

Degree Plan for B.Sc. in Statistics

| Minimum No. of Credits for the Degree Plan = 136 | | | | | |
|--|---|--------------|---------------|-----------|------------------------------------|
| University Requirements = 24 Credits | | | | | |
| Course Code | Course Name | Credit Hours | Contact Hours | | Pre-requisites/ Co-requisites |
| | | | Theory | Practical | |
| ARAB100 | Arabic Language I | 3 | 3 | 0 | |
| ARAB101 | Arabic Language II | 3 | 3 | 0 | ARAB100 |
| HIST150 | Islamic Civilization | 3 | 3 | 0 | |
| ENGL150 | English Language | 3 | 3 | 0 | |
| ENGL152 | English Language II | 3 | 3 | 0 | ENGL150 |
| ENGL155 | Communication Skills | 3 | 3 | 0 | ENGL152 |
| COMP101/L | Computer Skills | 3 | 2 | 2 | COMP-A,COMP-B, Digital Literacy |
| MNGT100 | Entrepreneurship: Creativity and Innovation | 3 | 3 | 0 | |
| University Electives = 3 Credits | | | | | |
| College Requirements = 28 Credits | | | | | |
| MATH116 | Pre-Calculus | 4 | 3 | 2 | |
| MATH211 | Calculus I | 4 | 3 | 2 | MATH116 |
| STAT101 | Introduction to Statistics | 4 | 3 | 2 | |
| COMP151/L | Introduction to Algorithms | 4 | 3 | 2 | COMP101/L |
| CHEM101/L | General Chemistry I | 4 | 3 | 2 | |
| PHYS101/L | General Physics I/L | 4 | 3 | 2 | MATH116 |
| PHYS150/L | General Physics II/L | 4 | 3 | 2 | PHYS101/L |
| College Electives = 6 Credits | | | | | |
| Department Requirements = 36 Credits | | | | | |
| MATH145 | Linear Algebra I | 3 | 2 | 2 | MATH116 |
| MATH212 | Calculus II | 3 | 2 | 2 | MATH211 |
| STAT210 | Principles of Probability | 3 | 2 | 2 | STAT101, MATH212 |
| STAT212 | Sampling Techniques | 3 | 2 | 2 | STAT101, MATH116 |
| STAT266/L | Computational Techniques in Statistics | 3 | 2 | 2 | COMP101/L, STAT101 |
| STAT290 | Statistical Methods | 3 | 2 | 2 | STAT101 |
| STAT320 | Mathematical Statistics | 3 | 3 | 0 | STAT210, MATH212 |
| STAT339 | Regression Analysis | 3 | 3 | 0 | STAT266/L, MATH145 |
| STAT381 | Statistical Inference I | 3 | 3 | 0 | STAT320 |
| STAT385 | Design and Analysis of Experiments I | 3 | 3 | 0 | STAT290 |

| Course Code | Course Name | Credit Hours | Contact Hours | | Pre-requisites/ Co-requisites |
|--|--|--------------|---------------|-----------|----------------------------------|
| | | | Theory | Practical | |
| STAT420 | Operations Research I | 3 | 3 | 0 | MATH211, MATH145 |
| STAT421 | Statistical Inference II | 3 | 3 | 0 | STAT381 |
| Department Electives = 39 Credits | | | | | |
| <ul style="list-style-type: none"> At least 12 credits of electives must be from the statistics elective courses. Courses from the Department of Mathematical and Physical Sciences may be taken as electives with written approval of the HOS/HOD. Students may opt to take any of the 15-credit approved university minors. | | | | | |
| Statistics Elective Courses | | | | | |
| STAT237 | Statistics for Actuarial Science | 3 | 2 | 2 | STAT101 |
| STAT340 | Probability Models in Decisions Making | 3 | 3 | 0 | STAT210 |
| STAT341 | Survey Design and Sampling | 3 | 3 | 0 | STAT212 |
| STAT351/L | Simulation | 3 | 2 | 2 | STAT210 |
| STAT352 | Demographic and Health Care Statistics | 3 | 3 | 0 | STAT101 |
| STAT379 | Applied Statistics | 3 | 3 | 0 | STAT290 |
| STAT380/L | Statistical Packages for Decisions Making | 3 | 2 | 2 | STAT266/L, STAT290 |
| STAT387 | Stochastic Processes | 3 | 3 | 0 | STAT320 |
| STAT428 | Quality and Reliability | 3 | 3 | 0 | STAT210 |
| STAT442 | Operations Research II | 3 | 3 | 0 | STAT420 |
| STAT460 | Information Theory | 3 | 3 | 0 | STAT320 |
| STAT462/L | Data Analysis | 3 | 2 | 0 | STAT266/L, STAT290 |
| STAT470 | Special Topic in Statistics 1 | 3 | 3 | 0 | Instructor's Permission |
| STAT475 | Special Topic in Statistics 2 | 3 | 3 | 0 | Instructor's Permission |
| STAT480 | Special Topic in Statistics 3 | 3 | 3 | 0 | Instructor's Permission |
| STAT485 | Special Topic in Statistics 4 | 3 | 3 | 0 | Instructor's Permission |
| STAT490 | Special Topic in Statistics 5 | 3 | 3 | 0 | Instructor's Permission |
| STAT495 | Special Topic in Statistics 6 | 3 | 3 | 0 | Instructor's Permission |
| Statistics Service Courses | | | | | |
| STAT105 | Statistics for Engineers | 3 | 2 | 2 | MATH211 |
| STAT214 | Probability and Statistics for Engineering | 3 | 2 | 2 | STAT105, MATH212 |

| Course Code | Course Name | Credit Hours | Contact Hours | | Pre-requisites/ Co-requisites |
|-------------|--|--------------|---------------|-----------|----------------------------------|
| | | | Theory | Practical | |
| STAT281 | Intermediate Statistics for Business and Economics | 3 | 2 | 2 | STAT101 |
| STAT321 | Mathematical Statistics for Education | 3 | 3 | 0 | STAT101, MATH212 |
| STAT330 | Bio-statistical Methods and Epidemiology | 3 | 3 | 0 | STAT101 |
| STAT615/L | Educational Computerized Statistics | 3 | 2 | 2 | STAT101 |