



SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

**COURSE OUTCOMES OF ALL COURSES OF EIGHTH SEMESTER
BE CSE (COMPUTER SCIENCE AND ENGINEERING)**

8KS01 OBJECT ORIENTED ANALYSIS AND DESIGN

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

1. Describe Object Oriented principles, for performing object-oriented analysis and design.
2. Explain the basic concepts of UML, Software Development Processes and Design pattern.
3. Illustrate requirements for developing a software.
4. Create initial domain model & system sequence diagram for use case scenario.
5. Design static and dynamic objects for modeling.
6. Construct UML and Design Patterns for developing object-oriented software.

8KS02 PROFESSIONAL ETHICS AND MANAGEMENT

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

1. Relate ethical and non-ethical situations.
2. Outline ethics in the society & environment.
3. Examine the moral judgment & correlate the concepts in addressing the ethical dilemmas.
4. Identify risk and safety measures in various engineering fields.
5. Justify ethical issues related to engineering responsibilities and rights.
6. Synthesize cognitive skills in solving social problems.

8KS03 VIRTUAL AND AUGMENTED REALITY

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

1. Describe Virtual reality & its applications.
2. Discuss virtual reality world and types.
3. Examine geometry of virtual world and the physiology of human vision
4. Investigate Visual Perception, Motion and Tracking
5. Inspect Physics of Sound and the Physiology of Human Hearing.
6. Explain Augmented reality & examples based on Augmented reality

8KS03 MACHINE LEARNING AND AI

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

1. Describe Machine learning and its types.
2. Discuss Bayesian Decision Theory and Parametric Methods.
3. Illustrate Multivariate and Dimensionality Reduction methods.
4. Categorize Non-Parametric methods.
5. Justify discrimination techniques in Machine learning.
6. Synthesize Neural network using Multilayer Perceptron.

8KS03 WIRELESS SENSOR NETWORKS

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

1. Describe Network of Wireless Sensor Nodes
2. Explain Node Architecture and Physical Layer.
3. Discuss Medium Access Control and its related properties.
4. Analyze the protocols and algorithms used at different network protocol layers in sensor systems.
5. Compare different power management techniques and clocks and the Synchronization problems.
6. Explain time synchronization and its problems.

8KS03 SYSTEM & SOFTWARE SECURITY

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

1. Relate malicious and non-malicious attacks.
2. Outline web common vulnerabilities, attack mechanisms and methods against computer and information systems.
3. Apply relevant methods for security modeling and analysis of Operating System.
4. Investigate a secure network by monitoring and analyzing the nature of attacks.
5. Explain cryptography, intrusion detection and firewall system.
6. Implement different security solutions at various levels such as operating systems, databases and clouds.

8KS04 DISTRIBUTED LEDGER TECHNOLOGY

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

1. Describe basic knowledge of Distributed Ledger Technologies
2. Outline Analytical Framework for Distributed ledger technology
3. Use Cryptographic method for ledgers.
4. Explain knowledge of Bitcoin.
5. Inspect Bitcoin cryptocurrency mechanisms.
6. Synthesize bitcoin mining process.

8KS04 MULTIMEDIA COMPUTING

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

1. Describe technical aspect of Multimedia Computing.
2. Compare various file formats for audio, video and text media.
3. Examine lossless data compression techniques in real time.
4. Illustrate lossy data compression techniques in real time scenario.
5. Investigate video compression technique.
6. Construct various networking protocols for multimedia applications.

8KS04 MODELLING & SIMULATION

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

1. Describe System models & system modelling.
2. Explain continuous system methods of obtaining solutions.
3. Illustrate the need of simulation and mathematical modeling
4. Examine simulation of Queuing System and PERT network.
5. Inspect experimentation of Simulation.
6. List different special purpose languages use for continuous and discrete systems