#### SKILL ENHANCEMENT COURSES

### **KU4SECCSC 101 : COMPUTER HARDWARE & NETWORKING**

Semester	Course Type	Course Level	Course Code	Credits	Total Hours
4	SEC	100-199	KU4SECCSC101	3 (2T+1P)	60

Learning	g Approach (Hou	urs/ Week)	Marks Distribution			Duration of ESE (Hours)
Lecture	Lecture Practical/ Internship		CE	ESE	Total	
2	2		25	50	75	1.5 hrs.

## **Course Description:**

The course will help in computer related operation and function involved in office activities regarding software installation, Hardware maintenance, network maintenance after completion of the course the student will be able work as a Hardware Analyst and Network Administrator

**Prerequisite: NIL** 

### **Course Outcomes:**

CO No.	Expected Outcome	Learning Domains
2	Solve different computer hardware related issues	A
3	Identify and select appropriate security measures in system maintenance	U/A
4	Use troubleshooting tools and tips in Software and hardware	A/An

problems related to internet applications

# **Mapping of Course Outcomes to PSOs**

			PSO 4	PSO 6	
CO 1	3		 3	 	2
	3	2			2
CO 3	3		3	 	2
CO 4	3		3	 	3

### **COURSE CONTENTS**

### **Contents for Classroom Transaction:**

M	U	DESCRIPTION	HOURS
0	N		
D	I		
U	T		
L			
E			
1	M	ODULE TITLE: Computer Fundamentals	12
	1	Computer Fundamentals & Basics of Power System in a Computer	
	2	Install Test and Troubleshoot Switch Mode Power Supply & UPS (Uninterrupted Power Supply).	
	3	Introduction to Basic Input Output System.	
	3	Introduction to Operating System	

2	MODULE TITLE: Computer Management.					
	1	Manage the resources of a Computer System (Windows and or Linux) according to users need.				
	2	Disk Partitioning				

<sup>\*</sup>Remember (R), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C)

Details about Central Processing Unit & Mother board	
 Primary and Secondary Memory	

3	M	MODULE TITLE: Maintaining devices and software						
	1	Install & connect accessories like optical drive, keyboard, mouse, monitor, Printer and troubleshoot them						
	2	Identify different types of Virus attack and take suitable course of action to disinfect a system						

4	M	ODULE TITLE: Networking	12
	1	Working Principle of Communication and utility of Network in a big System.	
	2	Network Topologies, Networking Devices,	
	3	Transmission Media, Sharing of resources.	
	4	Connect computers in a networking system and able to share, files, printers or other resources in a system.	
	5	Configure the router or modem and setup a secured connection via Internet	

5	Teacher Specific Module	
	1. Arrange practical session to identify various hardware components.     2. Practical session to install operating systems, application software and device drivers     3. Practice various trouble shooting techniques     4. Conduct workshop to use various network devices and connectors	12

## **Essential Readings:**

- 1. PC Hardware: The Complete Reference by Craig Zacker, John Rourke
- 2. Mastering Pc Hardware And Networking **Paperback Big Book, 1 January 2014** by Ajit Mittal (Author), Ajay Rana (Author)

### **Assessment Rubrics:**

]	Evaluation Type	Marks
End Semes	ster Evaluation	35(Theory)
Practical		15(practical)
Code writi	ng	8
Execution	without error	5
viva		2
Continuou	s Evaluation	15(Theory) 10(practical)
a)	Test Paper- 1	5
b)	Model Examination	5
c)	Assignment/viva	5
	Practical	
	Model exam	5
<u> </u>	Record	2
	Punctuality and lab performance	3
	Total	75