

M.Sc. Mathematics

Major Courses*		
BPM611	Mechanics and Variational Principles	3(3-2-0-0)
BPM631	Real Analysis	3(3-2-0-0)
BPM632	Differential Geometry and Tensors	3(3-2-0-0)
BPM633	Topology	3(3-2-0-0)
BPM634	Complex Analysis	3(3-2-0-0)
BPM635	Functional Analysis	3(3-2-0-0)
BPM636	Abstract Algebra	3(3-2-0-0)
	Sub-Total	21
Seminar		
BPM688	Master's Seminar	1
	Sub-Total	1
	Optional/Minor Courses	8
Supporting Courses		
BPS669	Operations Research	3(2-0-1)
BPS625	Statistical Methods	3(2-0-1)
	Sub-Total	6
Common Courses		
BHS500	Technical writing and Communication Skills	1(0-0-1)
BHS/AAC502	Research, Research Ethics and Rural Development	1(0-0-1)
BPC506	Basic Concepts in Laboratory Techniques	1(0-0-1)
AGP518	Intellectual Property and Its Management	1(0-0-1)
BHS611	Library and Information Services	1(0-0-1)
	Sub-Total	5
Research		
BPM690	Master's Thesis Research	30
	Total	71

M.Sc. Agricultural Statistics

Major Courses*		
BPS625	Statistical Methods	3(2-0-1)
BPS626	Probability Theory and Distributions	2(2-1-0)
BPS662	Advanced Experimental Designs	3(2-0-1)
BPS663	Linear Models	2(2-1-0)
BPS671	Theory of Sampling	3(2-0-1)
BPS676	Estimation and Statistical Hypotheses Testing	4(3-1-1)
BPS677	Multivariate Analysis and Official Statistics	3(2-0-1)
	Sub-Total	20
Seminar		
BPS688	Master's Seminar	1
	Sub-Total	1
	Optional/Minor Courses	8

Supporting Courses		
BPM603	Linear Algebra and Advanced Calculus	3(3-2-0)
AEC611	Econometrics	3(2-0-1)
	Sub-Total	6
Common Courses		
BHS500	Technical writing and Communication Skills	1(0-0-1)
BHS/ AAC501	Research, Research Ethics and Rural Development	1(0-0-1)
BPC506	Basic Concepts in Laboratory Techniques	1(0-0-1)
AGP518	Intellectual Property and Its Management	1(0-0-1)
BHS611	Library and Information Services	1(0-0-1)
	Sub-Total	5
Research		
BPS690	Master's Thesis Research	30
	Total	70
Deficiency Courses		
BPS404	Applied Statistics and Regression Analysis	3(2-0-1)

M.Sc. Statistics

Major Courses*		
BPS625	Statistical Methods	3(2-0-1)
BPS626	Probability Theory and Distributions	2(2-1-0)
BPS662	Advanced Experimental Designs	3(2-0-1)
BPS663	Linear Models	2(2-1-0)
BPS671	Theory of Sampling	3(2-0-1)
BPS676	Estimation and Statistical Hypotheses Testing	4(3-1-1)
BPS677	Multivariate Analysis and Official Statistics	3(2-0-1)
	Sub-Total	20
Seminar		
BPS688	Master's Seminar	1
	Sub-Total	1
		8
Optional/Minor Courses		
Supporting Courses		
BPM631	Real Analysis	3(3-2-0-0)
BPM637	Differential Equations	3(3-2-0)
	Sub-Total	6
Common Courses		
BHS500	Technical writing and Communication Skills	1(0-0-1)
BHS/ AAC501	Research, Research Ethics and Rural Development	1(0-0-1)
BPC506	Basic Concepts in Laboratory Techniques	1(0-0-1)
AGP518	Intellectual Property and Its Management	1(0-0-1)
BHS611	Library and Information Services	1(0-0-1)
	Sub-Total	5
Research		

BPS690	Master's Thesis Research	30
	Total	70

Ph.D. Mathematics

Major Courses*		
BPM713	Boundary Value Problems	3(3-2-0)
BPM731	Advanced Analysis	3(3-2-0)
BPM732	Integral Transforms and Z-Transforms	3(3-2-0)
BPM737	Special Functions	3(3-2-0)
	Sub-Total	12
Seminar		
BPM788	Doctoral Seminar-I	1
BPM789	Doctoral Seminar-II	1
	Sub-Total	2
Optional/Minor Courses		6
Supporting Courses		
BHS652	Research Methodology-I	1(1-0-0)
BPS653	Research Methodology-II	3(2-0-1)
BHS654	Special and Publication Ethics	2(2-0-0)
	Sub-Total	6
Research		
BPM790	Ph.D. Thesis Research	75
	Total	101

Ph.D. Agricultural Statistics/ Statistics

Major Courses*		
BPS702	Simulation Techniques	3(2-0-1)
BPS711	Advanced Statistical Methods	3(2-0-1)
BPS719	Survival Analysis and Bayesian Inference	3(2-0-1)
BPS720	Data Science Concepts for Statistical Research	3(2-0-1)
	Sub-Total	12
Seminar		
BPS788	Doctoral Seminar-I	1
BPS789	Doctoral Seminar-II	1
	Sub-Total	2
Optional/Minor Courses		6
Supporting Courses		
BHS652	Research Methodology-I	1(1-0-0)
BPS653	Research Methodology-II	3(2-0-1)
BHS654	Special and Publication Ethics	2(2-0-0)
	Sub-Total	6
Research		
BPS790	Ph.D. Thesis Research	75
	Total	101

Minor Packages for Other Majors

Mathematics

Course Code	Course Title	Cr.Hrs.
BPM602	Special Functions & Integral Equations	2(2-1-0)
BPM732	Integral Transforms and Z-Transforms	3(3-2-0)

Agril. Statistics/ Statistics

Course Code	Course Title	Cr. Hrs.
BPS662	Advanced Experimental Designs	3(2-0-1)
BPS672	Mathematical Statistics	3(3-1-0)

Computer Science

Course Code	Course Title	Cr. Hrs.
BPM621	Numerical Techniques for Computers	3(3-2-0)
BPM642	Structured Programming Languages	3(2-1-1)

Under-Graduate Courses

Mathematics (16):						
Sl.	Course No.	Title of the Courses	Credit Hours	Offered to	Semester	
1.	BPM-103	Elementary Mathematics	3(3-2-0)	B.Sc.(Hon) Comm Sc		II
2.	BPM-105	Fundamentals of Mathematics	2(2-1-0)	B.Sc.(Hon) Ag	I	
3.	BPM 106	Basic Mathematics-I	3(3-2-0)	B.Tech. Bio-Tech	I	
4.	BPM 107	Basic Mathematics-II	3(3-2-0)	B.Tech. Bio-Tech		II
5.	BPM-131	Engineering Mathematics-I	3(3-2-0)	B.Tech. Agril. Engg	I	
6.	BPM-132	Engineering Mathematics-II	4(4-1-0)	B.Tech. Agril. Engg		II
7.	BPM-141	Calculus, Multivariable Calculus and Linear Algebra	4(3-1-0)	B.Tech. Civil Engg	I	
8.	BPM-142	Calculus and Differential Equations	5(4-1-0)	B.Tech. Elect. Engg. B.Tech. E&C Engg.	I	
9.	BPM-143	Calculus & Linear Algebra	4(3-1-0)	B.Tech. Mech. Engg./ I & P Engg./ Comp. Engg./ Info. Tech.	I	
10.	BPM-151	Differential Equations & Complex variables- Differentiation	5(4-1-0)	B.Tech. Civil Engg		II
11.	BPM-152	Linear Algebra, Transform Calculus and Numerical Methods	4(3-1-0)	B.Tech. Elect. Engg. B.Tech. E&C Engg.		II
12.	BPM-153	Calculus, Ordinary Differential Equations and Complex Variables	5(4-1-0)	B.Tech. Mech. Engg. B.Tech. I & P Engg.		II
13.	BPM-154	Multivariable Calculus, Transforms & Ordinary differential equations	4(3-1-0)	B.Tech. Comp. Engg. B.Tech. Info. Tech.		II
14.	BPM-235	Agricultural Engineering Mathematics-III	2(2-1-0)	B.Tech. Agril. Engg	I	
15.	BPM-241	Transforms, Discrete Mathematics & Complex variables- Integration	3(2-1-0)	B.Tech. Civil Engg	I	
16.	BPM-242	Partial Differential Equations, Probability & Statistics	3(2-1-0)	B.Tech. Mech. Engg. B.Tech. I & P Engg.	I	
Statistics (5):						
Sl.	Course No.	Title of the Course	Credit Hours	Offered to	Semester	
1.	BPS-110	Elements of Statistics	3(2-0-1*2)	B.Sc.(Hon) Comm. Science	I	
2.	BPS-200	Elementary Statistics	2(1-1-1*2)	B.Sc.(Hon) Ag B.Tech. (Bio-Tech)	I	
3.	BPS-218	Probability, Statistics and Queueing Models	2(2-1-0)	B.Tech. (Bio-Tech)		II

4.	BPS-228	Probability and Statistics	4(3-1-0)	B.Tech.Comp. Engg. B.Tech. Info. Tech. B.Tech. Elect. Engg. B.Tech. Civil Engg.	I	
5.	BPS-270	Basic Statistical Methods	2(1-0-1*2)	B.F.Sc.		II

Computer Science (5):

Sl.	Course No.	Title of the Courses	Credit Hours	Offered to	Semester	
1.	BPM-104	Information and communication Technology	2(1-0-1*2)	B.F.Sc.		II
2.	BPM-108	Object Oriented Programming	3(2-0-1*2)	B.Tech. (Bio-Tech)		II
3.	BPM-203	Computer Applications	2(1-0-1*3)	B.Tech. (Bio-Tech)	I	
4.	BPM-205	Agri-informatics	2(1-0-1*3)	B.Sc.(Hon) Ag.		II
5.	BPM-261	Programming in Fortran and C	3(3-2-0)	B.Tech. (Bio-Tech)	I	

List of Post-Graduate Courses

Mathematics (25):			
S.No.	Course No.	Course Title	Cr. Hrs.
1.	BPM-601	Master's Special Problem	1
2.	BPM-602	Special Functions & Integral Equations	2(2-1-0)
3.	BPM-603	Linear Algebra & Advanced Calculus	3(3-2-0)
4.	BPM-604	Difference, Differential Equations & Topology	3(3-2-0)
5.	BPM-607	Transformations & Calculus of Variations	2(2-1-0)
6.	BPM-611	Mechanics and Variational Principles	3(3-2-0)
7.	BPM-631	Real Analysis	3(3-2-0)
8.	BPM-632	Differential Geometry & Tensors	3(3-2-0)
9.	BPM-633	Topology	3(3-2-0)
10.	BPM-634	Complex Analysis	3(3-2-0)
11.	BPM-635	Functional Analysis	3(3-2-0)
12.	BPM-636	Abstract Algebra	3(3-2-0)
13.	BPM-637	Differential Equations	3(3-2-0)
14.	BPM-688	Master's Seminar	1
15.	BPM-690	Master's Thesis Research	30
16.	BPM-701	Doctoral Special Problem	1
17.	BPM-711	Mathematical Modeling	3(3-2-0)
18.	BPM-713	Boundary Value Problems	3(3-2-0)
19.	BPM-731	Advanced Analysis	3(3-2-0)
20.	BPM-732	Integral Transforms and Z Transforms	3(3-2-0)
21.	BPM-734	Differentiable Manifolds	2(2-1-0)
22.	BPM-737	Special Functions	3(3-2-0)
23.	BPM-788	Doctoral Seminar I	1
24.	BPM-789	Doctoral Seminar II	1
25.	BPM-790	Ph.D. Thesis Research	75
Agril. Statistics/ Statistics (22):			
S.No.	Course No.	Course Title	Cr. Hrs.
1.	BPS-601	Master's Special Problem	1
2.	BPS-606	Computer Application in Biometrics	2(0-0-2)
3.	BPS-625	Statistical Methods	3(2-0-1)
4.	BPS-626	Probability Theory and Distributions	2(2-2-0)
5.	BPS-661	Experimental Statistics	4(3-0-1)
6.	BPS-662	Advanced Experimental Designs	3(2-0-1)
7.	BPS-663	Linear Models	2(2-1-0)
8.	BPS-669	Operations Research	3(3-1-0)
9.	BPS-671	Theory of Sampling	3(2-0-1)
10.	BPS-672	Mathematical Statistics	3(3-1-0)
11.	BPS-676	Estimation & Statistical Hypotheses Testing	4(3-1-1)
12.	BPS-681	Data Analysis and Forecasting	3(3-1-0)
13.	BPS-688	Master's Seminar	1
14.	BPS-690	Master's Thesis Research	30
15.	BPS-701	Doctoral Special Problem	1
16.	BPS-702	Simulation Techniques	3(2-0-1)
17.	BPS-711	Advanced Statistical Methods	3(2-0-1)
18.	BPS-719	Survival Analysis and Bayesian Inference	3(2-0-1)

19.	BPS-720	Data Science concepts for Statistical Research	3(2-0-1)
20.	BPS-788	Doctoral Seminar I	1
21.	BPS-789	Doctoral Seminar II	1
22.	BPS-790	Ph.D. Thesis Research	75
Computer Science (18):			
S.No.	Course No.	Course Title	Cr. Hrs.
1.	BPM-601	Master's Special Problem	1
2.	BPM-605	Use of Computer Software	2(0-0-2)
3.	BPM-621	Numerical Techniques for Computers	3(3-2-0)
4.	BPM-622	Numerical Solution of Partial Differential Equations	3(3-2-0)
5.	BPM-623	Computer Network	2(1-1-1)
6.	BPM-641	Object Oriented Programming	3(2-1-1)
7.	BPM-642	Structured Programming Languages	3(2-1-1)
8.	BPM-645	Introduction to Computer & Programming	2(1-0-1)
9.	BPM-646	Discrete Mathematical Structures	3(3-2-0)
10.	BPM-647	Relational Database Management System	3(2-1-1)
11.	BPM-648	Design and Analysis of Algorithm	3(3-2-0)
12.	BPM-649	Foundation of Theoretical Computer Science	3(3-2-0)
13.	BPM-650	Introduction to Computers & Programming	2(1-0-1)
14.	BPM-652	Elements of Computer Operating Systems	3(2-0-1)
15.	BPM-653	Principles of Compiler Design	4(4-2-0)
16.	BPM-655	Management Information System	3(2-0-1)
17.	BPM-682	Numerical Methods	3(3-1-0)
18.	BPM-683	Computer Application in Numerical Methods	3(0-0-3)