

Mobile Communication Technologies - 5G and beyond

COURSE DESCRIPTION:

This course is designed for people wanting to gain an understanding of the mobile communication technologies in use today. In this one-day course, we cover technologies from 4G/5G & wireless broadband to the upcoming 6G. The course will build the technology foundation for your day-to-day work or your research program.

WHO SHOULD ATTEND:

Policy workers, telecommunication professionals, marketing executives, academics, students and anyone looking to understand mobile communication technologies

COURSE OBJECTIVES:

By attending the course, you are expected:

- To understand the principle of mobile communication
- To understand the architecture of mobile networks
- To understand the technology development from 1G to 6G
- To understand mobile network deployment
- To understand NZ's mobile industry and the legislation around

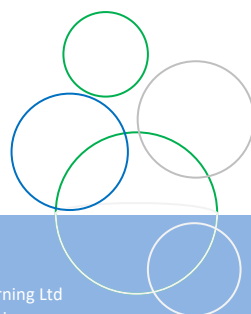
SOME COURSE BENEFITS:

- Be able to provide technical support and troubleshooting for mobile networks
- Have credible conversations around mobile technology with your peers and customers
- Be able to plan telecommunication strategy for your organisation
- Be able to leverage mobile communication technology for your day to day job and business
- Gain insights of the economic development and business opportunities in the telecommunication industry

FORMAT:

1-day, interactive classroom based or live online via Zoom

Maximum attendees 12 per course



CONTENT:

Morning

- The basics of wireless communication (simplifying the language)
- Evolution of mobile technology (1G thru 6G)
- Radio spectrum for mobile technology and regulatory
- Mobile network architecture
 - Core
 - Access
 - backhaul network
- Network sharing

Afternoon

- Core network
 - Function block
 - Network slicing
 - VoLTE/5G
- Radio access network
 - Base station and antenna
 - RAN technologies in 5G
 - TDD/FDD
 - Beamforming
 - MIMO
 - carrier aggregation etc.
- Backhaul network

Assessment (Optional for in-house courses)

- Instructor led interactive quizzes
- Multiple choice written test

Delivered in association with

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