COURSE TITLE	**COMPUTER WORKSHOP**
COURSE CODE	**01CE2102**
COURSE CREDITS	**1**

Objective:

1 Students of Computer Engineering have to work with various hardware and software not only during academia but also in company. Thus, students should get familiar with various hardware, software, operating systems and networking. This course will provide student a much-needed knowledge of computer hardware and networking, enabling them to identify and rectify the onboard computer hardware, software and network related problems. With the help of this course the student will be able to understand the hardware specifications that are required to run operating system and various application programs.

Course Outcomes: After completion of this course, student will be able to:

1 Understand the basic components of computer hardware, software, and operating systems.

2 Apply knowledge of computer assembly, OS installation, and basic troubleshooting techniques.

3 Demonstrate effective use of Internet services and networking concepts for communication and data transfer.

4 Analyze the capabilities and collaborative features of Google Suite applications for effective documentation and data collection

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
0	0	2	0	0	0	25	25

Contents : Unit	Topics	Contact Hours
Total Hours		

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	**Practical 1** System Assembly and Component Identification	2
2	**Practical 2** Windows Installation and Configuration	2
3	**Practical 3** Ubuntu Linux Installation and Basic Commands	2

DR. KRUNAL NARUMAL VAGHELA
Digitally signed by (Name of HOD)

DR. RAJENDRASINH BAHADURSINH JADEJA
Digitally signed by (Name of Dean/ Principal)

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
4	**Practical 4** Driver Installation and Basic Troubleshooting	2
5	**Practical 5** Basic Network Setup	2
6	**Practical 6** Wi-Fi Router Configuration	2
7	**Practical 7** Internet Browsing and Safe Practices	2
8	**Practical 8** Network Troubleshooting	2
9	**Practical 9** Gmail and Google Drive Management	2
10	**Practical 10** Google Calendar and Google Docs	2
11	**Practical 11** Google Sheets - Data Entry and Analysis	2
12	**Practical 12** Google Forms - Survey and Data Collection	2
13	**Practical 13** Google Slides - Presentation Creation	2
14	**Practical 14** Collaboration and Real-Time Editing in Google Suite	2
Total Hours		**28**

Textbook :

1 Modern Computer Hardware Course, M Lotia, P Nair, P Lotia, BPB Publications, 2011

References:

1 Hardware Bible, Hardware Bible, Winn L. Rosch, Indianapolis, Ind, 1999

2 Fundamentals of Computers , Fundamentals of Computers , V. Rajaraman, Tata McGraw Hill Education Private Limited, 2015

3 Computer Studies , Computer Studies , John Shelley and Roger Hunt, London : Pitman, 1984

4 Computer Fundamentals, MS Office and Internet & Web Technology, Computer Fundamentals, MS Office and Internet & Web Technology, Dinesh Maidasani, Laxmi Publications,, 2015

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery

Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
10.00	20.00	40.00	20.00	10.00	0.00

Instructional Method:

1. The course delivery method will depend upon the requirement of content and need of students. The teacher in addition to conventional teaching method by black board, may also use any of tools such as demonstration, role play, Quiz, brainstorming, MOOCs etc.
2. The internal evaluation will be done on the basis of continuous evaluation of students in the laboratory and class-room.
3. Practical examination will be conducted at the end of semester for evaluation of performance of students in laboratory.
4. Students will use supplementary resources such as online videos, NPTEL videos, e courses, Virtual Laboratory

Supplementary Resources:

1. http://nptel.ac.in/courses/106105084/
2. https://www.coursera.org/learn/internet-history
3. http://windows.microsoft.com/en-US/windows7/Create-a-system- repair-disc
4. https://www.coursera.org/learn/getting-started-with-google-sheets
5. https://www.coursera.org/learn/introduction-to-computers-and-office-productivity-software

DR. KRUNAL NARUMAL VAGHELA
Digitally signed by (Name of HOD)

DR. RAJENDRASINH BAHADURSINH JADEJA
Digitally signed by (Name of Dean/ Principal)