

**ES108: COMPUTER WORKSHOP
CREDIT - 1 (LTP:0,0,1)**

Course Objectives:

To impart ability to install and manage operating systems, drivers for hardware, and other software applications

Teaching and Assessment Scheme:

Teaching Scheme (Hours per week)			Credits	Assessment Scheme				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE	CE	ESE	CE		
0	0	2	1	0	0	40	60	100

Course Contents:

Unit No.	Topics	Teaching Hours
1	Introduction to various components of computer, Input / Output devices.	02
2	BIOS/UEFI settings	02
3	Basics and Installation of operating system, concept of dual booting, virtualization	04
4	Installation of device drivers and other required software, need and method of backup	04
5	Basic security issues: computer viruses, malware, etc., anti-virus software	02
6	Various office tools for text, spreadsheet and presentation documents	04
7	Flow-chart development tools, Introduction to various online tools for forms, documents, storage, etc	06
8	Basic concepts of networking and resource sharing in a network	04
TOTAL		28

Reference Books:

1. Scott Mueller, “*Upgrading and repairing PCs*”, 21st Edition; Pearson Education.
2. Mark Minasi, “*The complete PC upgrade and maintenance guide*”, 15th Edition; Sybex.
3. James, K. L., “*Computer hardware: installation, interfacing, troubleshooting and maintenance*”, PHI Learning.
4. M.Radhakrishnan and D. Balasubramanian, “*Computer Installation and Troubleshooting*” ISTE Learning Material.
5. Stephen J Bigelow, “*Troubleshooting, Maintaining and Repairing PCs*”, 5th Edition; Tata McGraw-Hill Publication.
6. Wale Soyinka, “*Linux Administration: A Beginner's Guide*” 6th Edition; Tata McGraw Hill Publication.
7. B Govindarajalu, “*IBM PC and Clones: Hardware, Troubleshooting, and Maintenance*”, 2nd Edition; Tata McGraw-Hill.

Course Outcomes (COs):

At the end of this course students will be able to

1. Understand basics of computer hardware
2. Install operating systems, drivers related to hardware and other software
3. Configure operating system for effective management of resources
4. Manage security related basic problem using anti-virus software
5. Create reports, presentation, and spread sheets
6. Work with various tools for collaboration and website creation