

Cumulative minimum credits (Required for the award of Certificates/ Diploma/Degree)			Subject I: STATISTICS		Choose Anyone	Subject II: Mathematics / Computers		Subject III	Vocational	Co-curricular	Audit Course*	Research Project**	Total credit (Year)
			Major			Major		Minor Elective	Minor	Minor	Compulsory	Major	
			4/5/6 Credits			4/5/6 Credits		4/5/6 Credits	3 Credits	2	Non-credits	4 Credits	
			Own Faculty			Own Faculty (Choose Anyone)		Any Faculty	Vocational/ Skill Development Course	Co-curricular (Qualifying)	Audit Course (Qualifying)	Inter/Intra Faculty related to main subject	
Certificate in Science (Statistics & Mathematics OR Statistics & Computer Science) 40	1	I	B060101T/MT139 Descriptive Statistics (Univariate) & Theory of Probability (T-4)	MATHEMATICS	B030101T/MT136: Differential Calculus & Integral Calculus (T4) B030102P/MT137: Practical using Mathematica /MATLAB (P2)		I030103V/MT143 Introduction to LaTeX (V-3) OR •MOOCs/SWAYAM etc. (T+P=3)	Z010101T/BE105 Food,NutritionandHygiene (T-2)	A050101T/HM101 RashtraGaurav		40		
			COMPUTERS	B070101T/CS127 Problem Solving using Computer (T-4) B070102P/CS128 Software Lab using Python (P-2)									
		II	B060201T/ MT141 Descriptive Statistics (Bivariate) & Probability Distributions (T-4)	MATHEMATICS	B030201T/MT138: Matrices and Differential Equations & Geometry (T6)		•ES115/BM186 Fundamentals of Environmental Science OR •A040209T/LN109 Basics of Communication OR •BS (4+2=6)					I030202V/MT144 LaTeX -Scientific Writing (V-3) OR •MOOCs/SWAYAM etc. (T+P=3)	Z020201T/NS110 FirstAidand Health (T-2)
	B060202P/ MT142 Descriptive Data Analysis Lab (Bivariate) (P-2)		COMPUTERS	B070201T/CS129 Database Management Systems (T-4) B070202P/CS130 Database Management Systems Lab(P-2)									
					MATHEMATICS	B030301T/MT228: Algebra & Mathematical Methods (T6)		I030302V/MT234 Introduction to R (V-3) OR •MOOCs/SWAYAM etc. (T+P=3)	Reginal Languages*** (T2)				40
Diploma in Science (Statistics & Mathematics OR Statistics & Computer Science) 40+40=80	2	III	B060301T/MT230 Theory of Estimation & Sampling Survey (T-4)										
			B060302P/ MT231 Sampling Survey Lab (P-2)	COMPUTERS	B070301T/CS273 Operating Systems (T-4) &B070302P/CS274								
					Operating Systems Lab (P-2)								

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				COMPUTERS	B070601T/ CS368 Data Communication and Computer Networks (T-4) & B070602T/ CS369 Cyber Security & Cyber Laws (T-4) & B070603P/ CS370 Lab on Computer Networks (P-2)						
	4-Year UG Degree with Honours& Research (≥75% Marks) Choose Anyone Specialization										
			STATISTICS								
4-Year B.Sc. Honours in STATISTICS 120+40=160	4	VII	B030701T/ MT434 Real & Complex Analysis (T-4)								40
			B060701T/ MT422 Sample Surveys (T-4)								
			B060702T/ MT423 Probability Theory (T-4)								
			B060703T/ MT424 Reliability Theory (T-4)								
			B060704P/ MT425 Sample Surveys and R – programming Lab (P-4)								
		VIII	(B030804T/ MT441) Advanced Linear Algebra (T-4)								
			B060801T/ MT427 Linear Models & Regression Analysis (T-4)								
			B060802/ MT428 Design & Analysis of Experiments (T-4)								
			B060803T/ MT430 Non-Parametric & Order Statistics (T-4)								
	B060804R/ MT431 Data Analytics with SPSS (P-4)										
			STATISTICS								
4-Year	4	VII	B060701T/ MT422 Sample Surveys							B060705R/ MT4	

B.Sc. Honours with Research in STATISTICS 120+40=160			(T-4)				45 Statistics Research Project- 1 (R-4)	40
			B060702T/ MT423 Probability Theory (T-4)					
			B060703T/ MT424 Reliability Theory (T-4)					
			B060704P/ MT425 Sample Surveys and R – programming Lab (P-4)					
		VIII	B060801T/ MT427 Linear Models & Regression Analysis (T-4)		B060805R/MT4 46 Statistics Research Project- 2 (R-4)			
			B060802/ MT428 Design & Analysis of Experiments (T-4)					
			B060803T/ MT430 Non-Parametric & Order Statistics (T-4)					
			B060804R/ MT431 Data Analytics with SPSS (P-4)					

			STATISTICS					
M.Sc. in STATISTICS 160+40=200	5	IX	B060901T/MT548 Statistical Inference (T-4)				B060906R/MT550 Statistics Research Project-3(R-4)	40
			B060902T/MT522 Demography (T-4)					
			B060903T/MT523 Statistical Process & Product Control (T-4)					
			B060905R/MT526 Demography and Statistical Process & Product Control lab (P-4)					
		X	B061001T/MT529 Multivariate Analysis (T-4)				B061005R/MT551 Statistics Research Project 4 (R-4)	
			B061002T/MT530 Stochastic Processes (T-4)					
			B061003T/MT549 Advanced Operations Research (T-4)					

			B061004P/MT549 Multivariate Analysis Lab (P-4)					
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- ✓ T-4 = Theory with 4 credits; P-2 = Practical with 2 credits; R = Research Project with 4 credits; Q: Qualifying; NC = Non-Credit; MOOCs = Massive Online Open Courses
- ✓ Co-curricular courses offered by UP higher education.
- ✓ Vocational courses offered by respective Department/University
- ✓ *Audit Courses: The respective Department/University offers RashtraGaurav and X+AI (Advanced Application of Artificial Intelligence in Chemical Sciences) as compulsory **Non-Credit** courses. All students will have to pass these courses for obtaining a Certificate, Diploma, Undergraduate Degree, or Undergraduate Honors Degree with Research only once.
- ✓ 01, 02, and 03 combinations are elective papers, out of which students must choose any one with a minimum of ten students' strengths.
- ✓ For entry into the 4-Year UG Degree with Honours and Research program, students must secure $\geq 75\%$ marks in the 3-Year UG Degree program.
- ✓ Students with a 3-Year Single Subject with Honours UG Degree below 75% marks in the 3-Year UG Degree program go for a two-year PG program.
- ✓ **Research Project/Dissertation/Internship/Field or Survey Work etc.
- ✓ ***Regional Language is a co-curricular course offered by the respective Department or University in the third semester, such as Hindi, Urdu, Awadhi, Sanskrit, etc.

Program Structure of B.Sc. Honours in Statistics/B.Sc. Honours with Research in Statistics + 1 OR 2 Year PG

(With Effect From: 2024 – 25)

		Subject I	Subject II	Subject III	**Vocational	Co-curricular	Research project	Minimum Credits (Year)	Cumulative minimum credits (Required for the award of certificates/ diploma/degree)
		Major	Minor	Audit Course	Minor	Minor	Major		
		4/5/6 Credits	4/5/6 Credits	Non - Credit	3 Credits	2 Credits	12		
Y.	Sem.	Own Faculty	Own/ Other Faculty	Audit/ Non-Credit Course	Vocational/ Skill development course	Co-curricular	Inter/Intra Faculty related to main subject		
1	I	Descriptive Statistics (Univariate) & Theory of Probability (T4) (B060101T/MT139)		(A050101T/H M101) Rashtra Gaurav (T-0)	I030103V/MT143 Introduction to LaTeX (V-3)	(Z010101T/ BE105) Food, Nutrition and Hygiene (T-2)	-----	40 (30 + 6 + 4) (First Year)	40 (Certificate in Statistics)
		Indian Official Statistics (T4) (B060103T)/MT154							
		Descriptive Statistics Lab (Univariate) (P4) (B060104P)/MT155							
	II	Descriptive Statistics (Bivariate) &Probability Distributions (T4) (B060201T/MT141)	Choose any ONE from the followings. 1) B030201T/MT138 (a) Matrices and Differential Equations & Geometry (T6) (b) (B070201T/CS129) Database Management Systems (T-4) + (B070202P/CS130) Database Management Systems Lab (P-2)	(B030201T/M T153) Applications of Artificial Intelligence in Mathematic al Sciences (T-0)	I030202V/MT144 LaTeX - Scientific Writing (V-3)	Z020201T/NS110) First Aid and Health (T-2)			
		Actuarial Statistics (T4) (B060203T)/MT156							
		Descriptive Statistics Lab (Bivariate)(P4) (B060204P)/MT157							
		Subject I	Subject II	Subject III	**Vocational	Co-curricular	Research project	Minimum Credits (Year)	Cumulative minimum credits
		Major	Minor	Audit Course	Minor	Minor	Major		

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Program Structure of B.Sc. Honours in Statistics/B.Sc. Honours with Research in Statistics + 1 OR 2 Year PG

(With Effect From: 2024 – 25)

		Subject I	Subject II	Subject III	**Vocational	Co-curricular	Research project	Minimum Credits (Year)	Cumulative minimum credits (Required for the award of certificates/ diploma/degree)
		Major	Minor	Audit Course	Minor	Minor	Major		
		4/5/6 Credits	4/5/6 Credits	Non - Credit	3 Credits	2 Credits	12		
Y.	Sem.	Own Faculty	Own/ Other Faculty	Audit/ Non-Credit Course	Vocational/ Skill development course	Co-curricular	Inter/Intra Faculty related to main subject		
3	V	Graph Theory & Discrete Mathematics(T4) (B030503T/MT322)	----	----	----	----	Statistics Project-1 (B030503R/ MT335) (P5)	(50) (Third Year)	130 (Degree in B.Sc. Honours in Statistics)
		Multivariate Analysis & Non-Parametric Methods(T4) (B060501T/MT327)	----	----	----	----			
		Analysis of Variance & Design of Experiments(T4) (B060502T/MT328)							
		Reliability Theory & Survival Analysis (T4) (B060504T/MT337)	----	----	----	----			
		Non-Parametric Methods & Experimental Design Lab(P4) (B060505P/MT338)	----	----	----	----			
	VI	Operations Research (T4) (B060602T/MT331)	----	----	----	----	Statistics Project-1 (B030608R/ MT336) (P5)		
		Linear Models & Econometrics(T4) (B060604T/MT339)	----	----	----	----			
		Inventory Management & Queuing Theory(T4) (B060605T/MT340)	----	----	----	----			
		Project Management & Network Flow (T4) (B060607T/ MT317)							
		Operations Research Lab(P4) (B060606P/MT341)	----	----	----	----			

Program Structure of B.Sc. Honours in Statistics/B.Sc. Honours with Research in Statistics + 1 OR 2 Year PG
(With Effect From: 2024 – 25)

Award of Degree

After the completion of the 3 year UG degree, one has to pursue 4th/5th year UG/PG programmes in similar manner as double major UG/PG Programme

Case 1: If any candidate having plain B.Sc. Degree takes admission in 4th Year in Integral University in any one of those subjects which they had in their 3rd Year and then make exit after 4th Year, then he/she will be awarded with

- (a) B.Sc. (H) degree in 4th Year (Applicable to all candidates) in that subject
- (b) B.Sc. (H) with Research degree in 4th Year in that subject (Applicable to those whose CGPA of first 3 years i.e. B.Sc. degree is > 7.5)

Case 2: If any candidate having Three Years B.Sc. (H) Degree takes admission in 4th Year in Integral University in that subject and make exit after 4th Year then he/she will be awarded with

- (a) B.Sc. (H) with Research Degree after 4th Year (Applicable to those whose CGPA > 7.5).
- (b) They will not get any degree if they make exit after 4th Year (Applicable to those whose CGPA < 7.5). Rather, they will get Master's Degree if they complete 5th Year.