

Name of Faculty Mentor	Divya Chaturvedi
Novel Engaging Course Title	MATLAB: Applications in Mathematical Biology (2000098)
Objectives of Course	<ul style="list-style-type: none"> • To learn basics of MATLAB as a programming tool. • To promote new teaching model that will help to develop programming skills and technique to solve mathematical problems. • To understand MATLAB graphic feature and its applications. • To use MATLAB as a simulation tool. • To learn the applications of MATLAB in Mathematical Biology
Content	<ul style="list-style-type: none"> • Introduction to MATLAB • Vectors and Matrices, Eigen value and Eigenvectors • MATLAB Graphics. • System of ordinary differential Equations • Applications: Logistic Growth Model, Prey-Predator Mathematical Model
Contact hrs	30 hrs
Outcomes of Course	<p>After completion of the course, students will be able to:</p> <ul style="list-style-type: none"> • Solve system of differential equations using MATLAB. • Write program Scripts and Functions using the MATLAB Environment. • Generate plots and export this for use in reports and presentations. • Apply MATLAB in Mathematical Biology