



**SSGMCE SHEGAON**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

---

**COURSE OUTCOMES OF ALL COURSES OF THIRD SEMESTER  
BE CSE (COMPUTER SCIENCE AND ENGINEERING)  
NEP-2020**

**3CS200PC: Discrete Structure & Graph Theory**

On completion of the course, the students will be able to:

1. Analyze and express logic sentence in terms of predicates, quantifiers, and logical connectives.
2. Derive the solution for a given problem using deductive logic and prove the solution based on logical inference.
3. Classify algebraic structure for a given mathematical problem.
4. Perform combinatorial analysis to solve counting problems.
5. Perform operation on trees data structures.
6. Develop the given problem as graph networks and solve with techniques of graph theory

**3CS201PC: Object Oriented Programming**

On completion of the course, the students will be able to:

1. Apply knowledge of Java constructs for developing programs/applications.
2. Conduct practical experiments for demonstrating features of Java.
3. Distinguish between java concepts for better applicability w.r.t requirement.
4. Evaluate the given Java program to identify bugs and to write correct code.
5. To conjecture a prototype to solve real life problems.

**3CS202PC: Data Structure**

On completion of the course, the students will be able to:

1. Apply various linear and nonlinear data structures
2. Demonstrate operations like insertion, deletion, searching and traversing on various data structures
3. Examine the usage of various structures in approaching the problem solution.
4. Choose appropriate data structure for specified problem domain

**3CS400EL Comm.Engag.Project/Field Project Lab**

On completion of the course, the students will be able to:

1. Identify and analyze real community problems in selected rural development domains.
2. Apply suitable digital and technological solutions to address community needs.
3. Evaluate and integrate innovative and cost-effective technologies for rural improvement.
4. Engage with community stakeholders and interpret feedback for better outcomes.
5. Create and present a comprehensive project report with outcomes and future scope.

### **3CS203PC: Object Oriented Programming Lab**

On completion of the course, the students will be able to:

1. To develop the knowledge of object-oriented paradigm in the Java programming language.
2. To evaluate classical problems using java programming.
3. To develop software development skills using java programming for real world applications.

### **3CS204PC Data Structure Lab**

On completion of the course, the students will be able to:

1. Apply various linear and nonlinear data structure.
2. Demonstrate operations like insertion, deletion, searching and traversing on various data Structures.
3. Examine the usage of various structures in approaching the problem solution.
4. Choose appropriate data structure for specified problem domain

### **3CS205MD: Fundamental Computer Programming**

On completion of the course, the students will be able to:

1. Understand computing systems and problem-solving logic.
2. Apply algorithmic thinking to solve simple problems.
3. Implement basic programs using control structures and I/O operations.

### **3CS206OE: E-Commerce**

On completion of the course, the students will be able to:

1. Explain the basic concepts of E-Commerce and its significance.
2. Identify different types of online business models and their applications.
3. Understand digital payment methods and their security aspects.
4. Analyze the impact of digital marketing and online customer engagement.
5. Recognize legal, ethical, and cybersecurity challenges in E-Commerce.
6. Explore career opportunities and emerging trends in E-Commerce.

### **3CS207EM: Entrepreneurship Development**

On completion of the course, the students will be able to

1. Understand and explain key entrepreneurial concepts and the startup ecosystem.
2. Identify, assess and evaluate business opportunities using feasibility analysis.
3. Develop a basic business plan including financial, marketing and legal elements.
4. Recognize the importance of innovation, funding sources and IP rights in startup.
5. Apply entrepreneurial thinking to engineering problems and real world challenges.

