Antennas

ABOUT THE COURSE:

This Course will cover the fundamentals of Antenna, Dipole Antennas, Monopole Antennas, Loop Antennas, Slot Antennas, Linear and Planar Arrays, Microstrip Antennas (MSA), MSA Arrays, Helical Antennas, Horn Antennas, Yagi-Uda & Log-Periodic Antennas, Reflector Antennas.

COURSE LAYOUT:

Week 1:
Lecture 1: Antenna Introduction-I
Lecture 2: Antenna Introduction-II
Lecture 3: Antenna Introduction-III
Lecture 4: Antenna Fundamentals-I
Lecture 5: Antenna Fundamentals-II

Week 2:
Lecture 1: Antenna Radiation Hazards-I
Lecture 2: Antenna Radiation Hazards-II
Lecture 3: Dipole Antennas-I
Lecture 4: Dipole Antennas-II
Lecture 5: Dipole Antennas-III

Week 3:
Lecture 1: Monopole Antennas-I
Lecture 2: Monopole Antennas-II
Lecture 3: Loop Antennas
Lecture 4: Slot Antennas

Week 4:
Lecture 1: Linear Arrays-I
Lecture 2: Linear Arrays-II
Lecture 3: Linear Arrays-III
Lecture 4: Planar Arrays

Week 5:
Lecture 1: Microstrip Antennas(MSA)
Lecture 2: Rectangular MSA
Lecture 3: MSA Parametric Analysis-I
Lecture 4: MSA Parametric Analysis-II
Lecture 5: Circular MSA
Week 6:
Lecture 1: Broadband MSA-I
Lecture 2: Broadband MSA-II
Lecture 3: Broadband MSA-III
Lecture 4: Broadband MSA-IV
Lecture 5: Broadband MSA-V

Week 7:
Lecture 1: Compact MSA-I
Lecture 2: Compact MSA-II
Lecture 3: Compact MSA-III
Lecture 4: Tunable MSA-I
Lecture 5: Tunable MSA-II

Week 8:
Lecture 1: Circularly Polarized MSA-I
Lecture 2: Circularly Polarized MSA-II
Lecture 3: Circularly Polarized MSA-III
Lecture 4: MSA Arrays-I
Lecture 5: MSA Arrays-II
Lecture 6: MSA Arrays-III

Week 9:
Lecture 1: Helical Antennas-I
Lecture 2: Helical Antennas-II
Lecture 3: Helical Antennas-III
Lecture 4: Helical Antennas-IV
Lecture 5: Helical Antennas-V

Week 10:
Lecture 1: Horn Antennas-I
Lecture 2: Horn Antennas-II
Lecture 3: Horn Antennas-III
Lecture 4: Horn Antennas-IV
Lecture 5: Horn Antennas-V

Week 11:
Lecture 1: Yagi-Uda and Log-Periodic Antennas-I
Lecture 2: Yagi-Uda and Log-Periodic Antennas-II
Lecture 3: Yagi-Uda and Log-Periodic Antennas-III
Lecture 4: IE3D Session TA-I
Lecture 5: IE3D Session TA-II
Lecture 6: IE3D Session TA-III
Week 12:
Lecture 1: Reflector Antennas-I
Lecture 2: Reflector Antennas-II
Lecture 3: Reflector Antennas-III
Lecture 4: Reflector Antennas-IV
Lecture 5: Lab Session