



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