



**TULSIRAMJI GAIKWAD-PATIL College of Engineering and Technology**

Wardha Road, Nagpur - 441108

Accredited with NAAC A+ Grade

Approved by AICTE, New Delhi, Govt. of Maharashtra

(An Autonomous Institution Affiliated to RTM Nagpur University, Nagpur)

### **BAE2401: Applied Mathematics-IV**

<b>BAE2401</b>	<b>Course Outcomes</b>
<b>CO1</b>	<b>Solve</b> first and second order ordinary differential equation arising in flow problems using single step and multi-step numerical methods.
<b>CO2</b>	<b>Solve</b> problems on the concepts of analytic functions, residues, poles of complex potentials and conformal and Bilinear transformation arising in field theory and signal processing.
<b>CO3</b>	<b>Apply</b> the knowledge of probability distribution of discrete, continuous random variables and joint probability distribution in solving complex problems on digital signal processing, information theory and design engineering.
<b>CO4</b>	<b>Analyze</b> testing of hypothesis of sampling distributions by illustrating examples of Markov chains related to discrete parameter stochastic process.
<b>CO5</b>	<b>Examine</b> Stochastic processes and matrices for solving simple problems on higher transition probability.