

## Lecture Plan

**Name of Subject: Telemetry And Data Processing**

**Class: B.Tech EIC (EIC 310C)**

**Semester: 6th**

**Name of the Faculty: KamalDeep Singh Malik**

<b>Unit/Section No.</b>	<b>Name of Topic</b>	<b>Number of Lectures Required</b>
<b>1</b>	<b>Block diagram of generalised instrument, description of various blocks</b>	<b>2</b>
<b>2</b>	<b>Modes of data transmission, various types of telemetry system</b>	<b>1</b>
	<b>Different Modulation Schemes: AM,FM,PCM</b>	<b>10</b>
	<b>Multiplexing Schemes: TDM and FDM</b>	<b>3</b>
	<b>Different types of wired and wireless channels</b>	<b>2</b>
<b>3</b>	<b>Across Track &amp; Along Track Scanning</b>	<b>1</b>
	<b>Different Remote Sensing Techniques: MultiSpectral, Thermal, HyperSpectral, Microwave</b>	<b>6</b>
	<b>LIDAR</b>	<b>1</b>
	<b>Applications of Remote Sensing</b>	<b>1</b>
<b>4</b>	<b>Digital Vs Analog Signal Processing</b>	<b>1</b>
	<b>Counters &amp; Flip-flops</b>	<b>3</b>
	<b>Display Methods like LED,LCD</b>	<b>3</b>
	<b>Discussion on Converters</b>	<b>2</b>

**Textbook:**

- **A Course in Electrical and Electronics Measurements and Instrumentation: A.K. Sawhney; Dhanpat Rai**
- **Lillesand, M.T. and Ralph, W., Remote Sensing and Image Interpretation, John Wiley (2004) 6th ed.**

**Reference Book:**

- **Electronics Instrumentation and Measurement Techniques, W.D. Cooper and A.D. Helfrick**
- **Measurement Systems and Analysis, E.O. Doeblien; TMH**