# PVP-19

Course	Co	de 1	9EC4	4701 <i>A</i>	A Y	ear		I	V	Sem	nester		Ι		
Course		I	Program		B	Branch		E	CE	Cou	Course Type		Theory		
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### PVP-19

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IV	SATELLITE LINK DESIGN: Basic transmission theory, system	CO1,
	noise temperature and G/T ratio, Design of down links, up link design,	CO3
	Design of satellite links for specified C/N, System design example.	
V	<b>MULTIPLE ACCESS:</b> Frequency division multiple access (FDMA).	CO1,
	Time division Multiple Access (TDMA), TDMA Frame Structure,	CO4
	Transmitter Power in TDMA Networks, Satellite Switched TDMA,	
	Onboard Processing, Baseband Processing Transponders, Satellite	
	Switched TDMA with Onboard Processing, Demand Access Multiple	
	Access (DAMA), Code Division Multiple access (CDMA).	

#### Learning Resources

#### **Text Books**

1. Satellite Communications – Timothy Pratt, Charles Bostian and Jeremy Allnutt, WSE, Wiley Publications, 2nd Edition, 2003.

2. Satellite Communications - Dennis Roddy, McGraw Hill, 2nd Edition, 1996.

## **Reference Books**

1. Satellite Communications: Design Principles – M. Richharia, BS Publications, 2nd Edition, 2003.

2. Satellite Communication - D.C Agarwal, Khanna Publications, 5th Ed.

3. Fundamentals of Satellite Communications - K.N. Raja Rao, PHI, 2004

## e- Resources & other digital material

1. https://nptel.ac.in/courses/117/105/117105131/3.https://nptel.ac.in/courses/108/105/1 08105159/

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