

5G in an Hour

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This course provides a quick overview of the fifth-generation mobile technology, or 5G. It focuses on establishing important technical concepts and terms, as well as putting 5G into context by relating it to use cases and current technological trends.

This condensed 5G course is the perfect way to kick-start your path on the 5G journey, regardless of your end goal. Perhaps you are aiming for an expert level of knowledge, and this is your first stepping stone, or you just want to keep up with the buzz and learn what is going on at the current forefront of the mobile evolution.

This course also exists in a one-day version as well as a full three-day course. “5G in an Hour” provides enough foundation to be able to navigate the technical terms used to discuss modern 5G networks. It gives you the framework necessary to formulate relevant questions and understand how the major puzzle pieces of 5G fit together.

It has been designed to be fully covered by students within one hour.

PREREQUISITES

General knowledge of tele/data communication is beneficial but not necessary.

NOTE: This course is not delivered with the FoldOut methodology.

What is 5G and why?

- How is 5G different from previous “Generations”
- How 5G is described and marketed by the different industry players
- The three main 5G use cases – eMBB, mMTC and URLLC

The 3GPP 5G System

- Evolution from 4G to 5G – Non-Standalone New Radio
- The 5G Core Network
 - Functionalities and services in 5G Core
 - Main functions e.g. SMF, AMF, UPF
 - Cloud and Virtualization
- NG-RAN – The Next-Generation Radio Access Network
 - gNB – The new base station
 - What makes New Radio “new” and different from previous radio technologies

Some High-Level Technical Concepts of 5G

- Network Slicing
- Edge Computing
- Private 5G