

# 5G for non-telco experts

## Course Description



# Agenda

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- Course introduction
- Unit 1: Introduction – From 2G to 5G
- Unit 2: 5G use cases – Some examples
- Unit 3: 5G versus 4G
- Unit 4: Technology features of 5G
- Unit 5: 5G – Frequently asked questions
- Course evaluation and conclusion



# Agenda

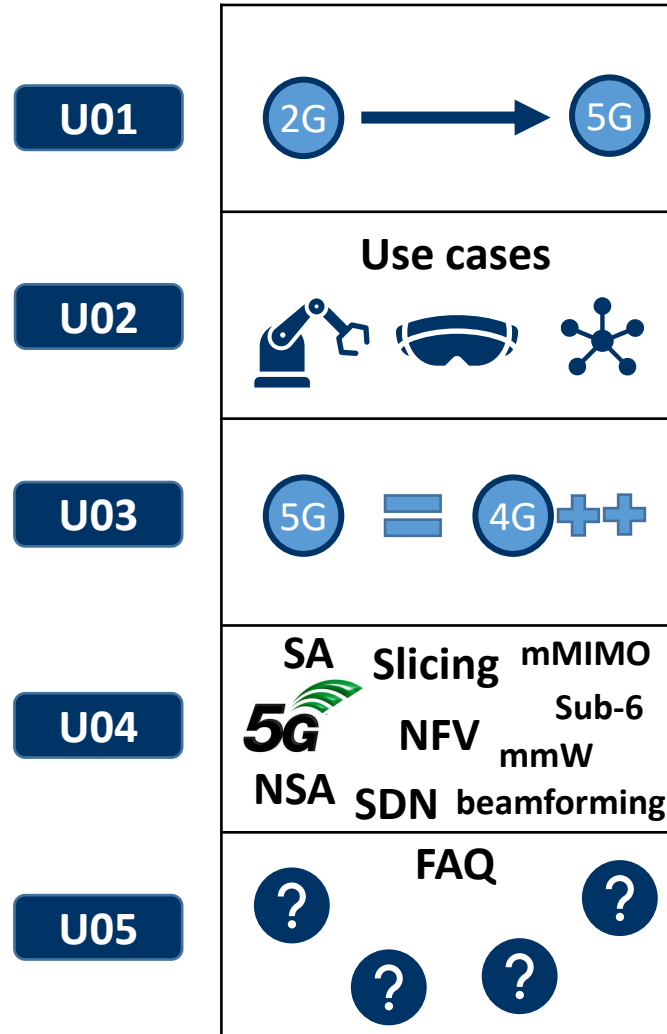
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- **Course introduction**
- Unit 1: Introduction – From 2G to 5G
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# Overview










- Are you an expert from an industry outside telecommunications and interested in knowing more about 5G?
  - This course explains 5G, starting with a short introduction about the evolution of digital mobile technologies since introduction of 2G.
  - Right in the early part, 5G use case examples will be presented.
  - Then the added value of 5G versus 4G will be highlighted.
  - The deployment timeline will be discussed along with service and terminal availability in time.
  - The key characteristics of 5G will then be depicted with more technology aspects.
  - To complete this course, answers to frequently asked questions about 5G will be provided in an interactive manner.



# Why should you attend this course?

- Delegates attending this course will get the following questions answered:

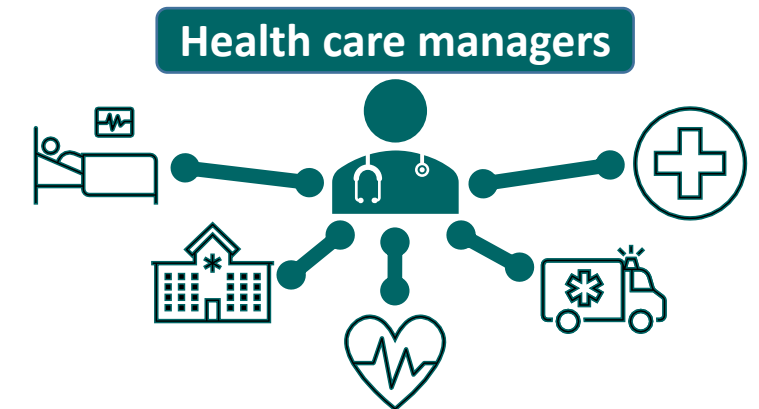
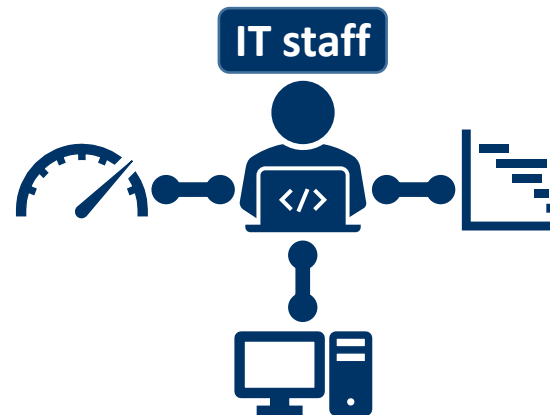
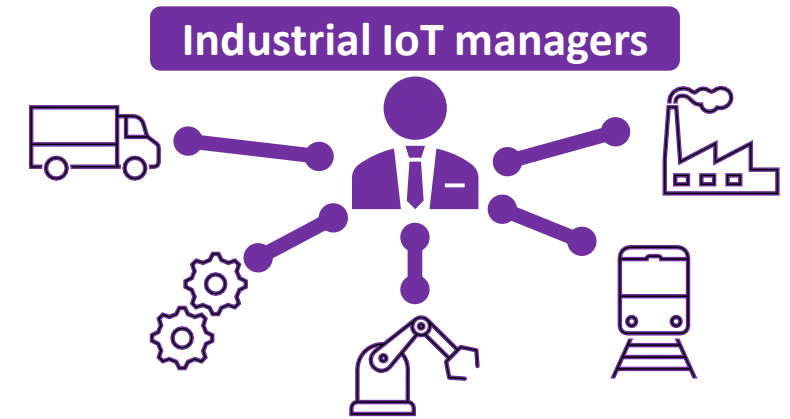
- What for do we need all these “G”s (2G to 5G) in mobile communications?
- Which are the most important use cases to expect?
- What makes the added value of 5G compared to 4G?
- Are there different flavours of 5G and when will these be available?
- Which terminals are required?
- Which 5G features enable its added values?

	
<p>Use cases</p> 	
	
<p>SA Slicing mMIMO 5G NFV Sub-6 NSA SDN mmW beamforming</p>	
	

# Who should attend this course?

- This course is dedicated among others to:

- Managers dealing with industrial IoT.
- IT staff dealing with industrial IoT.
- Managers in healthcare as well as in the automotive industry dealing with wireless connectivity of things.
- Sales and Marketing staff.
- Public authorities and their staff.



# Course program

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## ■ Unit 1: Introduction – From 2G to 5G

- What for do we need all these “G”s?
- Evolution of mobile technologies since 2G.
- Added value of each technology generation versus the preceding.

## ■ Unit 2: 5G use cases – Some examples

- FWA – Fixed Wireless Access
- NB Industrial IoT
- WB Industrial IoT

## ■ Module 3: 5G versus 4G

- 4G technology
  - Services of 4G
  - Network characteristics to fulfil the service requirements
  - Network architecture
  - Handsets and terminals
- 5G technology
  - New services
  - Network characteristics to fulfil the service requirements
  - NSA versus SA network architecture
  - Handsets and terminals

# Course program

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- **Unit 4: Technology features of 5G**
  - Network slicing
  - NFV versus SDN
  - RAN virtualization
  - Mobile edge computing
  - 5G Air Interface:
    - Carrier bandwidth in 5G
    - Sub 6 versus mmW bandwidth
    - Modulation schemes in 5G
    - Massive MIMO and beamforming in 5G
    - 5G numerology
- **Unit 5: 5G – Frequently Asked Questions**



# Course agenda

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## ■ Morning

- Course introduction 10 min
- Unit 1 60 min
- Coffee break 15 min
- Unit 2 45 min
- Coffee break 15 min
- Unit 3 60 min

## ■ Lunch break 90 min

## ■ Afternoon

- Unit 4 – Part 1 45 min
- Coffee break 15 min
- Unit 4 – Part 2 45 min
- Unit 5 30 min
- Course evaluation 10 min

# WELCOME !

We bring your ideas to life

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