SRLP 4125 Independent Project (3,0,3)
Prerequisite: SRLP 3075 Research Methods
The purpose of the Independent Project is to allow students to apply knowledge accumulated from the programme to pursue a small-scale research on a specific topic of their interest under the guidance of an appointed faculty member.

SRLP 4135 Leisure Counselling (3,3,0)
This course aims to provide students with an opportunity to understand the individual and social dynamics influencing leisure choices. Students will acquire basic counselling and educational intervention techniques to help clients with diverse socio-cultural backgrounds, interest, and physical/Intellectual abilities, to identify and overcome constraints to pursue leisure activities.

SRLP 4145 Outdoor Recreation and Adventure (3,2,1)
Education Programming
This course aims to provide students with an understanding of the nature of outdoor recreation and adventure education and to acquire the essential knowledge and skills to plan and lead outdoor recreation and adventure education programmes for persons with special needs and for the mainstream population.

SRLP 4155 Planning and Leading Water (3,1,2)
Activities
Prerequisite: GECR 5607 Swimming or equivalent
This course aims to provide students with knowledge related to designing, planning, and leading a variety of water (pool) activities for persons with special needs. Students will be provided with opportunities to apply knowledge to practical situations.

SRLP 4165 Sports for Persons with Special (3,1,2)
Needs
This course aims to provide students with knowledge to demonstrate, organize, and teach/coach a variety of alternate sports, such as floor hockey, floorball, sandshoe, goalball, bocce, gateball etc., for persons with special needs.

STAT 1131 Statistical Methods and Theory I (3,3,1) (E)
Prerequisite: A-Level Pure Mathematics, A-Level/AS-Level Applied Mathematics or AS-Level Mathematics and Statistics
This course deals with the statistical methods and theory. The emphasis is on what, how, when and why certain statistical methods can and cannot be applied. Topics include exploratory data analysis, estimation, hypothesis testing, analysis of variance, simple linear regression and nonparametric methods. Students are required to solve a variety of problems by using calculators and statistical packages such as SAS, MINITAB, SPSS, S-PLUS or R.

STAT 1132 Statistical Methods and Theory II (3,3,1) (E)
Prerequisite: STAT 1131 Statistical Methods and Theory I
This course deals with the elementary probability theory and the mathematical foundation of some commonly used statistical methods. First the rigorous mathematical frame of the probability theory based upon the concepts of random variables and probability distributions are introduced. The general procedures of statistical inference, such as parameter estimation, hypothesis test, analysis of variance are demonstrated with detailed discussion about their mathematical features. Students are required to comprehend the most commonly used probability distributions and their relations. Central Limit Theorem and related statistical application should be well understood. Several optimal schemes for the estimation accuracy and the hypothesis test power form another important part of the course.

STAT 1210 Probability and Statistics for (3,3,1)
Computer Science
Antirequisite: STAT 1620 Computer-aided Statistics
Prerequisite: MATH 1000 Supplementary Mathematics (Calculus and Linear Algebra) or Grade D or above in AL Pure Mathematics

This course aims to provide an understanding of the basic concepts in probability and statistical analysis, and focuses on applied probability and statistics. Students will learn the fundamental concepts of random variables, the basic concepts and techniques of parameter estimation and hypothesis testing. After taking this course, students will be able to apply the concepts to real-life IT/engineering applications and use popular statistics packages, such as SAS, SPSS, S-Plus, R or MATLAB, to perform simple and sophisticated analysis.

STAT 1620 Computer-aided Statistics (3,3,0) (E)
Antirequisite: BUS 1200 Statistics for Business, STAT 1210 Probability and Statistics or STAT 1131 Statistical Methods and Theory I
This course deals with the statistical analysis using commercial grade computer software. It provides statistical concepts and methods so that the students learn how to make correct statistical inference by using appropriate methods. This course is NOT for students whose programmes are offered by the Department of Mathematics.

STAT 2110 Regression Analysis (3,3,0) (E)
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.

STAT 2120 Categorical Data Analysis (3,3,0) (E)
Prerequisite: STAT 1620 Computer-aided Statistics or STAT 2110 Regression 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.

STAT 2710 Design and Analysis of Surveys (3,3,0) (E)
Prerequisite: STAT 1131 Statistical Methods and Theory I or STAT 1620 Computer-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.

STAT 2810 Design and Analysis of (3,3,0) (E)
Experiments
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) (E)
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