

Course Topic And Contents :

Topic	No. of hours	Lecture	Tutorial / Practical
Introduction to Digital TV signal. Digital Component signals	5	3	2
Digital TV channel broadcasting	10	6	4
Video Compression techniques: MPEG 2, MPEG 4 (Moving Picture Expert Group). Digital Video Broadcasting (DVB).	10	6	4
Friis transmission equation , Link budget calculations, determination of (C/No) ratio for a communication Channel. . Mid-Term 1Exam.	10	6	4
Levels and Profiles in video broadcasting.	5	3	2
Parameters for the standard Digital Video Broadcasting (DVBS). Advanced Digital Video Broadcasting (DVBS2). The High Definition TV (HDTV). Effects of FEC ratio, QPSK , 8PSK and DVBS2 on the number of broadcasted TV channels on a given satellite transponder bandwidth. Mid-Term Exam 2.	20	12	8
Application of DVBS2 and MPEG 4 in the HDTV Broadcasting. The Ultra HDTV. 4K HDTV , 9K HDTV.	15	9	6

Teaching And Learning Methodologies :

Lectures

Tutorials