

## **Computer Architecture**

**Code : CS 493**

Contacts : 3L

**Credits :2**

All laboratory assignments are based on Hardware Description Language (VHDL or Verilog) Simulation.

[Pre-requisite: The hardware based design has been done in the Analog & Digital Electronics laboratory and Computer Organisation laboratory]

1. HDL introduction
2. Basic digital logic base programming with HDL
3. 8-bit Addition, Multiplication, Division
4. 8-bit Register design
5. Memory unit design and perform memory operations.
6. 8-bit simple ALU design
7. 8-bit simple CPU design
8. Interfacing of CPU and Memory