

SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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

7KS01 SOCIAL SCIENCE & ENGINEERING ECONOMICS

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

- 1. To identify the importance of fundamental rights as well as fundamental duties.
- 2. To study the composition and powers of the Indian Parliament.
- 3. To study the impact of science and technology on culture and civilization.
- 4. To identify the different market structures.
- 5. To study the decision-making process and the relationship between engineering and economics.
- 6. To identify the importance of Economic Development on the livelihood of the citizens.

7KS02 COMPUTER NETWORKS

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

- 1. Describe the basic concepts of Computer Graphics.
- 2. Demonstrate various algorithms for basic graphics primitives.
- 3. Apply 2-D geometric transformations on graphical objects.
- 4. Use various Clipping algorithms on graphical objects.
- 5. Explore 3-D geometric transformations, curve representation techniques and projections methods
- 6. Explain visible surface detection techniques and Animation

7KS03 CLOUD COMPUTING

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

- 1. Describe the fundamental concept, architecture and applications of Cloud Computing.
- 2. Discuss the problems related to cloud deployment model.
- 3. Examine the concept of virtualization.
- 4. Identify the role of network connectivity in the cloud.
- 5. Assess different Cloud service providers.
- 6. Inspect the security issues in cloud service models.

7KS04 ROBOTICS

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

- 1. Describe basic concept of robotics.
- 2. Explain Components of a Robot System & Mechanical Systems.
- 3. Illustrate Control of Actuators in Robotic Mechanisms.
- 4. Compare and contrast Robotic Sensory Devices.
- 5. Recommend Robotics Hardware & Software Considerations in Computer Vision
- 6. Design Robotic system by taking real time considerations.

7KS04 DATA WAREHOUSE AND MINING

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

- 1. Explain the basics of data mining techniques.
- 2. Identify the similarity and dissimilarity between the data sets.
- 3. Apply Data Preprocessing to techniques.
- 4. Describe Data Warehouse fundamentals, Data Mining Principles.
- 5. Illustrate Multidimensional Data Analysis in Cube Space.
- 6. Assess Mining Frequent Patterns, Associations, and Correlations.

7KS04 EMBEDDED SYSTEM

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

- 1. Describe the basics of embedded systems and structural core units as well as memory organization for embedded system.
- 2. Explain components of embedded system, characteristics and quality attributes of embedded systems.
- 3. Discuss role of 8051 microcontroller and its architecture in design of embedded systems.
- 4. Examine the different Addressing modes and Instruction Set of 8051 microcontrollers.
- 5. Use knowledge of C programming to do embedded programming.
- 6. Assess the Real-Time Operating System concepts with VxWorks RTOS.

7KS04 Digital Forensics

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

- 1. Describe Digital Forensics and its related preparation
- 2. Outline Data Acquisition tools
- 3. Use knowledge to improve crime investigations.
- 4. Examine Digital Forensic and its validation
- 5. Assess role of email and social media in investigations
- 6. Discuss Cloud Forensics.

7KS05 BLOCK CHAIN FUNDAMENTALS

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

- 1. Understand the concept of decentralization of the block chain with different layers of blockchain
- 2. Apply basic cryptographic primitives with encryption standards.
- 3. Analyze & Design Consensus Algorithms.
- 4. Examine fundamentals of Bitcoin, how Bitcoin transactions are constructed and used with Bitcoin addresses, accounts, and mining.
- 5. Understand foundation, architecture, and use of the Ethereum blockchain.
- 6. Execute & build block chain application/ transaction.

7KS05 IMAGE PROCESSING

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

- 1. Explain fundamental steps in Image Processing.
- 2. Compare different methods for image transform with its properties.
- 3. Illustrate Image Enhancement in spatial domain.
- 4. Examine Image Enhancement in Frequency Domain.
- 5. Apply various methods for segmenting image and identifying image components.

7KS05 OPTIMIZATION TECHNIQUES

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

- 1. Describe statement of an optimization problem
- 2. Examine linear programming procedures to solve optimization problems.
- 3. Compare different nonlinear programming methods of optimization
- 4. Discuss Geometric Programming with different constraint
- 5. Identify the appropriate optimization technique for the given problem
- 6. Synthesize algorithms to solve real time optimization problems.

7KS06 COMPUTER GRAPHICS LAB

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

- 1. Describe the basic concepts of Computer Graphics.
- 2. Demonstrate various algorithms for basic graphics primitives.
- 3. Apply 2-D geometric transformations on graphical objects.
- 4. Use various Clipping algorithms on graphical objects
- 5. Explore 3-D geometric transformations, curve representation techniques and projections methods
- 6. Explain visible surface detection techniques and Animation.