

## Lesson Planning

**Name of the Institute** : CRSSIET SILANI-KESHO, JHAJJAR  
**Name of the teacher** : Ms. Kritika Khunger  
**Department** : Electrical  
**Subject & Code** : MEASUREMENTS AND INSTRUMENTATION, OEC-ECE321G  
**Branch/Semester** : EE 3rd Semester

Chapter Covered	Topic	Academic Activity	Test/Assignment
Section-A INTRODUCTION:	Measurement System – Instrumentation	<ul style="list-style-type: none"> <li>• Presentation on Transducers</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Static and Dynamic – Errors in Measurements		
	Classification of Transducers		
	Strain gauges , Thermistor, RTD-Variable Inductive transducers		
	Variable Capacitive Transducers , Capacitor microphone-		
	Piezo electric transducers		
	IC sensors, Fibre optic sensors, Smart/intelligent sensors		
Section–B:	DC and AC bridges	<ul style="list-style-type: none"> <li>• Presentation on AC Bridges</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Wheatstone, Kelvin		
	Maxwell, Hay and Schering. Pre- amplifier		
	Isolation amplifier, Filters, Data acquisition systems.		
	Spectrum Analyzers ,Wave Analyzers, Logic analyzers		
Section-C	Digital Voltmeters, Millimeters, automation in Voltmeter	<ul style="list-style-type: none"> <li>• Presentation on Nanotechnology</li> <li>• Quiz based on presentation</li> </ul>	01 Test  01 Assignment
	Accuracy and Resolution in DVM		
	Guarding techniques		
	Frequency counter- Data Loggers		
	Introduction to IEEE 488/GPIB Buses		
Section-D:	Dual trace CRO,		01 Assignment
	Digital storage and Analog storage oscilloscope		
	Analog and Digital Recorders and printers.		
	Virtual Instrumentation		
	Block diagram and architecture		
	Applications in various fields.		

	Measurement systems applied to Micro		01 Test
	and Nanotechnology		01 Assignment