

5G NG-RAN in Half a Day

CONTENTS

This course provides a quick overview of the Next-Generation Radio Access Network (NG-RAN) which is part of the 3GPP 5G System.

The course explains why and how the NG-RAN is different from previous generations' radio access networks. It describes the role and functionality of the gNB and various implementation options e.g. C-RAN and Open RAN. Some important NG-RAN concepts like Dual Connectivity and Network Slicing are also briefly explained.

PREREQUISITES

Basic system-level knowledge of LTE/4G and 5G recommended but not required. Also non-technical people can take the course in order to get an orientation about NG-RAN.

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

Introduction to NG-RAN

- Non-Standalone vs Standalone NR
- Why New Radio and NG-RAN?
- QoS Handling in 5G

NG-RAN Architecture

- C-RAN and Open RAN
- Virtualization basics
- Radio Network Protocols
- RRC States
- IAB – Integrated Access and Backhaul

Some Important NG-RAN Terms and Concepts

- Dual Connectivity
- Network Slicing