**GOVT. COLLEGE WOMEN UNIVERSITY FAISALABAD**

**DEPARTMENT OF STATISTICS**

**SCHEME OF STUDIES BS STATISTICS FOUR-YEAR DEGREE PROGRAMME 2019**

**Semester I**

|  |  |  |  |
| --- | --- | --- | --- |
| **Course Code** | **Title of the Course** | **Credit Hours** |  |
| **Major Course** | | |  |
| STA-301 | Introduction to Statistics | 4(4-0) |  |
| **Minor Course** | | |  |
| ICT-321 | Introduction to Computer | 3(2-1) |  |
| MTH-321 | Mathematics-I | 3(3-0) |  |
| ENG-321 | English-I Language in Use | 3(3-0) |  |
| PST-321 | Pakistan Studies | 2(2-0) |  |
| CHM-300 | Environmental Sciences | 1(1-0) |  |
| **Total** |  | 16(15-1) |  |

**Semester II**

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| --- | --- | --- | --- |
| **Course Code** | **Title of the Course** | **Credit Hours** |  |
| **Major Course** | | |  |
| STA-302 | Basic Probability & Random Variables | 3(3-0) |  |
| **Minor Course** | | |  |
| MTH-322 | Mathematics-II | 3(3-0) |  |
| ICT-323 | Introduction to Programming | 3(2-1) |  |
| ENG-322 | English-II Academic Reading and Writing | 3(3-0) |  |
| ISL-408 | Islamic Studies | 2(2-0) |  |
| BBA-506 | Human Resource Management | 3(3-0) |  |
| **Total** |  | 17(16-1) |  |

**Semester III**

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| --- | --- | --- | --- |
| **Course Code** | **Title of the Course** | **Credit Hours** |  |
| **Major Course** | | |  |
| STA-401 | Introduction to Probability Distribution | 3(3-0) |  |
| STA-403 | Introduction to Survey Sampling | 3(3-0) |  |
| **Minor Course** | | |  |
| ENG-421 | English-III Communication Skills | 3(3-0) |  |
| ECO-301 | Principles of Micro Economics | 3(3-0) |  |
| MTH-324 | Mathematics-III | 3(3-0) |  |
| **Total** |  | 15(16-0) |  |

**Semester IV**

|  |  |  |  |
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| **Course Code** | **Title of the Course** | **Credit Hours** |  |
| **Major Course** | | |  |
| STA-402 | Introduction to Regression Analysis & ANOVA | 4(4-0) |  |
| STA-406 | Applied Statistics | 4(4-0) |  |
| STA-404 | Basics of Estimation & Hypothesis Testing | 4(4-0) |  |
| **Minor Course** | | |  |
| MTH-406 | Ordinary Differential Equations | 3(3-0) |  |
| ECO-302 | Principles of Macro Economics | 3(3-0) |  |
| **Total** |  | 18(18-0) |  |

**Semester V**

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| **Course Code** | **Title of the Course** | **Credit Hours** |  |
| **Major Course** | | |  |
| STA-501 | Probability & Probability Distribution-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 Distribution-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 | Non Parametric Method | 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-I | 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 | 4(4-0) |  |
| STA-606 | Multivariate Analysis-II | 3(3-0) |  |
| STA-608 | Statistical Software-II | 3(3-0) |  |
| STA-630 | Special Problem | 1( 0 -1) |  |
| **Any One of The Following Courses** | | |  |
| STA-614 | Analysis of Time Series & Forecasting | 3(3-0) |  |
| STA-616 | Categorical Data Analysis | 3(3-0) |  |
| STA-618 | Biostatistics | 3(3-0) |  |
| STA-620 | Bayesian Statistics | 3(3-0) |  |
| **Total** |  | 18(17-1) |  |
| **Grand Total** |  | 136 |  |

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| --- | --- | --- | --- | --- |
| **Programme** | **Award** | **Duration** | **Semester** | **Credit Hours** |
| **Bachelor of Sciences** | **BS Statistics** | **4 years** | **8 Semester** | **136** |

**Approved by BOS Meeting and Academic Council**