# **Course Description**

This course helps students develop better analytical and decision-making skills in approaching practical and important daily life issues, without the use of any advanced knowledge in mathematics and statistics. Students will derive solutions or conclusions that require critical thinking, creativity, quantitative analysis, and common sense. In this short course, students will also learn to apply different decision analysis concepts and tools in a selected set of interesting problems with greater confidence.

## **Topics**

- 1. Decision analysis framework and environments
- 2. Decisions traps and how to overcome them
- 3. Critical thinking in the decision-making process
- 4. Analytical thinking for complex decisions
- 5. Statistical thinking for decisions involving uncertainty and risk

## **Grading Scheme**

- Attendance, in-class participation and exercises, and discussion (20%)
- Exam (80%)

[Topics and grading schemes are subject to change as deemed appropriate. Students will receive information and guidelines in class on how they will be assessed for the course.]

## **Instructor**

#### **Prof. Ronald LAU**

Prof. Lau joined HKUST in 2001. He is currently an Associate Professor of Business Education in the Department of Information Systems, Business Statistics and Operations Management. He has taught courses in the areas of operations management and decision analysis. Staying close to the current industry practices, Prof. Lau also maintains an active connection with management in financial, logistics, information technology, and business consulting industries. Over the years, he has completed many consulting projects for logistics, financial, manufacturing, and e-learning businesses. Prof. Lau has been teaching SISP 1505 for HKUST Summer Institute since 2011. He has been highly rated by past Summer Institute participants and has consistently been ranked one of the top course instructors for the program. Prof. Lau was also the winner of the HKUST Best Ten Lecturers and Franklin Prize for Teaching Excellence.