

## BS 04 Years & Associate Degree in Statistics

| Course Title   | Course Code         | Course Type       | Credit Hour                  |
|--|---------------------|-------------------|------------------------------|
| Semester 1   |                     |                   |                              |
| Functional English   | GENG-101            | General           | <u>3</u>                     |
| Civics and Community Engagement                            | GCCE-101            | General           | <u>2</u>                     |
| Islamic Studies / Ethics (for Non-Muslims)                 | GISL-101 / GETH-101 | General           | <u>2</u>                     |
| Introduction to Statistics                                 | STAT-101            | Major             | <u>3</u>                     |
| Calculus   | SMTH-101            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-001              | Compulsory        | <u>0</u>                     |
| Everyday Science (NS)                                      | NSS-104             | General           | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |
| Semester 2   |                     |                   |                              |
| GEN(AH)  |                     | General           | <u>2</u>                     |
| Quantitative Reasoning (I)                                 | GQR-101             | General           | <u>3</u>                     |
| Entrepreneurship   | GENT-101            | General           | <u>2</u>                     |
| Ideology and Constitution of Pakistan                      | GICP-101            | General           | <u>2</u>                     |
| Linear Algebra   | SMTH-102            | Major             | <u>3</u>                     |
| Probability Theory and Applications                        | STAT-102            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-002              | Compulsory        | <u>1</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |
| Semester 3   |                     |                   |                              |
| Applications of Information and Communication Technologies | GICT-201            | General           | <u>3</u>                     |
| Expository Writing   | GENG-201            | General           | <u>3</u>                     |
| Programming with R   | STAT-203            | Major             | <u>3</u>                     |
| Statistical Methods-I                                      | STAT-202            | Major             | <u>3</u>                     |
| Regression Analysis  | STAT-201            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-003              | Compulsory        | <u>0</u>                     |
|  |                     |                   | <b>Total Credit Hours 15</b> |
| Semester 4   |                     |                   |                              |
| GEN(SS)  |                     | General           | <u>2</u>                     |
| Quantitative Reasoning (II)                                | GQR-202             | General           | <u>3</u>                     |
| Applied Statistics   | STAT-206            | Major             | <u>3</u>                     |
| Statistical Computing                                      | STAT-205            | Major             | <u>3</u>                     |
| Statistical Methods-II                                     | STAT-204            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-004              | Compulsory        | <u>1</u>                     |
|  |                     |                   | <b>Total Credit Hours 15</b> |
| Semester 5   |                     |                   |                              |
| Interdisciplinary  | N/A                 | Major             | <u>3</u>                     |
| Interdisciplinary  | N/A                 | Major             | <u>3</u>                     |
| Probability and Probability Distributions-I                | STAT-303            | Major             | <u>3</u>                     |
| Sampling Techniques-I                                      | STAT-302            | Major             | <u>3</u>                     |
| Experimental Design  | STAT-301            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-005              | Compulsory        | <u>0</u>                     |
|  |                     |                   | <b>Total Credit Hours 15</b> |
| Semester 6   |                     |                   |                              |
| Interdisciplinary  |                     | Interdisciplinary | <u>3</u>                     |
| Interdisciplinary  |                     | Interdisciplinary | <u>3</u>                     |
| Probability and Probability Distributions-II               | STAT-306            | Major             | <u>3</u>                     |
| Multivariate Analysis                                      | STAT-305            | Major             | <u>3</u>                     |
| Sampling Techniques-II                                     | STAT-304            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-006              | Compulsory        | <u>1</u>                     |
|  |                     |                   | <b>Total Credit Hours 16</b> |
| Semester 7   |                     |                   |                              |
| Fieldwork  | STAT-401            | Major             | <u>3</u>                     |
| Elective-I   |                     | Major             | <u>3</u>                     |
| Research Methods   | STAT-404            | Major             | <u>3</u>                     |
| Time Series Analysis                                       | STAT-403            | Major             | <u>3</u>                     |
| Statistical Inference-I                                    | STAT-402            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-007              | Compulsory        | <u>0</u>                     |
| Elective-II  |                     | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 18</b> |
| Semester 8   |                     |                   |                              |
| Capstone Project   | STAT-405            | Major             | <u>3</u>                     |
| Elective-III   |                     | Major             | <u>3</u>                     |
| Machine Learning   | CSTA-304            | Major             | <u>3</u>                     |
| Econometrics   | STAT-407            | Major             | <u>3</u>                     |
| Statistical Inference-II                                   | STAT-406            | Major             | <u>3</u>                     |
| Tarjuma-e-Quran  | HQ-008              | Compulsory        | <u>1</u>                     |
| Elective-IV  |                     | Major             | <u>3</u>                     |
|  |                     |                   | <b>Total Credit Hours 19</b> |

Signature