VALUE ADDED COURSES ON

Fundamentals of Instrumentation Skills

(VAC-P-001)

26-08-2017 TO 02-12-2017



Basic Skills for Instrumentation :

To control the parameters in a process or in a particular system, devices such as microprocessors, microcontrollers or PLCs are used, but their ultimate aim is to control the parameters of a system. Presenting results to senior research staff. researching and writing papers, reports and reviews. Keeping up to date with relevant scientific and technical developments

The objective of the program

The main objective of this course is to create awareness among students about the new technologies arising day to day. It updates the required knowledge and improve the applicability. The Practical work related with data interpretations therefore energy skill plays a pivotal role in increasing their employability.

COURSE COORDINATOR: DR NIRDESH

(Associate Professor

Department of Physics KVSCOS)

E-mail Id:- nirdeshmansha@gmail.com

Phone no. 9897224480

DEPARTMENT OF PHYSICS

KERAL VERMA SUBHARTI COLLEGE OF SCIENCE, SWAMI VIVEKANAND SUBHARTI UNIVERSITY

Subhartipuram, NH-58 Delhi-Haridwar-Meerut Bypass Road, Meerut -250005

Academic Section's copy

COURSE REGISTRATION FORM

(To be filled up in consultation with the Course Advisor at the time of admission)

	Rol	l No	0. :			Name :	ame :									
	Pro	gra	mn	ıe :			Yea	<u>ur.:</u>								
+	Courses to be offered:															
		Cou	rse (ode		Course Title		Cr.	L	T	P	*Course Type				
						Basic Instrumentation Skills VAC-P-001										
						Renewable Energy And Energy Harvesting VAC-P-002										

Value Added Course I

Course Name: Fundamentals of Instrumentation Skills	VAC-P-001	

Objectives: To acquire basic knowledge about Basic of Measurement, Electronic Voltmeter, Oscilloscope and Signal and pulse Generators.

Unit 1: Basic of Measurement: Instruments accuracy, precision, sensitivity, resolution range etc. Errors in measurements and loading effects. Multimeter: Principles of measurement of dc voltage and dc current, ac voltage, ac current and resistance. Specifications of a multimeter and their significance

Unit II: Electronic Voltmeter: Advantage over conventional multimeter for voltage measurement with respect to input impedance and sensitivity. Principles of voltage, measurement (block diagram only). Specifications of an electronic Voltmeter/ Multimeter and their significance. AC mill voltmeter: Type of AC millivoltmeters. Block diagram ac millivoltmeter, specifications and their significance.

Unit III: Oscilloscope: Block diagram of basic CRO. CRT, electrostatic focusing and acceleration (Explanation only— no mathematical treatment), brief discussion on screen phosphor, visual persistence. Time base operation, synchronization. Front panel controls. Specifications of CRO and their significance.

Unit IV: Signal and pulse Generators: Block diagram, explanation and specifications of low frequency signal generator and pulse generator. Brief idea for testing, specifications. Distortion factor meter, wave analysis.

Unit V:Digital Instruments and Multimeter: Comparison of analog & digital instruments. Characteristics of a digital meter. Working principles of digital voltmeter. Block diagram and working of a digital multimeter.

Swami Vivekanand Subharti University MEERUT New Tool



Department of Physics

KERAL VERMA SUBHARTI COLLEGE OF SCIENCE SWAMI VIVEKAN AND SUBHARTI UNIVERSITY



Subhartipuram, NH-58 Delhi-Haridwar-Meerut Bypass Road, Meerut -250005

Report on Value added course Fundamentals of Instrumentation Skills

Value added course on Fundamentals Instrumentation Skill was organized from 26-08-17 to 02-12-2017 in department of physics, Keral Verma Subharti College Of Science, Swami Vivekanand Subharti University, Meerut. The speaker was Dr. N.K. Singh. A total number of forty one participate were present. The encompass topic Basic Instrumentation Skill. The purpose of the course was the to give the holistic knowledge of Basic Instrumentation Skill.

Ragistrar Swami Vivekanand Subharti University MEERUT Vikostoyl (HOD)

KERAL VERMA SUBHARTI COLLEGE OF SCIENCE, SWAMI VIVEKANAND SUBHARTI UNIVERSITY DEPARTMENT OF PHYSICS Attended sheet(2017-18)

Course: Fundamentals of Instrumentation Skills

Course: Fundamentals of 1 NAME	2613	3012	119	49	719	1819	2814	349	2/1-	4/4	17/2	2/10	26/10	11	MIL	2/12
I POOJA CHOUDHARY	P	P	P	P	P	P	1	P	P	P	A	p	A	P	P	P
2 PAYAL PANWAR	P	P	P	0	0	0	0	0	A	P	A	P	P	0	P	A
3 Harsh Rathor	P	P	P	P	P	A	0	P	P	A	P	P	P	b	A	P
4 BARKHA RATHI	P	P	P	p	0	A	0	0	10	P	p	P	P	P	P	P
5 HARENDRA	0	P	P	P	0	0	P	A	D	p	P	P	A	P	P	P
6 MAHESH KUMAR YADAV	P	P	P	P	0	Ó	0	0	0	0	0	P	P	P	P	A
7 MANJEET SINGH	ρ	P	p	P	P	P	0	p	A	D	P	P	P	P	P	A
8 MANTHAN GARG	P	P	P	P	B	P	P	D	P	A	0	A	0	P	P	P
9 MAYANK	P	D	P	P	0	P	P	P	P	0	P	A	P	A	P	P
0 MOHD SAMAR	P	P	0	P	P	P	P	P	0	P	A	0	A	A	P	P
1 MOHD SHADAB	P	P	P	P	0	P	0	P	10	P	A	P	A	P	P	A
2 MUDDASIR	P.	P	P	P	0	P	P	P	P	A	12	A	P	A	P	1
3 MUKUL TYAGI	P	þ	p	P	P	P	P	p	1	P	P	A	P	P	P	P
4 NAJISH PRAVEEN	P	P	P	P	1	13	P	10	P	P	P	P	P	A	P	A
5 NEHA SAROHA	P	P	P	P	P	P	P	P	P	P	P	6	6	13	Pa	P
6 NIDHI PAL	P	D	0	p	0		1	0	0	P	13	P	P	P	10	A
7 NISHANT ANAND	P	P	P	0	P	7	P	P	P	P	D	P	P	A	0	A
8 NISHANT SHARMA	0	P	P	P	p	P	P	P	b	P	1	A	P	A	P	p
9 PARIDHI GOEL	P	10	0	D	P	P	P	P	P	12	8	0	8	P	P	P
20 POOJA MAURYA	P	0	0	p	10	P	P	P	10	P	P	P	1	P	P	F
21 PREETI PANWAR	10	0	P	7	P	B	P	b	P.	P	P	P	(4)	P	(7	P
22 PRINCE SINGH	1	A	Pa	A	1)		P	P	P	6	P	P	P	P	1	A
23 PRITAM	13	0	P	P	A	P	P	10	10	P	0	P	P	11	12	D
24 PRIYA	p	P	P	P	p	Pa	P	0	0	P.	P	P	P	12	P	P
25 PRIYANKA GUPTA	P	0	P	P	P	12	P	P	P	P	Pa	P	1	1	P	1
26 PRIYANKA SINGH	P	0	P	10	P	Pa	P	P	0	P	B	A	P	P	0	P
27 PUNEET CHAUDHARY	p	P	P	12	0	()	1	1	P	P	1	P	Pa	P	13	6
28 RAHUL	0	0	U	0	A.	Y	P	A	P	V	P	P	12	8	h	P
29 REENA	D	0	15	7	D	.0	P	P	1)	1	P	p.	P	Pa		6
30 RENU RAGHAV	17	0	p	P	12	P	P	P	0	A	0	1	A	P	A.	P
31 NEERAJ KUMAR	P	0	0	15	P	0	P	0		Lo	P	P	()	A	P	1
32 AAKASH KUMAR	0	0	0	P	p	P	B	6	0	1		H	H	A	b	6
33 CHITRANSH CHAUDHARY	0	10	0	V	P	A	1	P	1	1	B	13	0	1	P	P
34 KM SUMAN RANI	0	0	V	0	V	2	þ	P	0	0	13	8	1	1	14	1
35 KM AYUSHI RANA	0	b	n	0	D	R	A	P	8	P		1	P	P	A	f
36 KM SHEETAL	0	P	15	0	8	N	P	1	L.	P	8	12	3	P	0	A
37 ARUN CHIKARA	0	0	0	2	P	J	0	()	10	1	()	B	P	A	1	H
38 NARENDRA KUMAR	0	10	10	5	P	R	B	100		h	A	0	4	1	A	P
39 KM PRITI DEVI RAJPUT	0	0	P	0	0	10	16	P		12	P	0	La	P	0	6
40 KM AARTI KAUSHIK	P	0	0	0	P	P	K	1	P	P	P	12	P	P	1/	4
41 AMIT KUMAR	0	1	-	1	100	1				3						



Sample Certificate

VALUE ADDED COURSE

FUNDAMENTAL OF INSTRUMENTATION SKILLS



Organized by

Department of Physics

KVSCOS SWAMI VIVEKANAND SUBHARTI UNIVERSITY, MEERUT, U.P., INDIA

Certificate

This is to certify that Mr./Ms	
class	
has participated/completed the value added course of 30 hours on Funda	mental of Instrumentation Skills
from 26-08-17 to 02-12-2017 in department of physics faculty of Science.	(
Dr. Nindesh	Mr. Sdrvender
Course Coordinator	HOD