## GOVT. COLLEGE WOMEN UNIVERSITY FAISALABAD DEPARTMENT OF STATISTICS

## SCHEME OF STUDIES BS STATISTICS FOUR-YEAR DEGREE PROGRAMME 2020

#### Semester I

Course Code	Title of the Course	Credit
		Hours
Major Course		
STA-301	Introduction to Statistics	4(3-1)
Minor Course		
ICT-321	Introduction to Computer	3(2-1)
MTH-321	Mathematics-I	3(3-0)
ENG-321	English-I (Functional English)	3(3-0)
PST-321	Pakistan Studies	2(2-0)
CHM-300	Environmental Sciences	1(1-0)
Total		16(14-2)

#### Semester II

Course Code	Title of the Course	Credit
		Hours
Major Course		
STA-302	Introduction to random variables &	4(3-1)
	Probability distributions	
STA-304	Applied Statistics	4(3-1)
Minor Course		
MTH-322	Mathematics-II	3(3-0)
ICT-323	Introduction to Programming	3(2-1)
ENG-322	English-II (Communication skills)	3(3-0)
Total		17(14-3)

### Semester III

Course Code	Title of the Course	Credit Hours
Major Course		
STA-401	Basic statistical inference	4(3-1)
STA-403	Statistics and Society	3(3-0)
Minor Course		
ENG-421	English-III (Technical writing)	3(3-0)
ECO-301	Principles of Micro Economics-I	3(3-0)
MTH-324	Mathematics-III	3(3-0)
ISL-408	Islamic Studies	2(2-0)
Total		18(17-1)

### Semester IV

Course Code	Title of the Course	Credit Hours
Major Course		
STA-402	Introduction to Regression Analysis of ANOVA &	4(3-1)
	ANCOVA	
STA-406	Statistical software-1	3(0-3)
Minor Course		
MTH-406	Ordinary Differential Equations	3(3-0)
ECO-302	Principles of Macro Economics-I	3(3-0)
BBA-506	Human Resource Management	3(3-0)
Total		16(12-4)

## Semester V

Course Code	Title of the Course	Credit Hours
Major Course		
STA-501	Probability & Probability	4(4-0)
	Distributions-I	
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

Course Code	Title of the Course	Credit Hours
Major Course		
STA-502	Probability & Probability	4(4-0)
	Distributions-II	
STA-504	Sampling Techniques-II	3(3-0)
STA-506	Design & Analysis of	4(4-0)
	Experiments-I	
STA-508	Statistical Quality Control	3(3-0)
STA-510	Survey Research Methods	3(3-0)
Total		17(17-0)

# Semester VII

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

<b>Total</b> 18(14-4)
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Semester	VIII

Course Code	Title of the Course	Credit Hours		
Major Course				
STA-602	Econometrics-II	4(4-0)		
STA-604	Statistical Inference-II	3(3-0)		
STA-606	Multivariate Analysis-II	3(3-0)		
STA-608	Statistical Software-III	3(0-3)		
STA-630	Research Report	4(0-4)		
Or Any One of The Following Courses				
STA-610	Analysis of Time Series &	4(4-0)		
	Forecasting			
STA-612	Categorical Data Analysis	4(4-0)		
STA-614	Survival Data Analysis	4(4-0)		
STA-616	Bayesian Statistics	4(4-0)		
STA-618	Non-Parametric Methods	4(4-0)		
Total		17(10-7)		
Grand Total		133		

Programme	Award	Duration	Semester	<b>Credit Hours</b>
Bachelor of Sciences	<b>BS</b> Statistics	4 years	8 Semester	133

#### FOLLOWING COURSES ARE OFFERED AS MINOR / DEFICIENCY IN DIFFERENT DEPARTMENTS

#### For Ph.D. Programme

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

#### For M. Phil. Programme

Course Code	Title of the Course	Credit Hours
Miner Courses		
STA-701	Experimental Statistics	3(3-0)
STA-702	Statistical Methods for Business Management	3(3-0)
STA-704	Statistical Methods for Social Sciences	3(3-0)
STA-705	Statistical Methods	3(3-0)

#### For BS/ MA/ MSc. Programme

Course Code	Title of the Course	Credit Hours
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Miner Courses		
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)