## BSc in Statistics - Curriculum Chart

## Term 1

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| General Mathematics (1) | 4 |  |  | Basic |
| Fundamentals of Mathematics | $r$ |  |  | Basic |
| Fundamentals of | $r$ |  |  | Basic |
| Economics/Demographics/Genetics/Environment |  |  |  |  |
| Introductory Statistics and Probability | $r$ |  |  | Basic |
| General Persian | $r$ |  |  | General |
| Physical Education (1) | 1 |  |  | General |
| Total Credits | 19 |  |  |  |

Term 2

| Courses | Credits | Code | Prerequisites | Type |
| :---: | :---: | :---: | :---: | :---: |
| General Mathematics 2 | $\stackrel{4}{4}$ |  | General <br> Mathematics (1) | Basic |
| Fundamentals of Computer and Programming | $r$ |  | - | Basic |
| Probability (1) | ${ }^{4}$ |  | General <br> Mathematics (1) / <br> Introductory <br> Statistics and <br> Probability | Required |
| Introduction to Official Statistics | r |  | Introductory Statistics and Probability | Required |
| General English | r |  | - | General |
| Physical Education (2) | 1 |  | Physical Education (1) | General |
| Total Credits | IV |  |  |  |

## Term 3

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Differential Equation | $r$ |  | General Mathematics (2) | Basic |
| Mathematical Analysis (1) | $r$ |  | Fundamentals of <br> Mathematics / General <br> Mathematics (2) | Required |
| Probability (2) | $r$ |  | General Mathematics 2 / <br> Probability (1) | Required |
| Statistical Methods | $r$ |  | Probability (1) | Required |
| Knowledge of Family and Population | $r$ |  | - | General |
| General Courses of Islamic <br> Teachings | $r$ |  | - | General |
| Total Credits | $1 \wedge$ |  |  |  |

Term 4

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Linear Algebra for Statistics | $r$ |  | Fundamentals of <br> Mathematics / General <br> Mathematics (2) | Required |
| Mathematical Statistics (1) | $r$ |  | Probability (2) / Statistical <br> Methods | Required |
| Random Processes | $r$ |  | Probability (2) | Required |
| Sampling Methods (1) | $r$ |  | Statistical Methods | Required |
| Nonparametric Methods | $r$ |  | Statistical Methods | Required |
| General Courses of Islamic <br> Teachings | $r$ |  | Fundamentals of <br> Mathematics / General <br> Mathematics (2) | General |
| Total Credits | r | ^^ |  |  |

Term 5

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Mathematical Statistics (2) | $r$ |  | Mathematical Statistics (1) | Required |
| Regression (1) | $r$ |  | Linear Algebra for <br> Statistics / Mathematical <br> Statistics (1) | Required |
| Numerical Methods and Simulation | $r$ | Differential Equations / <br> Fundamentals of Computer <br> and Programming / Linear <br> Algebra / Probability (2) | Required |  |
| Time Series (1) | $r$ |  | Mathematical Statistics (2) <br> / Random Processes | Required |
| Sampling Methods (2) | $r$ |  | Sampling Methods (1) | Required |
| General Courses of Islamic <br> Teachings | $r$ |  | - | General |
| Total Credits | $1 \wedge$ |  |  |  |

Term 6

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Regression (2) | $r$ |  | Regression (1) | Required |
| Experimental Design (1) | $r$ |  | Regression (1) | Required |
| Discrete Multivariate Methods (1) | $r$ |  | Statistical Mathematics (2)/ <br> Regression (1) | Required |
| English for Students of Mathematics | r |  | General English / Regression <br> (1) | Required |
| Continuous Multivariate Methods (1) | $r$ |  | Mathematics Statistics (2) / <br> Regression (1) | Required |
| General Courses of Islamic <br> Teachings | $r$ |  | - | General |
| Total Credits | rv |  |  |  |

Term 7

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Experimental Design (2) | 3 |  | Experimental Design (1) | Required |
| Continuous Multivariate Methods (2) | 3 |  | Continuous Multivariate <br> Methods (1) | Required |
| Statistical Quality Control | 3 |  | Probability (1) / <br> Sampling Methods (1) | Required |
| Elective Course (1) from the Offered <br> Courses | 3 |  | Depends on the Course | Elective |
| Elective Course (2) from the Offered <br> Courses | 3 |  | Depends on the Course | Elective |
| General Courses of Islamic Teachings | 2 |  | - | General |
| Total Credits | 17 |  |  |  |

Term 8

| Courses | Credits | Code | Prerequisites | Type |
| :--- | :--- | :--- | :--- | :--- |
| Statistical Calculations | 3 |  | Experimental Design <br> (1)/ Numerical <br> Methods and <br> Simulation | Required |
| Research Methodology and Statistical <br> Consultation | 2 |  | Sampling Methods (2) <br> (Experimental Design <br> (1) | Required |
| Project | 2 |  | At least 90 credits <br> must have been <br> passed. | Project |
| Elective Course (1) from the Offered Courses | 3 |  | Depends on the <br> Course | Elective |
| Elective Course (2) from the Offered Courses | 3 |  | Depends on the <br> Course | Elective |
| General Courses of Islamic Teachings | 2 |  | - | General |
| Total Credits | 15 |  |  |  |

## Total Credits of General Courses: 22

Total Credits of Required Courses: 78
Total Credits of Project: 2

Total Credits of Basic Courses: 22
Total Credits of Elective Courses: 12
Total Credits: 136

