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| **Sl. No** | **Syllabus** | **Curriculum** | **Deployment Strategy and**  **Tool** | **Cross-cutting issues**  **integrated** | **PO, PSO and CO** | **Attainment Verification** |
| 1. | Transform Calculus, Fourier Series And Numerical Techniques | * To provide the numerical methods of solving the nonlinear equations, interpolation, differentiation, and integration. To improve the student's skills in numerical methods by using the numerical analysis software and computer facilities. * Numerical methods are commonly used for solving mathematical problems that are formulated in science and engineering where it is difficult or impossible to obtain exact solutions. MATLAB has a large library of functions for numerically solving a wide variety of mathematical problems * Probability provides information about the likelihood that something will happen. Meteorologists, for instance, use weather patterns to predict the probability of rain. In epidemiology, probability theory is used to understand the relationship between exposures and the risk of health effects. | 1. Chalk and   Talk method   1. PPT | * Business   Ethics   * Human   values | PO1:Engineering Knowledge  PO2:Problem Analysis  PO3:Design/Development Of Solutions  PO4:Conduct Investigations Of Complex Problems |  |
|  |  | PO11:Project Management and Finance.  PO12: Life-long  Learning. |
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|  |  | PSO2:Problem Solving Skill |
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|  |  | CO1:Use Laplace transform and Inverse Laplace transform in solving differential / Integral equation arising in network analysis, control systems and other fields of engineering.  CO2:Demonstrate Fourier series to study the behaviour of periodic functions and their applications in system communications, digital signal processing and field theory.  CO3:Make use of Fourier transform and Z-transform to illustrate discrete/ continuous function arising in wave and heat propagation, signals and systems.  CO4:Solve first and second order ordinary differential equations arising in engineering problems using single step and multi step numerical methods.  CO5:Determine the extremals of functionals using calculus of variations and solve problems arising in dynamics of rigid bodies and vibrational analysis. |
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