

Scheme of B.A./B.Sc. (Mathematics)
(Scheme UG A2: Undergraduate Programmes (Single Major))

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Total Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A1	Calculus	240/MAT/CC 101	3	--	2	3	-	1	4	25	50	5	20	100
CC-A2	Discrete Mathematics	240/MAT/CC 102	3	--	2	3	-	1	4	25	50	5	20	100
CC-A3	Vector Calculus	240/MAT/CC 103	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-1	One from Pool		1	-	2	1	-	1	2	5	20	5	20	50
Multidisciplinary Course(s)														
MDC-1	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-1	One from Pool		2	-	-	2	-		2	15	35	-	-	50
Skill Enhancement Course(s)														
SEC-1	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Value-added Course(s)														
VAC-1	One from Pool		2	-	-	2	-	-	2	15	35	-	-	50
Total Credits			18		12	18		6	24					600

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A4	Algebra	240/MAT/C C201	3	--	2	3	-	1	4	25	50	5	20	100
CC-A5	Advanced Calculus	240/MAT/C C202	3	--	2	3	-	1	4	25	50	5	20	100
CC-A6	Descriptive Statistics	240/MAT/C C203	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-2	One from Pool		1	-	2	1	-	1	2	5	20	5	20	50
Multidisciplinary Course(s)														
MDC-2	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-2	One from Pool		2	-	-	2	-		2	15	35	-	-	50
Skill Enhancement Course(s)														
SEC-2	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Value-added Course(s)														
VAC-2	One from Pool		2	-	-	2	-	-	2	15	35	-	-	50
Total Credits			18		12	18		6	24					600

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A7	Ordinary and Partial Differential Equations	240/MAT/C C301	3	--	2	3	-	1	4	25	50	5	20	100
CC-A8	Statics	240/MAT/C C302	3	--	2	3	-	1	4	25	50	5	20	100
CC-A9	Probability Theory & Distributions	240/MAT/C C303	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-3	One from Pool		2	-	4	2	-	2	4	15	35	15	35	100
Multidisciplinary Course(s)														
MDC-3	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Ability Enhancement Course(s)														
AEC-3	One from Pool		2	-	-	2	-		2	15	35	-	-	50
Total Credits			15		12	15		6	21					525

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A10	Solid Geometry	240/MAT/C C401	3	--	2	3	-	1	4	25	50	5	20	100
CC-A11	Sequence and Series	240/MAT/C C402	3	--	2	3	-	1	4	25	50	5	20	100
CC-A12	Linear Programming	240/MAT/C C403	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-4/VOC-1	One from Pool		2	-	4	2	-	2	4	15	35	15	35	100
Ability Enhancement Course(s)														
AEC-4	One from Pool		2	-	-	2	-		2	15	35	-	-	50
Value-added Course(s)														
VAC-3	One from Pool		2	-	-	2	-		2	15	35	-	-	50
Total Credits			15		10	15		5	20					500

Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A13	Groups and Rings	240/MAT/C C501	3	--	2	3	-	1	4	25	50	5	20	100
CC-A14	Integral Transforms	240/MAT/C C502	3	--	2	3	-	1	4	25	50	5	20	100
CC-A15	Numerical Analysis	240/MAT/C C503	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-5/ VOC-2	One from Pool		2	-	4	2	-	2	4	15	35	15	35	100
Skill Enhancement Course(s)														
Internshi p			-	-	8	-	-	4	4	-	-	30	70	100
Total Credits			11		18	11	-	9	20					500

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
Core Course(s)														
CC-A16	Mathematical Analysis	240/MAT/C C601	3	--	2	3	-	1	4	25	50	5	20	100
CC-A17	Linear Algebra	240/MAT/C C602	3	--	2	3	-	1	4	25	50	5	20	100
CC-A18	Dynamics	240/MAT/C C603	3	--	2	3	-	1	4	25	50	5	20	100
Minor/ Vocational Course(s)														
MIC-6	One from Pool		2	-	4	2	-	2	4	15	35	15	35	100
MIC-7/VOC-3	One from Pool		2	-	4	2	-	2	4	15	35	15	35	100
Skill Enhancement Course(s)														
SEC-3	One from Pool		2	-	2	2	-	1	3	15	35	5	20	75
Total Credits			15		16	15		8	23					575

1. The curriculum of semester 7 and 8 will be provided in due course of time.

Multidisciplinary Course from the department for pool of the Courses in the University

(These courses are to be offered to students of different discipline/Subject)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-1	Introductory Mathematics		2		2	2		1	3	15	35	5	20	75

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-2	Essential Mathematics		2		2	2		1	3	15	35	5	20	75

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MDC-3	Statistical tools for data analysis		2		2	2		1	3	15	35	5	20	75

Minor Course from the department for pool of the Courses in the University

(These courses are offered by each department for students of other departments/same department to gain a broader understanding beyond the major discipline)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-1	Basic Calculus		1		2	1		1	2	5	20	5	20	50
	Correlation and Regression		1		2	1		1	2	5	20	5	20	50

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-2	Basic Algebra		1		2	1		1	2	5	20	5	20	50
	Basic Analysis		1		2	1		1	2	5	20	5	20	50

Semester 3

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-3	Statistical Methods		2	-	4	2	-	2	4	15	35	15	35	100

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-6	Numerical Methods		2	-	4	2	-	2	4	15	35	15	35	100

Vocation Course from the department for pool of the Courses in the University

(These courses are offered by each department for students of other departments/same department and is focused on practical work, preparing students for a particular skilled profession.)

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-4/ VOC-1	Programming in C		2	-	4	2	-	2	4	15	35	15	35	100

Semester 5

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-5/ VOC-2	Python		2	-	4	2	-	2	4	15	35	15	35	100

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
MIC-7/ VOC-3	MATLAB & R Software		2	-	4	2	-	2	4	15	35	15	35	100

Skill Enhancement Course from the department for pool of the Courses in the University

(These courses are offered by each department for students of other departments/same department and is designed to provide value-based and/or skill-based knowledge and should contain both theory and lab/hands-on/training/field work.)

Semester 1

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-1	Calculation Skills with Vedic Mathematics		2		2	2		1	3	15	35	5	20	75

Semester 2

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-2	Numerical Ability Enhancement Skills		2		2	2		1	3	15	35	5	20	75

Semester 6

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
SEC-3	Quantitative Aptitude		2		2	2		1	3	15	35	5	20	75

Value Added Course from the department for pool of the Courses in the University

(All the departments will offer value added course for semester 4 for the students of same or different departments. In the first year, students will study (i) Human Values and Ethics and (ii) Environmental Studies as value added course)

Semester 4

Course Code	Course Title	Course ID	L	T	P	L	T	P	Credits	MARKS				
			(Hrs)			Credits				TI	TE	PI	PE	Total
VAC-3	History of Mathematics		2	-	-	2	-	-	2	15	35	-	-	50