

# BABU BANARASI DAS UNIVERSITY, LUCKNOW

## B. Sc. (Honours) Mathematics

### COURSE STRUCTURE (Under CBCS)

Course	Code	Title	Teaching			Evaluation				Credits	
						Theory		Lab/Seminar/ Viva Voce/ Dissertation			Total
			L	T	P	CIA	ESE	CIA	ESE		
<b>SEMESTER – I</b>											
Core	BSM 1101	Calculus	5	1	-	40	60	-	-	100	6
Core	BSM1102	Algebra	5	1	-	40	60	-	-	100	6
GE		Generic Elective - I									6
AECC	BSAE 1101	Communicative English	2	-	-	40	60	-	-	100	2
GP	BSGP11	General Proficiency						100	-	100	1
										<b>21</b>	
<b>SEMESTER – II</b>											
Core	BSM 1201	Real Analysis	5	1	-	40	60	-	-	100	6
Core	BSM 1202	Differential Equations	5	1	-	40	60	-	-	100	6
GE		Generic Elective - II									6
AECC	BSAE 1201	Environmental Studies	2	-	-	40	60	-	-	100	2
GP	BSGP 12	General Proficiency				-	-	100	-	100	1
										<b>21</b>	
<b>SEMESTER – III</b>											
Core	BSM 1301	Theory of Real Functions	5	1	-	40	60	-	-	100	6
Core	BSM 1302	Group Theory I	5	1	-	40	60	-	-	100	6
Core	BSM 1303	PDE and System of ODE	5	1	-	40	60	-	-	100	6
GE		Generic Elective - III									6
SEC		Skill Enhancement Course - I									2
GP	BSGP 13	General Proficiency	-	-	-	-	-	100	-	100	1
										<b>27</b>	
<b>SEMESTER – IV</b>											
Core	BSM 1401	Numerical Methods	5	1	-	40	60	-	-	100	6
Core	BSM 1402	Reimann Integration and Series of Functions	5	1	-	40	60	-	-	100	6
Core	BSM 1403	Ring Theory & Linear Algebra I	5	1	-	40	60	-	-	100	6
GE		Generic Elective - IV									6
SEC		Skill Enhancement Course - II									2
GP	BSGP 14	General Proficiency	-	-	-	-	-	100	-	100	1
										<b>27</b>	
<b>SEMESTER – V</b>											
Core	BSM 1501	Multivariate Calculus	5	1	-	40	60	-	-	100	6
Core	BSM 1502	Group Theory II	5	1	-	40	60	-	-	100	6
DSE		Discipline Specific Elective - I									6
DSE		Discipline Specific Elective - II									6
Lab	BSM S15	Seminar	-	-	-			100	-	100	2
										<b>26</b>	
<b>SEMESTER – VI</b>											
Core	BSM 1601	Metric Spaces & Complex Analysis	5	1	-	40	60	-	-	100	6
Core	BSM 1602	Ring Theory & Linear Algebra	5	1	-	40	60	-	-	100	6
DSE		Discipline Specific Elective - III									6
DSE		Discipline Specific Elective - IV									6
Lab	BSM V16	Vice Voce	-	-	-	-	-	-	100	100	2
										<b>26</b>	

## ELECTIVE COURSES – B. Sc. (Honours) Mathematics

Code	Title	Teaching			Evaluation				Credits	
					Theory		Lab/Seminar/ Viva Voce/ Dissertation			Total
		L	T	P	CIA	ESE	CIA	ESE		
<b>Generic Elective – I</b>										
BSC 1101	Programming in C	5	1		40	60	20	30	150	6
BSC1102	Computer System Architecture	5	1		40	60			100	6
<b>Generic Elective – II</b>										
BSC1202	Discrete Structure	5	1	-	40	60	-	-	100	6
BSC1201	Programming in JAVA	5	1		40	60	20	30	150	6
<b>Generic Elective – III</b>										
BSC1301	Data Structures	5	1		40	60	20	30	150	6
BSC1301	Operating Systems	5	1		40	60	20	30	150	6
<b>Generic Elective – IV</b>										
BSC 1403	Database Management Systems	5	1		40	60	20	30	150	6
BSC 1402	Software Engineering	5	1		40	60			100	6

<b>Discipline Specific Elective – I</b>										
BSM 1551	Differential Geometry	5	1	-	40	60	-	-	100	6
BSM 1552	Number Theory	5	1	-	40	60	-	-	100	6
BSM 1553	Analytical Geometry	5	1	-	40	60	-	-	100	6
<b>Discipline Specific Elective – II</b>										
BSM 1554	Mathematical Modeling	5	1	-	40	60	-	-	100	6
BSM 1555	Boolean Algebra and Automata Theory	5	1	-	40	60	-	-	100	6
BSM 1556	Probability and Statistics	5	1	-	40	60	-	-	100	6
<b>Discipline Specific Elective – III</b>										
BSM 1651	Theory of Equations	5	1	-	40	60	-	-	100	6
BSM 1653	Linear Programming	5	1	-	40	60	-	-	100	6
BSM 1654	Industrial Mathematics	5	1	-	40	60	-	-	100	6
<b>Discipline Specific Elective – IV</b>										
BSM 1655	Graph Theory	5	1	-	40	60	-	-	100	6
BSM 1656	Mechanics	5	1	-	40	60	-	-	100	6
BSM 1658	Dissertation	-	-	-	-	-	-	100	100	6

<b>Skill Enhancement Course – I</b>										
BSS 1301	LaTeX and HTML	1	-	2	40	60	50	-	150	2
BSS 1311	Internet Technologies	2	-	-	40	60	-	-	100	2
<b>Skill Enhancement Course – II</b>										
BSS 1411	Linux / Unix Programming	1	-	2	40	60	50	-	150	2
BSS 1421	Programming in MATLAB	1	-	2	40	60	50	-	150	2