### SCHEME OF STUDIES BS STATISTICS FOUR YEAR DEGREE PROGRAMME 2016

### Semester I

Course Code	Title of the Course	Credit Hours
<b>Major Course</b>		
STA-301	Introduction to Statistics	4(4-0)
<b>Minor Course</b>		
ICT-321	Introduction to Computers	3(2-1)
MTH-301	Calculus-I	4(4-0)
ENG-321	English-I Language in Use	3(3-0)
PST-321	Pakistan Studies	2(2-0)
Total		16(15-1)

### Semester II

Course Code	Title of the Course	Credit Hours
<b>Major Course</b>		
STA-302	Basic Probability & Random Variables	3(3-0)
Minor Course		
MTH-302	Calculus-II	4(4-0)
ICT-323	Introduction to Programming	3(2-1)
ENG-322	English-II Academic Reading and Writing	3(3-0)
ISL-408	Islamic Studies	2(2-0)
CHM-300	Environmental Sciences	1(1-0)
Total		16(15-1)

# Semester III

Course Code	Title of the Course	<b>Credit Hours</b>
<b>Major Course</b>		
STA-401	Introduction to Probability Distribution	3(3-0)
STA-403	Introduction to Survey Sampling	3(3-0)
STA-405	Applied Statistics	4(4-0)
<b>Minor Course</b>		
ENG-421	English-III Communication Skills	3(3-0)
ECO-301	Principles of Micro Economics	3(3-0)
Total		16(16-0)

# Semester IV

Course Code	Title of the Course	Credit Hours
Major Course		
STA-402	Introduction to Regression Analysis & ANOVA	4(4-0)
STA-404	Basics of Estimation & Hypothesis	4(4-0)
	Testing	
<b>Minor Course</b>		
BBA-506	Human Resource Management	3(3-0)
MTH-406	Ordinary Differential Equations	3(3-0)
ECO-302	Principles of Macro Economics	3(3-0)
Total		17(17-0)

# Semester V

Course Code	Title of the Course	<b>Credit Hours</b>
<b>Major Course</b>		
STA-501	Probability & Probability Distribution-I	4(4-0)
STA-503	Sampling Techniques-I	3(3-0)
STA-505	Statistical Methods	4(4-0)
STA-507	Operations Research	3(3-0)
STA-509	Population Studies	3(3-0)
Total		17(17-0)

# Semester VI

<b>Course Code</b>	Title of the Course	<b>Credit Hours</b>
<b>Major Course</b>		
STA-502	Probability & Probability Distribution-II	4(4-0)
STA-504	Sampling Techniques-II	3(3-0)
STA-506	Design & Analysis of Experiments-I	4(4-0)
STA-508	Statistical Quality Control	3(3-0)
STA-510	Non Parametric Methods	3(3-0)
Total		17(17-0)

# Semester VII

<b>Course Code</b>	Title of the Course	<b>Credit Hours</b>
<b>Major Course</b>		
STA-601	Econometrics-I	4(4-0)
STA-603	Design & Analysis of Experiments-II	4(4-0)
STA-605	Multivariate Analysis-I	3(3-0)
STA-607	Statistical Inference-I	3(3-0)
STA-609	Statistical Software-I	3(0-3)
STA-629	Seminar	1(0-1)
Total		18(14-4)

# Semester VIII

<b>Course Code</b>	Title of the Course	Credit Hours	
<b>Major Course</b>	Major Course		
STA-602	Econometrics-II	4(4-0)	
STA-604	Statistical Inference-II	4(4-0)	
STA-606	Multivariate Analysis-II	3(3-0)	
STA-608	Statistical Software-II	3(3-0)	
STA-630	Special Problem	1(0-1)	
	Any One of The Following Courses		
STA-614	Analysis of Time Series & Forecasting	3(3-0)	
STA-616	Categorical Data Analysis	3(3-0)	
STA-618	Biostatistics	3(3-0)	
STA-620	Bayesian Statistics	3(3-0)	
Total		18(17-1)	
<b>Grand Total</b>		135	

Programme	Award	Duration	Semester	<b>Credit Hours</b>
Bachelor of	BS Statistics	4 Years	8 Semesters	135
Sciences				

### Following Course offered as Minor / deficiency in PhD.

Course Code	Title of the Course	<b>Credit Hours</b>
<b>Miner Courses</b>		
STA-703	Design and Analysis of Experiments for	3(3-0)
	Researchers	

# Following Courses offered as Minor/ deficiency in MPhil.

<b>Course Code</b>	Title of the Course	Credit Hours
<b>Miner Courses</b>		
STA-701	Experimental Statistics	3(3-0)
STA-702	For M.Phil. Business Management	3(3-0)
STA-705	For M.Phil./ MS. Computer Science	3(3-0)

### Following Courses offered as Minor / deficiency in BS/ MSc. Programs

<b>Course Code</b>	Title of the Course	Credit Hours
<b>Miner Courses</b>		
STA-320	Introduction to Statistical Theory	3(3-0)
STA-321	Introduction to Statistical Theory-I	3(3-0)
STA-322	Introduction to Statistical Theory-II	3(3-0)
STA-323	Applied Statistical Theory	3(2-1)

Approved by BOS Meeting and Academic Council