

University Diploma Programs  
 Electronic Equipment Maintenance  
**EET-027, Electronics Instrumentation**

Lab Instructor: Muhammad Ajmal Khan  
 Lecturer, Electrical Engineering Department, KFUPM.  
 E-mail: [ajmal@kfupm.edu.sa](mailto:ajmal@kfupm.edu.sa)  
 URL: <http://faculty.kfupm.edu.sa/ee/ajmal>  
 Office Location: 14-115, Phone: 1392

Week	Date	Exp No.	Experiment Title
1	14 Feb.		
2	21 Feb.	1	Introduction of Block Diagrams- Building Blocks of Process Instruments
3	28 Feb.	2	Study and Identification of Various Sensors
4	6 Mar.	3	Verify Ohm's Law and Balanced Bridge Circuit
5	13 Mar.	4	Wheatstone bridge and measure resistance using Wheatstone bridge equipment <b>Quiz # 1:</b> This quiz will be based on first three experiments.
6	20 Mar.	5	Material Behavior
7	27 Mar.	6	Thermocouple Voltage Measurement
8	3 Apr.	7	Strain Gauge Application and Measurement of Unknown Load <b>Quiz # 2:</b> This quiz will be based on experiments 4, 5 and 6.
9	10 Apr.	8	Strain Gauge Measurement using Strain Indicator
10	17 Apr.	9	Strain Gauge Measurement by Applying Displacement using Strain Indicator
11	24 Apr.	10	Linear Variable Differential Transformer Measurements <b>Quiz # 3:</b> This quiz will be based on experiments 7, 8 and 9.
12	1 May	11	Event Counting using Slotted Opto Switch
13	8 May	12	X – Y Recorder – Usage and Data Logging
14	15 May	13	PC-Based Data Logging
15	22 May	14	One new Experiment on Data Logging + <b>Final Lab Exam</b>

**Lab 20 Points Distribution:**

Lab Reports = 5  
 Three Quizzes = 6  
 Lab Performance = 2  
 Final Lab Exam = 7

**Lab Hours:** Saturday 6:20 PM – 9:10 PM at Building 7 Room 208.

**Office Hours:** Sat and Mon 1:00-2:00 PM, or appointment by Email or Phone.