



**IICSE University**  
...a liberal arts education

# MS in Applied Statistics Graduate Program

## Master of Science in Applied Statistics (MS)



**MS**

**APPLIED  
STATISTICS**

The “Master of Science in Applied Statistics” program at IICSE University is an academic degree program which empowers students to utilize statistical methods to draw valid and meaningful inferences from data. Using a variety of statistical software (SAS, SPSS, Minitab, R), graduates are expected to analyze real-world data appropriately and communicate their findings efficiently. The program brings about the study of statistics, computer science, scientific research, and communication skills.

Applied statisticians are in high-demand in the up-to-date high-technology economy. Our program emphasizes a flexible curriculum that allows a wide variety of concentrations of application, including mathematics, computer science, psychology, sciences, business, pharmaceutical product development, and other self-designed multi-disciplinary concentrations.

Upon completion of the program, students seek jobs as statistical analysts in industry, government or academia. Some of the graduates continue on for a Ph.D. in other universities.

[www.iicseuniversity.org](http://www.iicseuniversity.org)



**The Program Structure:**

Course Code	MS: <b>First Semester Courses</b>	Credit
STA 801	Linear Algebra	2
STA 802	Real Analysis	3
STA 803	Introduction to Mathematical Software	3
STA 804	Introduction to Probability Theory	2
STA 805	Combinatorics	2
STA 806	Computer Programming	3
TOTAL CREDITS		15
Course Code	MS: <b>Second Semester Courses</b>	Credit
STA 811	Statistical Inference	2
STA 812	Applied Stochastic Processes	3
STA 813	Algorithms	3
STA 814	Optimization	2
STA 815	Numerical Analysis	2
STA 816	Regression Analysis	3
TOTAL CREDITS		15
Course Code	MS: <b>Third Semester Courses</b>	Credit
STA 821	Theoretical Computer Science	2
STA 822	Time Series Analysis	3
STA 823	Information System	3
STA 824	Categorical Data Analysis	2
STA 825	Distribution Theory	2
STA 826	Multivariate Analysis	3
TOTAL CREDITS		15
Course Code	MS: <b>Fourth Semester Courses</b>	Credit
STA 831	Advanced Probability	2
STA 832	Biostatistics	3
STA 833	Theory of Sampling	3
STA 834	Statistical Techniques in Data Mining	2
STA 835	Testing of Hypothesis	2
STA 836	Master Thesis	3
TOTAL CREDITS		15

**The thesis**

A thesis on a particular topic of your choice (with a Supervisor's approval) will be completed by each student in the last semester. There is considerable scope in the choice of subject areas by the student and the research method employed. Each student is allocated a supervisor who guides them through the thesis. The thesis aims to assimilate the theoretical and practical elements of the academic program of study.

**Duration of program:** A Semester runs for a period of three months. Our "Master's Degree" programs are completed within the period of four semesters (one year). We allow extension in the period of study, in case your courses could not be completed within the stipulated time frame. No additional fee, no extra charge for extension in the period of study.

**How to apply**

Prospective student must complete the Admission Form and pay the processing fee of \$45 USD or its equivalent. The processing fee is refundable if admission is denied.

