DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

COURSE INFORMATION

1. **Academic Year** :

2. **Name of the Faculty** :

3. **Department** : **COMPUTER SCIENCE AND ENGINEERING**

4. **Programme** : **B.E**

5. **Class and Semester** :

6. **Course code and title** :

7. **Regulations** :

8. **Core / Elective** :

9. **Contact Hours** :

10. **Type of Course** :

    (Analytical/Theoretical)

11. **Number of credits** :

12. **Course Pre-requisites:**

13. **Course Learning objectives:**

The student should be made

Course outcomes:

At the end of the course, the student should be able to:

14. Course Syllabus

UNIT I		**9**
CO1		
UNIT II		**9**
CO2		
UNIT III		**9**
CO3		
UNIT IV		**9**
CO4		
UNIT V		**9**
CO5		

15. Text and Reference books:

Video Links:

16. Course Plan

UNIT I						Target Hours: 09
Sl. No	**Period Reqd.**	**Topics to be covered**	**Ref. Book**	**Page No.**	**Teaching Method**	**Level**
1						
2						
3						
4						
5						
6						
7						
8						
9						
UNIT II						Target Hours: 09
Sl. No	**Period Reqd.**	**Topics to be covered**	**Ref. Book**	**Page No.**	**Teaching Method**	**Level**
1						
2						
3						
4						
5						
6						
7						
8						
9						
UNIT III						Target Hours: 09
Sl. No	**Period Reqd.**	**Topics to be covered**	**Ref. Book**	**Page No.**	**Teaching Method**	**Level**

2

Sl. No						
1						
2						
3						
4						
5						
6						
7						
8						
9						

UNIT IV						Target Hours: 09
Sl. No	Period Reqd.	Topics to be covered	Ref. Book	Page No.	Teaching Method	Level
1						
2						
3						
4						
5						
6						
7						
8						
9						

UNIT V						Target Hours: 09
Sl. No	Period Reqd.	Topics to be covered	Ref. Book	Page No.	Teaching Method	Level
1						
2						
3						
4						
5						
6						
7						
8						
9						

Knowledge Level

K1- Remember, K2- Understand, K3 – Apply, K4- Analyze, K5- Evaluate, K6- Create

17. Mapping course outcome with Programme outcomes and Programme Specific outcomes(PSOs)

Program Outcomes (POs)

At the time of graduation, the students of Computer Science and Engineering should have the

PO1 ENGINEERING KNOWLEDGE: Ability to apply knowledge of   mathematics, Science and Engineering applicable to Computer Science and Engineering discipline.

PO2 PROBLEM ANALYSIS: Ability to analyze and develop solutions to computational problems using appropriate algorithms.

PO3 DESIGN / DEVELOPMENT: Ability to design, implement and evaluate a computational system to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability.

PO4 CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: Ability to apply design and development principles in the construction of software systems of varying complexity and perform testing.

PO5 MODERN TOOL USAGE: Ability to use appropriate techniques, skills, and modern tools to produce quality software products and solutions using Software Engineering principles.

PO6 THE ENGINEER AND SOCIETY: Ability to develop innovative ideas that can be translated into products benefiting the society and the economic growth.

PO7 ENVIRONMENT & SUSTAINABILITY: Ability to assess the impact of engineering practices on societal and environmental sustainability.

PO8 ETHICS: Ability to understand and apply professional, ethical, security, social issues and responsibilities for the computing profession

PO9 INDIVIDUAL AND TEAM WORK: Ability to function effectively as individuals and as a member of a team to share computing design, assessment or implementation of a common goal.

PO10 COMMUNICATION: Ability to communicate, write effective reports, design documentation and make effective presentations.

PO11 PROJECT MANAGEMENT AND FINANCE: Ability to work with good engineering and managerial skills and teamwork for successful completion of projects

PO12 LIFE LONG LEARNING: Ability to recognize the need and an ability to engage in life-long learning.

CO-PO Mapping

	1	2	3	4	5	6	7	8	9	10	11	12
CO1												
CO2												
CO3												
CO4												
CO5												

1 – Slight   2 – Moderate   3-High

Program Specific Outcomes (PSOs)

PSO1 Ability to understand and analyze the real world computational problems and to develop solutions by applying mathematical logic, appropriate data structures and algorithms.

PSO2 Ability to become a successful software engineer by creating and using modern IT tools.

PSO3 Graduate will have communication and leadership skills to endure themselves working as a member or managing a team.

	1	2	3
CO1			
CO2			

CO3			
CO4			
CO5			

1 – Slight   2 – Moderate   3-High

GAPS IN THE SYLLABUS - TO MEET INDUSTRY/PROFESSION REQUIREMENTS:

SNO	DESCRIPTION	PROPOSED ACTIONS	PO Mapping	PSO Mapping
1				

18. Mapping with Programme Educational Objectives(PEO)

Programme Educational Objectives:

1. Graduates will establish themselves as effective computer professionals by solving real world problems using cutting edge technologies of Computer Engineering.
2. Graduates will be inculcated with professional and ethical attitude, team work, effective communication, multi-disciplinary approach with an ability to relate computer engineering issues with social awareness.
3. Graduates will actively pursue graduate studies in advanced areas of computer science and related fields by succeeding in competitive exams.

Subject	PEO1	PEO2	PEO3

1 – Slight   2 – Moderate   3-High

19. Course Assessment Marks

Internal Test: 20 Marks

Objective	To evaluate the learning outcomes of the students based on application, analysis and understanding of concepts.
Product	Answer Scripts
Frequency	Monthly
Format	2*4=8 2*13=26 1*16=16
Evaluation	Based on answer given in the scripts
Criteria	Pass mark – 50% Minimum Pass Percentage : 75% to be fixed for attainment level If not, remedial action will be taken.

End Semester Exam: 80 Marks

Objective	To verify whether the determined criteria is attained.
Product	Result Analysis
Frequency	Monthly
Format	2*10=20 5*13=65 1*15=15
Evaluation	Based on answer given in the scripts

Criteria	Pass mark – 50% Minimum Pass Percentage : 75% to be fixed for attainment level If not, remedial action will be taken.

Faculty in charge   **HOD/CSE**   **Principal**