5G Network, Certified IoT Security, etc., he served as the Certified Senior Trainer at the ITU-MUST IPv6 and IOT Centre of Expertise.



Prof Dr Omar Amer Abouabdalla DEPUTY VICE CHANCELLOR Limkokwing University

Professor Dr Omar obtained his PhD degree and Masters in Computer Sciences from University Science Malaysia (USM) in the year 2004 and 1999 respectively. Currently, he is the Deputy Vice-Chancellor of Limkokwing University. He is a certified trainer for IPv6 and IoT security. He Trained thousands of technical professionals on Next Generation Internet, Network & Data Security and IoT Security. He is a member of IPv6 Forum Malaysia, member of Internet Society (ISOC) and member of Internet Engineering Task Force (IETF). He is actively involved in conducting professional courses on IoT Security, IPv6 and other Computer Network related technologies. He has authored and co-authored more than 60 articles in journals, conference proceedings and book chapters as well as published 3 books.



COURSE OUTLINE

Day 1: Morning Session

9:00 am to 11:00 am

Introduction to 5G technology

- Evolution of mobile technologies from 1G to 5G
- 5G technology features
- Comparing 5G and 4G
- 5G spectrum allocation and assignment
- 5G preparation, deployment, and utilization
- 5G deployment scenarios:
 - Enhanced Mobile Broadband (eMBB)
 - Massive Machine-Type Communications (m-MTC)
 - Ultra Reliable Low Latency Communications (URLLC)
 - Fixed-wireless access (FWA)
- Technologies driving the 5G evolution

MORNING TEA BREAK (15 minutes)

11:15 am to 1:00 pm

Socio economic impact from the introduction of 5G

- Societal change and economic contributions
- Global 5G deployment
- 5G application and specialized services
- 5G value chain outlooks
 - AI/ML
 - Big Data
 - High-performance computing (HPC)

LUNCH (1 Hour)

Day 1: Afternoon

2:00 pm to 3:30 pm

Advanced 5G Technologies

- 5G Overall Architecture
- **Network Slicing**
- **Network Functions Virtualization**
- 5G Technology Stack
- IPv6 for 5G
- 5G Worldwide Implementation

Frequency Allocation for 5G Networks

EVENING TEA BREAK (15 minutes)

3:45 pm to 5:00 pm

5G EMF Radiation Health Issues

- 5G EMF base station Radiation
- 5G Device Radiation.
- Relationship between 5G Device and Base station
- SAR Compliance

- Ionizing Radiations
- Organizations working on EMF exposure issues
- ITU activities on EMF exposure issues

Day 1 Assignment: Key Strengths of 5G - A review

END OF CERTIFIED 5G FOR MANAGEMENT MASTERCLASS DAY 1







COURSE OUTLINE

Day 2: Morning Session

9:00 am to 11:00 am

Business models for 5G deployment

- B2C, B2B and B2B2X 5G deployment business models
- Business-to-consumer (B2C)
- Business-to-business (B2B)
- Business-to-business-to-any (B2B2X)

MORNING TEA BREAK (15 minutes)

11:15 am to 1:00 pm

5G Implementation scenarios and Case Studies

- AR/VR
- Video surveillance
- Public Transport
- Financial Services and Banking
- Media and Entertainment
- Public Safety

- Automotive
- Healthcare
- IoT and fleet management
- Smart Manufacturing
- Energy and Utilities

LUNCH (1 Hour)

Day 2: Afternoon Session

2:00 pm to 3:30 pm

5G Deployment in Malaysia

- 5G Deployment Architecture in Malaysia
- Comparison of 5G Deployment in Malaysia vs Other Models
- How would a SME or Organization benefit from 5G connectivity?
- What are the manpower and technical investments needed to implement 5G?

EVENING TEA BREAK (15 minutes)

3:45 pm to 5:35 pm

Certified 5G for Management Workshop

Case study on Implementing 5G for your organization (30 Mins)

- Group Assignment.
- An experienced Coordinator will be assigned to each group to assist in developing the case study.

Presentation & Discussion (60 Mins)

- Each Group will present their case study.
- Includes Discussions , Q&A.

END OF CERTIFIED 5G FOR MANAGEMENT MASTERCLASS





