



SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE OUTCOMES OF ALL COURSES OF SIXTH SEMESTER

BE CSE (COMPUTER SCIENCE AND ENGINEERING)

6KS01 SECURITY POLICY & GOVERNANCE

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

1. List and discuss the key characteristics of Information Security, Leadership and Management
2. Differentiate between Law and Ethics.
3. Describe why ethical codes of conduct are important to Information Security.
4. Discuss the importance, benefits and desired outcomes of Information Security Governance
5. Discuss the process of developing, implementing and maintaining various types of Information Security Policies.
6. Define Risk Management and its role in the organization.

6KS02 DESIGN AND ANALYSIS OF ALGORITHMS

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

1. Carry out the analysis of various Algorithms for mainly Time complexity.
2. Apply design principles and concepts to algorithm design.
3. Understand different algorithmic design strategies.
4. Analyze the efficiency of algorithms using time complexity.
5. Apply the standard sorting algorithms.

6KS03 SOFTWARE ENGINEERING

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

1. Decide on a process model for a developing a software project.
2. Classify software applications and identify unique features of various domains.
3. Design test cases of a software system.
4. Understand basics of Project management.
5. Plan, schedule and execute a project considering the risk management.
6. Apply quality attributes in software development life cycle.
7. Understand quality control and to ensure good quality software.

6KS04 NATURAL LANGUAGE PROCESSING

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

1. Understand how to tag a given text with basic Language features.
2. Design an innovative application using NLP components.
3. Implement a rule-based system to tackle morphology/syntax of a language.
4. Design a tag set to be used for statistical processing for real-time applications.
5. Compare and contrast the use of different statistical approaches for different types of NLP applications.

6KS04 BIG DATA ANALYTICS

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

1. Explain basics and need of data science.
2. Demonstrate proficiency with statistical analysis of data.
3. Perform linear and multiple linear regression analysis.
4. Develop the ability to build and assess classification-based models.
5. Evaluate outcomes and make decisions based on data.
6. Compare machine learning techniques to solve data science business problems.

6KS04 SENSORS AND ACTUATORS

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

1. Fabricate some of those sensors.
2. Simulate sensors and characterize before fabricating it.
3. Design application with sensors and actuators for real world.

6KSO4 CRYPTOGRAPHY

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

1. Classify the symmetric encryption techniques.
2. Illustrate various public key cryptographic techniques.
3. Evaluate the authentication and hash algorithms.
4. Discuss authentication applications.
5. Summarize the intrusion detection and its solutions to overcome the attacks.
6. Understand basic concepts of system level security.

6KS05 COMPUTATIONAL BIOLOGY

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

1. Understand what types of biological questions can be investigated using computers, and what limitations computational methods impose on the understanding of biology.
2. Describe the properties of DNA, RNA, and proteins, the relationships among these molecules.
3. Analyze how to convert a biological question into a computational problem that can be solved using computers.
4. Explain general approaches for solving computational problems, and will be able to apply these approaches to new problems you encounter.
5. Understand how implement the algorithms by writing computer programs.

6KS05 CYBER LAWS & ETHICS

On completion of this course, the students should be able to:

1. Understand Cyber Space, Cyber Crime, Information Technology, Internet & Services.
2. List and discuss various forms of Cyber Crimes.
3. Explain Computer and Cyber Crimes.
4. Understand Cyber Crime at Global and Indian Perspective.
5. Describe the ways of precaution and prevention of Cyber Crime as well as Human Rights.

6KS05 INTELLECTUAL PROPERTY RIGHTS

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

1. Demonstrate a breadth of knowledge in Intellectual property.
2. Assess fundamental aspects of Intellectual Property Rights.
3. Discuss Patents, Searching, filling and drafting of Patents.
4. Discuss the basic principles of geographical indication, industrial designs, and copyright.
5. Explain of Trade Mark and Trade Secret.
6. Investigate current trends in IPR and Government initiatives in fostering IPR.

6KS06 DESIGN AND ANALYSIS OF ALGORITHMS – LAB

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

1. Carry out the analysis of various Algorithms for mainly Time complexity.
2. Apply design principles and concepts to algorithm design.
3. Understand different algorithmic design strategies.
4. Analyze the efficiency of algorithms using time complexity.
5. Apply the standard sorting algorithms.

6KS07 SOFTWARE ENGINEERING LAB

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

1. Understand basic Software engineering methods and practices, and their appropriate application.
2. Describe software process models such as the waterfall and evolutionary models.
3. Discuss role of project management including planning, scheduling and, risk management.
4. Explain data models, object models, context models and behavioral models.
5. Understand of different software architectural styles and Process frame work.

6KS09 C SKILL LAB IV– LAB (DevOps)

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

1. Install and setup of Jenkins on your systems.
2. Create and run jobs in Jenkins.
3. Add and manage plugins. Use plugins in jobs.
4. Create and run pipelines in Jenkins.
5. Setup, configure, and deploy jobs.