

Department of Mathematics
St. Xavier's College, Thumba
FYUGP in Mathematics - Course basket

Stream - Science
Subject – Mathematics

Discipline Specific Core/Elective Courses

Semester	Category	Course
I	DSC	Foundations of Mathematics
	DSC	Differentiation, Sequence and Series
	DSC	Matrices and Linear Equations
	DSC	Mathematics for Social Science I
2	DSC	Theory of equations, Differential Calculus and Geometry
	DSC	Integration and Multivariate Calculus
	DSC	Applications of Differentiation and Ordinary Differential Equations
	DSC	Mathematics for Social Sciences - II
3	DSC	Integral Calculus and Foundations of Vector Calculus
	DSC	Applications of Integration and Vector Calculus
	DSC	Group Theory and Probability
	DSC	Mathematics in Social Sciences - III
	DSE	Programming with LATEX and Python
4	DSC	Introduction to Real Analysis and Multiple Integrals
	DSC	Partial Differentiation and Introduction to Abstract Algebra
	DSE	Elementary Graph Theory
5	DSC	Differential Equations and Vector Calculus
	DSC	Fundamentals of Real Analysis - I
	DSC	Abstract Algebra

	DSE	Intermediate Graph Theory
	DSE	Special Functions
6	DSC	Real Analysis - II
	DSC	Complex Analysis I
	DSC	Linear Algebra
	DSE	Partial Differential Equations
	DSE	Foundations of Computational Mathematics with SageMath
7	DSC	Topology
	DSC	Complex Analysis - II
	DSE	Functional Analysis

General Foundation Courses

Semester	Category	Course
4	SEC	Numerical Methods
5	SEC	Programming with Python
6	SEC	Programming with R

Internship/Projects

Semester	Course
4	Internship
8	Capstone internship project in Honours