



## Course Content Transmission

Issue No. : 001  
Date of Issue : 01.08.2013  
Revision No : Nil  
Date of Revision : Nil  
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<b>Name of the course:</b>	Digital Transmission II
<b>Duration:</b>	5 days
<b>Venue:</b>	Welisara

### Course content:

- ✚ Overview of Transmission Systems
- ✚ Error control of Digital systems
  - ❖ Coding for Error Control
  - ❖ Coding Applications
  - ❖ Influence of Coding on Bandwidth & Power
  - ❖ Coding Gain
  - ❖ Categories of FEC Codes
  - ❖ Concept of hamming weight and hamming distance
  - ❖ Convolution Coding
- ✚ Equalization of Digital Transmission
  - ❖ Distorted waveform and cancellation of ISI
  - ❖ Mechanism of Transversal Filter/Equalizer



## Course Content

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#### Overview of M-ary modulation

- ❖ Basics of Digital Modulation
- ❖ M-ary Modulation Techniques
- ❖ Differential Coding/De-coding (Sum Logic and Dif. Logic)
- ❖ Constellation and Formation of EYE pattern
- ❖ Comparison of the S/N for different type of modulation techniques

#### Constellation Measurements

- ❖ Constellation "Closure"
- ❖ "Lock" angle error
- ❖ "Quad" angle error
- ❖ "rms" Non Linear Distortion
- ❖ "am-am" Non Linear Distortion
- ❖ Relating Constellation Measurements to C/N

#### Causes of Digital Radio Impairments

#### EYEs and Constellations

#### Practical on MUX and DMR equipments