

SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAM: B.E. (INFORMATION TECHNOLOGY)

ACADEMIC SESSION: 2025-26

COURSE OUTCOMES (NEP SCHEME)

CLASS: SECOND YEAR

SEMESTER: III

Course Title: Discrete Structure and Graph Theory

Course Code: 3IT200PC

After successful completion of the course, students will be able to:

CO1: Demonstrate the basic terminologies of mathematical logic, theory of inference and set theory.

CO2: Apply mathematical logic, inference theory and set theory, to solve engineering problems.

CO3: Apply algebraic structures, grammar, polish expressions and lattices to solve the mathematics expressions.

CO4: Apply the lattices for partially ordered relations and Boolean algebraic simplification methods to minimize the Boolean functions.

CO5: Analyze graphs based on various parameters for graph manipulation and storage representation.

Course Title: Object Oriented Programming

Course Code: 3IT201PC

After successful completion of the course, students will be able to:

CO1: Apply Java syntax and constructs to implement functional programs.

CO2: Apply the concepts of inheritance, aggregation, method overriding, abstract classes, interfaces, and packages to develop Java programs.

CO3: Apply the concepts of exception handling and file handling to develop robust Java programs.

CO4: Apply the concepts of Java applets to develop interactive graphical programs.

CO5: Apply event-handling concepts to develop interactive Java applications.

Course Title: Analog and Digital Electronics

Course Code: 3IT202PC

After successful completion of the course, students will be able to:

CO1: Apply the basic concepts of analog electronics while choosing a transistor as per application.

CO2: Categorize different applications of the operational amplifier.

CO3: Discriminate the working of sinusoidal and non-sinusoidal waveform generators.

CO4: Apply the basic concepts of digital electronics and K-map to simplify logic expressions.

CO5: Analyze combinational and sequential circuits for different applications.

Course Title: Introduction to Data Structures

Course Code: 3IT205MD

After successful completion of the course, students will be able to:

CO1: Apply data structure concepts to analyze complexity and perform operations like searching, sorting, insertion, and deletion on linear arrays.

CO2: Apply linked lists, stacks, and queues with basic operations to solve computational problems

CO3: Implement and analyze tree and graph data structures with traversal, searching, and path-finding algorithms.

Course Title: OE-1 Cyber Law

Course Code: 3IT206OE

After successful completion of course, students will be able to:

CO1: Apply basic computer and internet concepts to analyze their role in digital business and governance.

CO2: Apply knowledge of e-payment systems to select suitable methods for secure online transactions.

CO3: Identify types of cybercrimes and common techniques used by cyber offenders.

CO4: Categorize cybercrimes and relate them to relevant legal provisions.

CO5: Apply sections of the IT Act to given cyber law scenarios.

CO6: Describe ethical and security concerns associated with the use of digital technologies.

Course Title: Entrepreneurship Development

Course Code: 3IT207EM

After successful completion of course, students will be able to

CO1: Understand the definitions and fundamental concepts of entrepreneurship and start-ups.

CO2: Understand the role of a business plan in guiding the implementation of business ideas.

CO3: Understand the company's organization structure and its role in effective management.

Course Name: Environmental Science

Course Code: 3SH208VE

After successful completion of course, students will be able to

CO1: Understand the multidisciplinary nature of environment and Renewable and non-renewable resources

CO2: Understand natural environment and its relationship with human activities.

CO3: Understand the basic concepts and problems and follow sustainable development practices.