



**SSGMCE SHEGAON**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

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**COURSE OUTCOMES OF ALL COURSES OF FIRST SEMESTER  
ME CE (COMPUTER ENGINEERING)**

**1KMEF1 ADVANCED COMPUTER ARCHITECTURE**

After completing this course, student will be able to

1. Understand Fundamental Concepts of Computer Architecture
2. Identify limitations and other issues of Pipelining in DLX Architecture
3. Understand Advanced Pipeline and Instruction Level Parallelism with its Limitations
4. Explain Cache hit and miss Primary and Virtual Memory and Memory Hierarchy design challenges.
5. Understand Storage system, working of OS and inter connected networks.

**1KMEF2 ALGORITHMIC**

After completing this course, student will be able to

1. Understand the fundamental algorithms like searching, sorting, graph traversal and divide-and-conquer
2. Understand how algorithm can be used in engineering applications
3. Make use of dynamic programming to solve optimization problem
4. Apply Dijkstra's, Kruskal's and Prim's algorithm to solve complex problem
5. Analyze computational complexity of different algorithms
6. Design the algorithm to solve problem efficiently

**1KMEF3 OPERATING SYSTEM DESIGN**

After completing this course, student will be able to

1. Possess knowledge of the role of Operating Systems and their types.
2. Apply the concept of a process, thread and scheduling algorithms.
3. Apply the concepts of process synchronization and how it is achieved.
4. Realize the concept of deadlock and different ways to handle it.
5. Realize various memory management techniques.
6. Realize the concept of I/O management and File system

#### **1KMEF4 OBJECT-ORIENTED SYSTEMS**

After completing this course, student will be able to

1. Explain OOAD concepts and various UML diagrams
2. Select an appropriate design pattern
3. Illustrate about domain models and conceptual classes
4. Compare and contrast various testing techniques
5. Construct projects using UML diagrams

#### **1KMEF5 MOBILE COMPUTING**

After completing this course, student will be able to

1. Identify the characteristics and infrastructure of different wireless communication systems, such as cellular, satellite, Ad Hoc and sensor networks, wireless MANs, LANs, and PANs
2. Explain the propagation mechanisms and types of radio waves used in wireless communication, including free space propagation, land propagation, path loss, and interference
3. Evaluate the cellular concept, frequency reuse, and channel allocation techniques, including fixed, dynamic, and hybrid allocation methods
4. Analyze mobile communication systems' infrastructure, handoff parameters, roaming support, and security measures, and compare existing wireless systems such as AMPS, IS-41, GSM, and IMT-2000
5. Discuss ad hoc and sensor networks, routing protocols, and wireless MANs, LANs, and PANs, including recent advances and ultra-wideband technology
6. Evaluate multimedia service requirements, resource management, directional and smart antennas, and security issues in wireless communication systems