



# C. U. SHAH UNIVERSITY, WADHWAN CITY.

Faculty of: **Computer Science**

Course: **Bachelor of Science (Information Technology)**

Semester: **I**

Subject Code: **4CS01TOA1**

Subject Name: **Computer fundamentals & Office automation**

Sr. No	Branch Code	Subject Code	Subject Name	Teaching hours/ Week			Credit hours	Credit Points	Evaluation Scheme/ Semester								Total
				Th	Tu	Pr			Theory				Practical				
									Internal Assessment		End Semester Exams		Internal Assessment		End Semester Exams		
									Marks	Duration	Marks	Duration	Marks	Duration	Marks	Duration	
4	2	4CS01TOA1	Computer fundamentals & Office automation	4	--	2	6	5	15 SE	1Hr.	70	2½ Hrs.	25 IP	1	---	--	150

## AIM:

To enable the student to learn number system, computer codes, hardware, Software, operating system, storage devices and office applications used in operating system etc.

## COURSE CONTENTS

### Unit I Introduction to Computer

**06 Hrs.**

- Functional Block Diagram
- Computer : History and Development
- Evolution of Computer
- An Introduction to Computer

### Unit II Overview of Computer

**06 Hrs.**

- Different types of Input Devices.
- Different types of Output Devices.
- Different types of Storage Devices.

### Unit III Number System

**10 Hrs.**

- Binary, Octal, Decimal, Hexadecimal
- Conversion of Numbers:
- Decimal to Binary, Octal, Hexadecimal
- Binary to Decimal, Octal, Hexadecimal
- Octal to Decimal, Binary, Hexadecimal
- Hexadecimal to Decimal, Binary, Octal
- 1's complement, 2's complement, Binary Addition, Binary Subtraction

### Unit IV Basics of gate and operating system

**10 Hrs.**

- Logic Gates, AND, OR, NOT, NAND, NOR, EX-OR, EX-NOR

- Half Adder, Full Adder, Multiplexer, De-multiplexer
- Operating System, (Batch, Multiprocessor, Multiprogramming, Time Sharing, Real Time)

**Unit V Emerging Technology**

**08 Hrs.**

- Bluetooth
- Wi-Fi
- Li-fi
- GPS
- Wi-max

**Unit VI Introduction to Internet**

**08 Hrs.**

- An Introduction to Computer Networking.
- Introduction to LAN, MAN, WAN, intranet, E-mail, Components of E-Mail.

**REFERENCE BOOKS:**

- Computer Fundamentals, by P. K. Sinha, ISBN-13: 978-8176567527, Publisher: BPB
- COMPUTER ORGANIZATION AND ARCHITECTURE Kindle Edition, by V. Radhakrishnan, T. Rajaraman, Publisher: PHI
- Computer System Architecture – M. Morris Mano
- Computer Organization & Architecture – William Stallings, 4th Ed.

**SWAYAM/NPTEL Link:**

[https://onlinecourses.swayam2.ac.in/cec21\\_cs15/preview](https://onlinecourses.swayam2.ac.in/cec21_cs15/preview)

**Practical on MS Office: Word, Excel & Power Point**