



SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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

5KS01 DATABASE MANAGEMENT SYSTEMS

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

1. Model, design and normalize databases for real life applications.
2. Discuss data models, conceptualize and depict a database system using ER diagram.
3. Query Database applications using Query Languages like SQL.
4. Design & develop transaction processing approach for relational databases.
5. Understand validation framework like integrity constraints, triggers and assertions.

5KS02 COMPILER DESIGN

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

1. Describe the fundamentals of compiler and various phases of compilers.
2. Design and implement LL and LR parsers.
3. Solve the various parsing techniques like SLR, CLR, LALR.
4. Examine the concept of Syntax-Directed Definition and translation.
5. Assess the concept of Intermediate-Code Generation and run-time environment.
6. Explain the concept code generation and code optimization

5KS03 COMPUTER ARCHITECTURE & ORGANIZATION

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

1. Discuss basic structure of computer.
2. Understand the basic operation of CPU.
3. Compare and select various Memory and I/O devices as per requirement.
4. Solve the concepts of number representation and their operation.
5. Explain the concept of parallel processing and pipelining.

5KS04 COGNITIVE TECHNOLOGIES

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

1. Describe the Cognitive computing and principles of cognitive systems.
2. Identify role of Natural Language Processing in cognitive system.
3. Outline application of advanced analytics in cognitive computing.
4. Justify role of Cloud and Distributed Computing in Cognitive Computing.
5. Assess the process of building a Cognitive Application.
6. Identify the Emerging Areas and Future Applications of Cognitive Computing.

5KS04 DATA SCIENCE AND STATISTICS

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.

5KS04 INTERNET OF THINGS

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

1. Understand the basics of IoT.
2. Understand design methodology and platforms involved in IoT.
3. Apply the knowledge to interface various sensors with IoT development.
4. Design and Implement IoT system for real time application

5KS04 INTRODUCTION TO CYBER SECURITY

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

1. Know fundamentals of Cybercrimes and Cyber offenses.
2. Realize the Cyber threats, attacks and Vulnerabilities.
3. Explore the industry practices and tools.
4. Comprehend the Access Control and Authentication Process.
5. Implement Intrusion Detection and Prevention.

5KS05 PRINCIPLES OF MARKETING FOR ENGINEERING

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

1. Identify the importance of the digital marketing for marketing success,
2. Manage customer relationships across all digital channels and build better customer relationships.
3. Create a digital marketing plan, starting from the SWOT analysis and defining a target group.
4. Identify digital channels, their advantages and limitations, to perceiving ways of their integration taking into consideration the available budget.

5KS05 Open Elect. I (i) FUNDAMENTALS OF FINANCE & ACCOUNTING

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

1. Define bookkeeping and accounting.
2. Explain the general purposes and functions of accounting.
3. Explain the differences between management and financial accounting.
4. Describe the main elements of financial accounting information – assets, liabilities, revenue and expenses.
5. Identify the main financial statements and their purposes.

5KS05 ENTREPRENEURSHIP

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

1. Analyze the business environment in order to identify business opportunities,
2. Identify the elements of success of entrepreneurial ventures.
3. Evaluate the effectiveness of different entrepreneurial strategies.
4. Specify the basic performance indicators of entrepreneurial activity.
5. Explain the importance of marketing and management in small businesses venture,
6. Interpret their own business plan.

5KS06 DATABASE MANAGEMENT SYSTEMS LAB

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

1. Design ER model for any kind of application.
2. Design and develop database.
3. Apply normalization.
4. Query the database.
5. Apply various integrity constraints.
6. Build indices, views.
7. Implement triggers, assertions.

5KS07 COMPILER DESIGN – Lab

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

1. Identify the fundamentals of compiler and its phases.
2. Use the powerful compiler generation tools such as Lex and Yacc.
3. Write a lexical scanner, either from scratch or using Lex.
4. Develop program for solving parser problems.
5. Examine the various optimization techniques.

5KS08 EMERGING TECHNOLOGY LAB I

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

1. Demonstrate proficiency with statistical analysis of data.
2. Build skills in transformation and merging of data for use in analytic tools.
3. Perform linear and multiple linear regression analysis.
4. Develop the ability to build and assess data-based models.
5. Evaluate outcomes and make decisions based on data.

5KS08 DATA SCIENCE AND STATISTICS – LAB

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

1. Demonstrate proficiency with statistical analysis of data.
2. Build skills in transformation and merging of data for use in analytic tools.
3. Perform linear and multiple linear regression analysis.
4. Develop the ability to build and assess data-based models.
5. Evaluate outcomes and make decisions based on data.

5KS09 C-Skill Lab – III

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

1. Explain the various tools, packages and modules required for Web Development.
2. Discuss the workings of web server, cookies, routes, etc.
3. Develop a mobile application using JS Framework.
4. Design GUI using JS framework and/or Libraries.
5. Create applications using Angular, React, Node and Express.