

LTE/4G in an Hour

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This course provides a quick overview of the fourth-generation mobile technology, LTE or simply 4G. It focuses on establishing important technical concepts and terms, as well as putting LTE/4G into context by relating it to use cases and current technological trends.

This condensed course is the perfect way to quickly understand what LTE/4G is and what it is used for, regardless of your end goal. Perhaps you are aiming for an expert level of knowledge, and this is your first steppingstone, or you just want to get a broad understanding of what LTE/4G is all about.

LTE/4G in an Hour provides enough foundation to be able to navigate the technical terms used to discuss LTE/4G networks. It gives you the framework necessary to formulate relevant questions and understand how the major puzzle pieces of LTE/4G fit together.

PREREQUISITES

General technical knowledge of computing as well as experience from Tele and/or Data communication is beneficial but not necessary.

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

LTE/4G/EPS – System Architecture

- Why 4G? How is 4G different from previous “Generations”
- Network Architecture – E-UTRAN and EPC
- The eNB, MME, HSS, SGW, PGW and PCRF
- PDN Connections and EPS Bearers

Services in LTE/4G

- Data Sessions in LTE/4G – Mobile Broadband
- Voice over LTE – VoLTE
- IoT in 4G

E-UTRAN – The LTE Radio Access Network

- LTE Frequency Bands
- Radio Challenges
- Coverage vs Capacity