

Advance Course on Wireless Communication Technologies

Duration : 6 months

Hardware (3 months) :

Module	Contents
Module – 1	Analog Communication
Module – 2	Digital Communication
Module – 3	RF Propagation
Module – 4	Basics of Line of sight and Satellite Communication
Module – 5	Antenna propagation and diversity
Module – 6	Block Diagram of Digital RF transmission equipment
Module – 7	Parameters to be monitored for the Radio frequency signals.
Module – 8	Critical parameters/specifications for the RF Transmission eqpt/BTS.
Module – 9	Cellular Network (2G) architecture.
Module – 10	Access Techniques.
Module – 11	2G GSM protocols/architecture.
Module – 12	CDMA IS-95 protocols / architecture.
Module – 13	Network Quality/optimization parameters in a 2G GSM network.
Module – 14	Network Quality/optimization parameters in a

Module – 15	CDMA / WCDMA network.
Module – 16	Outdoor Repeaters / boosters
Module – 17	In building Coverage solutions.
Module – 18	GRPS and EDGE technologies
Module – 19	3G/HSDPA/HSPA/LTE technologies
Module - 19	4 G Technology
Module – 20	Job placement / Interviews

software (3 months) :

Module	Contents
Module – 21	RF Network Planning
Module – 22	Planning with MAPINFO software tool.
Module – 23	RF Optimization in a cellular network.
Module – 24	Network Quality/optimization parameters in a 2G GSM network.
Module – 25	Network Quality/optimization parameters in a CDMA / WCDMA network.
Module – 26	Drive test data collection in 2G/3G and CDMA / WCDMA networks using TEMS software tool.
Module – 27	Drive test data analysis and optimization techniques in GSM 2G network using TEMS software tool.
Module – 28	Drive test data analysis and optimization techniques in CDMA / WCDMA network using TEMS software tool.