



C. U. SHAH UNIVERSITY, WADHWAN CITY.

Faculty of: **Computer Science**

Course: **Bachelor of Computer Applications**

Semester: **II**

Subject Code: **4CS02ACA1**

Subject Name: **Computer Architecture And Organization**

Sr. No	Branch Code	Subject Code	Subject Name	Teaching hours/ Week			Credit hours	Credit Points	Evaluation Scheme/ Semester								
				Th	Tu	Pr			Theory				Practical				Total
									Internal Assessment		End Semester Exams		Internal Assessment		End Semester Exams		
									Marks	Duration	Marks	Duration	Marks	Duration	Marks	Duration	
2	2	4CS02ACA1	Computer Architecture And Organization	4	--	--	4	4	15(SE)	1Hr.	70	2½ Hrs.	--	--	--	--	100
									15(CE)								

AIM :

The aim of this subject is to get in-depth practical knowledge of C++ language.

COURSE CONTENTS

Unit I 8 Hrs.

- Introduction
- Functional Blocks in a Computer System
- Number system and Computer Arithmetic

Unit II 8 Hrs.

- Addressing Modes
- Instruction Set and Instruction Execution Flow

Unit III 8 Hrs.

- Hardware and Micro-program based control Unit Design

Unit IV 8 Hrs.

- Memory Architecture

Unit V 8 Hrs.

- Peripherals and Input-Output

Unit VI 8 Hrs.

- Performance Enhancement of Processor

REFERENCE BOOKS:

1. William Stallings. “Computer organization and architecture: designing for performance”. Pearson Education India, 2000.
2. Carl Hamacher, Zvonko Vranesic and Safwat Zaky. “Computer Organization”, McGraw Hill, 2011.
3. David A. Patterson, John L. Hennessy. “Computer organization and design: the hardware/software interface”. Elsevier, 2011.

NPTEL COURSE (<https://nptel.ac.in/>):

1. Computer architecture and organization by Prof. Indranil Sengupta, Prof. Kamalika Datta
Course Link: <https://nptel.ac.in/courses/106105163>