decisions. This course will take a conceptual, rather than a computational approach to learning statistics.

STAT 2110 Regression Analysis (3,3,0)

Prerequisite: STAT 1131-2 Statistical Methods and Theory I & II and MATH 1120 Linear Algebra

This course aims to provide an understanding of the classical and modern regression analysis and techniques which are widely adopted in various areas such as business, finance, biology and medicine. There have been great developments in the past decades such as nonlinear regression, robust regression, nonparametric regression etc. With the help of a statistical package such as SAS, Matlab or R, students can analyse multivariate data by modern regression techniques without any difficulty.

STAT2120Categorical Data Analysis(3,3,0)Prerequisite:STAT1620Computer-aidedStatistics or STAT2110Regression Analysis

To equip students with statistical methods for analysing categorical data arisen from qualitative response variables which cannot be handled by methods dealing with quantitative response, such as regression and ANOVA. Some computing software, such as SAS, S-PLUS, R or MATLAB, will be used to implement the methods.

STAT2710Design and Analysis of Surveys(3,3,0)Prerequisite:STAT1131Statistical Methods and Theory I or
STAT1620STAT1620Computer-aided Statistics

To provide students with a good understanding of survey operations, survey sampling methods and the corresponding analyses of data. Important points in questionnaire design will also be addressed in the course. Students will form teams to do course projects. On completion of the course, students should be able to design, carry out, and write reports based on a professional survey.

STAT2810Design and Analysis of Experiments(3,3,0)Prerequisite:STAT 2110 Regression Analysis

To provide an understanding of various kinds of experimental designs involving factorial and uniform designs as well as design for computer experiments. The experimental design has a long history and has been widely used in industry, agriculture, quality control, natural sciences and computer experiments. They can be applied to survey design as well. Therefore, they are useful in business and social sciences. The statistical package, SAS and UD4.0 will be used to support the lecture.

STAT 3710 Multivariate Analysis and Data (3,3,0) Mining

Prerequisite: STAT 2110 Regression Analysis

To provide an understanding of the classical multivariate analysis and modern techniques in data mining. Very often, observations in the social, life and natural sciences are multidimensional or very high dimensional. This kind of data sets can be analysed by techniques in multivariate analysis and/or data mining. With the help of statistical package, such as Matlab, students will learn how to treat real multivariate problems.

STAT 3820 Life Insurance and Life Contingencies (3,2,1)

Prerequisite: (1) BUS 1150 Mathematics for Business and BUS 1160 Statistics for Business, or (2) STAT 1131-2 Statistical Methods and Theory I & II

To introduce the theory of life insurance and life contingencies with application to insurance problems. Students will learn some of the major issue in the field of actuaries.

STAT3830Times Series and Forecasting(3,3,0)Prerequisite:STAT 2110 Regression Analysis

The course aims at providing students with an understanding of the statistical methods for time series data whose order of observation is crucially important in depicting the background dynamics of the related social, economical, and/or scientific phenomena. The students will learn to use various time series models and techniques such as exponential smoothing, ARIMA, etc. to model and make forecasts. Corresponding programming techniques to facilitate these practices will also be introduced within the platforms of MATLAB. Case studies will be provided to make the students acquainted with the elementary techniques.

STAT 3840 Survival Analysis (3,3,0)

Prerequisite: STAT 1131-2 Statistical Methods and Theory I & II, STAT 2110 Regression Analysis and STAT 2120 Categorical Data Analysis

This course aims to provide students with a good understanding of techniques for the analysis of survival data, including methods for estimating survival probabilities, comparing survival probabilities across two or more groups, and assessing the effect of covariates on survival. The emphasis will be on practical skills for data analysis using statistical software packages. Students will form groups to do projects involving the analysis of real data.

STAT 3930 Asymptotics in Statistics (3,3,0)

Prerequisite: Year II standing or above or consent of instructor To provide senior students with advanced statistics, especially some modern knowledge so that students can have a good preparation for research.

STAT 3980 Special Topics in Statistics (3,3,0)

Prerequisite: Year II standing or above or consent of instructor This course exposes students to selected current trends in edgecutting research areas in (bio)statistics. The topics will vary according to the expertise and interests of staff and visitors.

STAT 7010 Modern Experimental Designs (3,3,0)

Prerequisite: Postgraduate standing or consent of instructor This course serves postgraduate students from different disciplines. The theory and method of experimental design will be introduced. Applications of the methods to students' research are emphasized.

STAT 7020 Monte Carlo and Quasi-Monte Carlo (3,3,0) Methods

Prerequisite: Postgraduate standing or consent of instructor Monte Carlo and quasi-Monte Carlo methods are valuable tools for solving multidimensional integration, optimization, and other problems. This course covers the generation of (pseudo-) random numbers and quasi-random numbers. Theoretical and practical aspects of Monte Carlo and quasi-Monte Carlo methods for different classes of problems are also explained.

STAT 7030 Special Topics in Statistics (3,3,0)

Prerequisite: Postgraduate standing or consent of instructor This course exposes postgraduate students to selected current research areas in statistics. The topics will vary according to the expertise and interests of staff and visitors.

STAT 7040 Generalized Multivariate Analysis (3,3,0)

Prerequisite: Postgraduate standing or consent of instructor This course provides a comprehensive theory and methods of modern multivariate analysis in non-normal population and in large number of variables. The course stresses the theory of elliptical distributions also.

STAT 7050 Asymptotics in Statistics (3,3,0)

Prerequisite: Postgraduate standing or consent of instructor Asymptotic theory in statistics is very important as for vast majority of statistics it is not possible, especially in nonparametric settings, to derive sampling distributions and limiting distributions are then of great help in statistical inference and estimation. Thus, this course equips students with a sound asymptotic theory and some new re-sampling methods to approximate sampling distributions.

TRA 1110 Translation Knowledge (1): (3,3,0) Principles and Methods (3,3,0) (3,3,0)

This is an introduction to the basic approaches to, and problems in, translating. Various aspects of the art and profession of translating will be highlighted and disucssed. Students will