國立台灣科技大學 114學年 第2學期　課程大綱

Spring 2026 NTUST Course Outline

授課教師：何建韋

Instructor:HO, CHIEN-WEI

課程名稱：數量方法—統計方法與資料分析

Course Title：Statistics and Data Analysis

2026/11/3

課程代號： MA5100701 Course Code 學分數： 3 Credits	必選修：選修/半學年 Required/Electve:Elective/Half Yr. 先修課程： Prerequisites
節次教室： Time/Location	R2(TR-513) R3(TR-513) R4(TR-513)
專業核心能力： Core Professional Competencies	
課程網址： Course Website	
課程宗旨： Course Objectives	This course provides MBA students with the quantitative research skills necessary to design, analyze, and interpret empirical research for academic theses and managerial decision-making. By the end of the course, students will be able to independently design hypotheses, select appropriate statistical methods, and interpret analytical results in a professional research context.
課程大綱： Outline of Lectures	The basic concept of quantitative research 1 Science research and quantitative research 2 Variable and measurement Data process 1 Coding and database development 2 Check up the data 3 Descriptive statistics and figure The method of statistics analysis 1 Chi-square test 2 Difference between means: t-test 3 Difference among means: ANOVA 4 Correlation and regression analysis 5 Mediating and moderating 6 Reliability and validity 7 Structural equation modelling (SEM)
授課方式： Method of Instruction	講授 Lecture：55% 分組討論 Group discussion：25% 案例研討 Case study：5% 操做練習 Practical exercises：15% 講授 Lecture：%
教科書： Textbooks	
參考書目： References	Multivariate Data Analysis (8 Ed.)

修課須知： Notice	
評量方式： Grading	Mid-term proposal - group (25%) Final report - group (30%) Two journal paper presentations - group (20%) Normal grades - attendance record, quiz, homework, and interaction (25%)
備註說明： Notes	