

- Introduction to 3GPP Long Term Evolution ,3GPP EVOLUTION FROM R5 TO R11
- REQUIREMENTS ,SPECTRUM FLEXIBILITY ,GENERAL CHARACTERISTICS
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- MOTIVATION FOR MULTI-CARRIER VS SINGLE-CARRIER
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- CONVOLUTIONAL AND TURBO CODING
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- LTE Frames, Slots and Resources ,LTE GENERIC FRAME STRUCTURE
- DOWNLINK AND UPLINK SLOT FORMATS
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- DOWNLINK PHYSICAL CHANNEL PROCESSING CHAIN
- CODEWORDS AND LAYERS ,SCRAMBLING AND MODULATION
- SYNCHRONIZATION SIGNALS: PSS AND SSS
- THE CONTROL REGION ,LTE Uplink Physical Layer Modulation
- RESOURCE GRID MAPPING
- MIMO IN LTE R8 ,LTE Release 9 ,LTE Release 10

