**GOVT. COLLEGE WOMEN UNIVERSITY FAISALABAD**

**DEPARTMENT OF STATISTICS**

**SCHEME OF STUDIES BS STATISTICS FOUR-YEAR DEGREE PROGRAMME 2021**

**Semester I**

|  |  |  |
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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-101 | 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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-102 | Introduction to random variables &Probability distributions | 4(3-1) |
| STA-104 | 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) |
| ISL-322-A | Translation of Holly Quran | 1(0-1) |
| **Total** |  | 18(14-4) |

**Semester III**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-201 | Basic statistical inference | 4(3-1) |
| STA-203 | 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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-202 | Introduction to Regression Analysis of ANOVA & ANCOVA | 4(3-1) |
| STA-206 | 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) |
| ISL-322-B | Translation of Holly Quran | 1(0-1) |
| **Total** |  | 17(12-5) |

**Semester V**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-301 | Probability & Probability Distributions-I | 4(4-0) |
| STA-303 | Sampling Techniques-I | 3(3-0) |
| STA-305 | Statistical Methods  | 4(4-0) |
| STA-307 | Operations Research | 3(3-0) |
| STA-309 | Population Studies  | 3(3-0) |
| **Total** |  | 17(17-0) |

**Semester VI**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-302 | Probability & Probability Distributions-II | 4(4-0) |
| STA-304 | Sampling Techniques-II | 3(3-0) |
| STA-306 | Design & Analysis of Experiments-I | 4(4-0) |
| STA-308 | Statistical Quality Control | 3(3-0) |
| STA-310 | Survey Research Methods | 3(3-0) |
| **Total** |  | 17(17-0) |

**Semester VII**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-401 | Econometrics-I | 4(4-0) |
| STA-403 | Design & Analysis of Experiments-II | 4(4-0) |
| STA-405 | Multivariate Analysis-I | 3(3-0) |
| STA-407 | Statistical Inference-I | 3(3-0) |
| STA-409 | Statistical Software-II | 3(0-3) |
| STA-494 | Seminar | 1(0-1) |
| **Total** |  | 18(14-4) |

**Semester VIII**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** |
| STA-402 | Econometrics-II | 4(4-0) |
| STA-404 | Statistical Inference-II | 3(3-0) |
| STA-406 | Multivariate Analysis-II | 3(3-0) |
| STA-408 | Statistical Software-III | 3(0-3) |
| STA-430 | Research Report | 4(0-4) |
|  **Or Any One of The Following Courses** |
| STA-410 | Analysis of Time Series & Forecasting | 4(4-0) |
| STA-412 | Categorical Data Analysis | 4(4-0) |
| STA-414 | Survival Data Analysis | 4(4-0) |
| STA-416 | Bayesian Statistics | 4(4-0) |
| STA-418 | Non-Parametric Methods | 4(4-0) |
| **Total** |  | 17(10-7) |
| **Grand Total** |  | 134 |

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| **Programme** | **Award** | **Duration**  | **Semester** | **Credit Hours** |
| **Bachelor of Sciences** | **BS Statistics** | **4 years** | **8 Semester** | **134** |