

# T K M College Of Arts Science (142)

## Course Basket of Mathematics and Statistics

Category	Course Code	Course Name
<b>Discipline: FYUGP Mathematics</b>		
<b>Semester: 1</b>		
DSC	UK1DSCMAT100	Foundations of Mathematics
DSC	UK1DSCMAT101	Differential Calculus and Linear Algebra
DSC	UK1DSCMAT102	Differentiation, Sequence and Series
MDC	UK1MDCMAT100	Numerical Ability - I
<b>Semester: 2</b>		
DSC	UK2DSCMAT100	Theory of equations, Differential Calculus and Geometry
DSC	UK2DSCMAT101	Integration and Multivariate Calculus
DSC	UK2DSCMAT104	Integral Calculus and Ordinary Differential Equations
MDC	UK2MDCMAT100	Numerical Ability- II
MDC	UK2MDCMAT103	Introduction to Modular Arithmetic and Cryptography
<b>Semester: 3</b>		
DSC	UK3DSCMAT200	Integral Calculus and Foundations of Vector Calculus
DSC	UK3DSCMAT202	Group Theory and Probability
DSC	UK3DSCMAT207	Applications of Integration, Special Functions and Fourier Series
DSE	UK3DSEMAT201	Numerical Analysis
VAC	UK3VACMAT200	Introduction to Actuarial Mathematics
<b>Semester: 4</b>		
DSC	UK4DSCMAT200	Introduction to Real Analysis and Multiple Integrals
DSC	UK4DSCMAT201	Partial Differentiation and Introduction to Abstract Algebra
DSE	UK4DSEMAT200	Elementary Graph Theory
INT	UK4INTMAT200	Summer Internship
SEC	UK4SECMAT200	Typesetting Documents with LATEX
VAC	UK4VACMAT200	Introduction to Mathematical Modeling
<b>Semester: 5</b>		
DSC	UK5DSCMAT300	Differential Equations and Vector Calculus
DSC	UK5DSCMAT301	Real Analysis - I
DSC	UK5DSCMAT302	Abstract Algebra

DSE	UK5DSEMAT300	Intermediate Graph Theory
DSE	UK5DSEMAT303	Optimization Techniques
SEC	UK5SECMAT300	Programming with Python
<b>Semester: 6</b>		
DSC	UK6DSCMAT300	Real Analysis - II
DSC	UK6DSCMAT301	Complex Analysis I
DSC	UK6DSCMAT302	Linear Algebra
DSE	UK6DSEMAT301	Partial Differential Equations
DSE	UK6DSEMAT304	Integral Transforms
SEC	UK6SECMAT300	Programming with R
<b>Semester: 7</b>		
DSC	UK7DSCMAT400	Topology
DSC	UK7DSCMAT401	Complex Analysis - II
DSE	UK7DSEMAT401	Functional Analysis
<b>Semester: 8</b>		
CIP	UK8CIPMAT400	Capstone project

<b>Discipline: FYUGP Statistics</b>		
<b>Semester: 1</b>		
DSC	UK1DSCSTA109	DESCRIPTIVE STATISTICS AND PROBABILITY
MDC	UK1MDCSTA101	EXPERIMENTAL DESIGNS FOR SCIENCE
<b>Semester: 2</b>		
DSC	UK2DSCSTA109	STANDARD DISTRIBUTIONS, CORRELATION AND REGRESSION
MDC	UK2MDCSTA101	BIVARIATE AND CATEGORICAL DATA ANALYSIS
<b>Semester: 3</b>		
DSC	UK3DSCSTA208	STATISTICAL INFERENCE
VAC	UK3VACSTA201	DATA VISUALISATION AND INTERPRETATION
<b>Semester: 4</b>		
SEC	UK4SECSTA202	STATISTICAL ANALYSIS USING R
VAC	UK4VACSTA203	DATA ANALYSIS USING SPREADSHEETS