

Antennas for Mobile Communication

We examine modern antenna techniques for mobile applications. We will cover everything from basic antenna principles to advanced system array techniques. Antennas and supporting systems for GSM, UMTS and WLAN applications will also be examined.

Antennas for Mobile Communication

OBJECTIVES

- Understanding the..
- antenna principles
 - characteristics of an antenna
 - models of antenna arrays
 - principles of antenna measurements

TARGET GROUP

The Course is aimed for those who have some previous understanding of Mobile Communication.

PRECONDITION

Basic understanding of antennas and related terms is recommended. In order to fully benefit from the course, it is suggested that the participants have a basic knowledge of mobile communications systems and also basic electronics knowledge.

Standard Advanced - 1 day

Content

✕ Basic antenna principles

- The isotropic antenna
- Power density
- Absorption area
- EIRP

✕ Fundamental antennas

- Dipole
- Ground plane antennas

✕ Antenna characterization

- Directivity and gain
- Radiation pattern
- dBi and dBd
- Front to back ratio
- Polarization
- Impedance

✕ Arrays

- Stacking
- Gain and beam width
- Yagi antennas
- Collinear antennas

✕ Antenna measurements

- Far field and narrow field
- Measurement environments
- Ground reflection measurement paths
- Error sources

Antenna Products

AMC-1: Antennas for Mobile Communication insight (1 day)

AMC-2: Antennas for Mobile Communication (1 day)

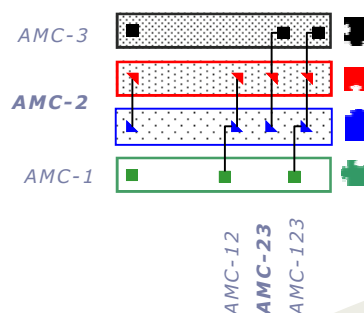
AMC-3: Advanced Antennas for Mobile Communication (1 day)

Product Combinations

AMC-12: AMC-1+2 (2 days)

AMC-23: AMC-2+3 (2 days)

AMC-123: AMC-1+2+3 (3 days)



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