

Vishwakarma University
Faculty of Science & Technology
School of Basic and Quantitative Sciences
Department of Statistics
B.Sc.(Statistics)- Curriculum

Semester -I		
Course Code	Course name	Credits
BSCST101	Descriptive Statistics	4
BSCST102	Concept of Probability and Distribution Functions	4
BSCST103	Algebra	4
BSCST104	Mathematical Analysis	4
BSCST105	R Programming	4
BSCST106	Practical-I	4
	Total	24

Semester –II		
Course Code	Course name	Credits
BSCST201	Discrete Distributions	5
BSCST202	Continuous Distribution	5
BSCST203	Sampling Methods and Indian Official Statistics	5
BSCST204	Calculus	5
BSCST205	Practical-I	2
BSCST206	Practical-II	2
	Total	24

Semester –III		
Course Code	Course name	Credits
BSCST301	Estimation Theory	5
BSCST302	Numerical Analysis	5
BSCST303	Testing of Hypothesis	5
BSCST304	Introduction to Python	5
BSCST305	Practical-I	2
BSCST306	Practical-II	2
	Total	24

Semester –IV		
Course Code	Course name	Credits
BSCST401	Stochastic Process & Queuing Theory	5
BSCST402	Applied Statistics	5
BSCST403	Regression Analysis	5
BSCST404	Multivariate Analysis & Non-Parametric Methods	5
BSCST405	Practical-I	2
BSCST406	Practical-II	2
	Total	24

Semester –V		
Course Code	Course name	Credits
BSCST501	Design of Experiment	5
BSCST502	Operation Research	5
BSCST503	Elective-I	4
BSCST504	Elective-II	4
BSCST505	Statistical Data Analysis using SPSS/Minitab	4
BSCST506	Practical-I	2
	Total	24

Semester –VI		
Course Code	Course name	Credits
BSCST601	Statistical Quality Control	5
BSCST602	Data Mining	5
BSCST603	Elective-I	4
BSCST604	Elective –II	4
BSCST605	Project	6
	Total	24

List of Electives for Semester- V

- 1. Big Data Analytics**
- 2. Bioinformatics**
- 3. Applied Reliability**
- 4. Actuarial Statistics**
- 5. Machine Learning**
- 6. Business Statistics and Analytics**
- 7. Time Series Analysis**

List of Electives for Semester- VI

- 1. Biostatistics and Survival Analysis**
- 2. Database Management System**
- 3. Business Process Management**
- 4. Artificial Neural Networks**
- 5. Stochastic Models in Finance**
- 6. Microarray Data Analysis**
- 7. Financial Statistics**