**Minor Title**  
Minor in Statistics

**Offered to students admitted to Year 1 in**  
2012

**Objectives:**  
The curriculum of the Statistics minor is structured specifically to cater for the general need of non-statistical disciplines and provide basic training in statistical methodologies and their applications to practical problems. It aims to provide students with a strong and rigorous sense of quantitative reasoning that has become an indispensable skill in nearly all disciplines.

**Learning Outcomes:**  
Students should be able to:

a. acquire basic statistical knowledge alongside their major disciplines, with emphases on correct applications of statistical methods and insightful interpretations of statistical findings;  
(by means of coursework, tutorial classes and project-based learning in the curriculum)

b. equip with computational skills essential to conducting complete data analyses;  
(by means of coursework, tutorial classes, project-based learning and presentation opportunities in the curriculum)

c. participate proactively in large-scale, multi-disciplinary studies, determine objective findings, and provide guidance on all aspects of data collection and analyses.  
(by means of coursework, tutorial classes and project-based learning in the curriculum)

**Impermissible Combination:**  
Major in Risk Management  
Major in Statistics  
Minor in Risk Management

### Required courses (42 credits)

1. **Introductory level courses (12 credits)**  
   At least 6 credits selected from the following courses:  
   - STAT1601 Elementary statistical methods (6)  
   - STAT1602 Business statistics (6)  
   - STAT1603 Introductory statistics (6)  
   - STAT2601 Probability and statistics I (6)  
   
   Plus at least 6 credits selected from the following courses:  
   - STAT2602 Probability and statistics II (6)  
   - STAT2603 Data management with SAS (6)  
   - STAT2605 Introduction to demographic and socio-economic statistics (6)

2. **Advanced level courses (30 credits)**  
   At least 30 credits selected from the following courses:  
   - STAT3601 Linear statistical analysis (6)  
   - STAT3602 Statistical inference (6)  
   - STAT3603 Probability modeling (6)  
   - STAT3604 Design and analysis of experiments (6)  
   - STAT3605 Quality control and management (6)  
   - STAT3606 Business logistics (6)  
   - STAT3607 Statistics in clinical medicine & bio-medical research (6)  
   - STAT3608 Statistical genetics (6)  
   - STAT3611 Computer-aided data analysis (6)  
   - STAT3612 Data mining (6)  
   - STAT3613 Marketing engineering (6)  
   - STAT3614 Business forecasting (6)  
   - STAT3616 Advanced SAS programming (6)  
   - STAT3617 Sample survey methods (6)  
   - STAT3955 Survival analysis (6)  
   - STAT4601 Time-series analysis (6)  
   - STAT4602 Multivariate data analysis (6)

**Notes:**  
1. A course may appear as required course in two or more Science majors/minors. Each course can only be considered to satisfy the requirement of one major or one minor, even if that appears in the curriculum of two
majors/minors. Students have to select another course to replace the course in the second major/minor.

2. Courses at the advanced level are subject to change.

**Remarks:**
Important! Ultimate responsibility rests with students to ensure that the required pre-requisites and co-requisite of selected courses are fulfilled. Students must take and pass all required courses in the selected primary science major in order to satisfy the degree graduation requirements.