

## Shri Sant Gajanan Maharaj College of Engineering, Shegaon

## **Department of Information Technology**

### Course Outcomes of all subjects of B.E. Second Year (SEM-IV)

## **4IT01-Computer Organization and Architecture**

After successfully completing the course the students will be able to:

CO1	Understand the basics of instructions sets and their impact on processor design
CO2	Demonstrate an understanding of the design of the functional units of a digital computer system.
CO3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory.
CO4	Design a pipeline for consistent execution of procedure and multi processors.

#### 4IT02- DATA COMMUNICATION & NETWORKING

After successfully completing the course the students will be able to:

CO1	Demonstrate the principles and fundamental concepts of computer networks
CO2	Demonstrate and explain data communication systems with their techniques and applications.
CO3	Identify various error detection and correction techniques in data transmission.
CO4	Evaluate the network addresses and learn routing mechanism protocols.

CO5	Design TCP connection and analyze upper OSI layer functions and services.

# 4IT03-Operating System

After successfully completing the course the students will be able to:

CO1	Able to control access to a computer and the files that may be shared.
CO2	Demonstrate the knowledge of the components of computer and their respective roles in computing.
CO3	Understand to recognize and resolve user problems with standard operating environments
CO4	Analyze the practical knowledge of how programming languages, operating systems, and architectures interact and how to use each effectively

### **4IT04- Data Structure**

After successfully completing the course the students will be able to:

CO1	Understand basic data structures such as arrays, strings, and linked lists
CO2	Understand linear data structures such as stacks and queues and understand their difference
CO3	Understand the concept of hash function and collision and its resolution methods.
CO4	Understand the concept of memory management.

CO5	Analyze the basic operations of tree, heap and graphs.
CO6	Analyze different techniques for solving problems like sorting and searching.

# 4IT05- Social Science and Engineering Economics

After successfully completing the course the students will be able to:

CO1	Exercise his/her fundamental rights in the proper sense and at the same time identity his/her responsibilities in nation-building.
CO2	Understand the composition and powers of the Indian Parliament.
CO3	Measure the impact of science and technology on culture and civilization.
CO4	Assess the different market structures and their implications on the Economy.
CO5	Analyze and compare different factors of production using the concept of cost, and returns to scale.
CO6	Predict the impact of various obstacles to economic growth in the Indian context.