



SSGMCE SHEGAON

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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

3KS01 ENGINEERING MATHEMATICS – III

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

1. Solve the Linear Differential equations with constant coefficients by various methods.
2. Find Laplace Transform of various types of functions and apply this knowledge to find Laplace Transform of Periodic, Impulse & Unit step function.
3. Use Laplace Transform to solve Linear Differential equations with constant coefficients & Find Fourier Transform of various types of functions and apply this knowledge to find Fourier Transform of functions, in their core subjects.
4. Find the solution of partial differential equations of first order also learn statistical methods
5. Test the analyticity, find the harmonic conjugates and expand the function in Taylor's or Laurent's series, find conformal mapping.
6. Differentiate vector point functions, find gradient of scalar point function, and find divergence and curl of vector point function. Integrate vector point functions Evaluate line, surface and volume integrals.

3KS02 DISCRETE STRUCTURES AND GRAPH THEORY

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

1. Analyze and express logic sentence in terms of predicates, quantifiers, and logical connectives.
2. Derive the solution for a given problem using deductive logic and prove the solution based on logical inference.
3. Classify algebraic structure for a given mathematical problem.
4. Perform combinatorial analysis to solve counting problems.
5. Perform operation on trees data structures.
6. Develop the given problem as graph networks and solve with techniques of graph theory

3KS03 OBJECT ORIENTED PROGRAMMING

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

1. Apply Object Oriented approach to design software.
2. Implement programs using classes and objects.
3. Specify the forms of inheritance and use them in programs.
4. Analyze polymorphic behaviour of objects.
5. Design and develop GUI programs.
6. Develop Applets for web applications

3KS04 DATA STRUCTURES

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

1. Apply various linear and nonlinear data structures
2. Demonstrate operations like insertion, deletion, searching and traversing on various data structures.
3. Examine the usage of various structures in approaching the problem solution.
4. Choose appropriate data structure for specified problem domain

3KS05 ANALOG & DIGITAL ELECTRONICS

At the end of course students will able to:

1. Explain basic concepts of semiconductor devices and its application.
2. Compare different Number System and basics of conversion of number systems.
3. Realize different minimization technique to obtain minimized expression.
4. Design Combinational Circuits.
5. Design and Develop Sequential Circuits.

3KS06 OBJECT ORIENTED PROGRAMMING LAB

Design, implement, test, and debug simple programs in an object-oriented programming language.

1. To develop the knowledge of object-oriented paradigm in the Java programming language.
2. To evaluate classical problems using java programming.
3. To develop software development skills using java programming for real world applications.

3KS07 DATA STRUCTURE LAB

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

1. Apply various linear and nonlinear data structure.
2. Demonstrate operations like insertion, deletion, searching and traversing on various data Structures.
3. Examine the usage of various structures in approaching the problem solution.
4. Choose appropriate data structure for specified problem domain

3KS08 ANALOG & DIGITAL ELECTRONICS LAB

After successfully completing the lab, the students will be able to:

1. Apply practically the concepts of analog and digital electronics.
2. Explain the operation and characteristics of semiconductor devices.
3. Illustrate the operation of various logic gates and their implementation using digital IC"s.
4. Design and implement various combinational logic circuits.
5. Design and implement various sequential logic circuits

3KS09 C-SKILL-LAB I

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

1. Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python
2. Interpret different Decision-Making statements, Functions, Object oriented programming in Python
3. Summarize different File handling operations
4. Explain how to design GUI Applications in Python and evaluate different database operations
5. Develop applications using Django framework or Flask