**GOVT. COLLEGE WOMEN UNIVERSITY FAISALABAD**

**DEPARTMENT OF STATISTICS**

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

**Semester I**

|  |  |  |
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| **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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** | | |
| STA-302 | Introduction to random variables &  Probability distributions | 4(3-1) |
| 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) |
| 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-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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** | | |
| STA-402 | Introduction to Regression Analysis of ANOVA & ANCOVA | 4(3-1) |
| 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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** | | |
| STA-501 | Probability & Probability Distributions-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**

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| **Course Code** | **Title of the Course** | **Credit Hours** |
| **Major Course** | | |
| STA-502 | Probability & Probability Distributions-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 | 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-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-II | 3(0-3) |
| STA-629 | 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-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 & Forecasting | 4(4-0) |
| 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 |

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| **Programme** | **Award** | **Duration** | **Semester** | **Credit Hours** |
| **Bachelor of Sciences** | **BS Statistics** | **4 years** | **8 Semester** | **133** |