

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：李強笙

Instructor: Lee, Chiang-She

課程名稱：多變量分析

Course Title : Multivariate Analysis

2026/5/6

<p>課程代號：IM6107701 Course Code</p> <p>學分數：3 Credits</p>	<p>必選修：選修/半學年 Required/Elective: Elective/Half Yr.</p> <p>先修課程： Prerequisites</p>
<p>節次教室：R2(MA-417) R3(MA-417) R4(MA-417) Time/Location</p>	
<p>專業核心能力： Core Professional Competencies</p>	
<p>課程網址： Course Website</p>	
<p>課程宗旨：This course focuses on discussing how to use the statistical methods to analyze the multi-normal data. These methods include Wishart distribution, Hotelling T-distribution, Logistic regression, Principle component, Factor analysis, and so on. Course Objectives</p>	
<p>課程大綱：The following materials are contained in this class. Outline of Lectures</p> <ol style="list-style-type: none"> (1) theories of vectors, matrices and so on, (2) introduction of multi-normal distribution, (3) Wishart distribution and Hotelling T-distribution, (4) Testing of the mean vector, (5) Multiple regression model, (6) Logistic regression model, (7) Principle component, (8) Factor analysis, (9) Cluster analysis. 	
<p>授課方式：講授 Lecture：70% Method of Instruction</p> <p>分組討論 Group discussion：0%</p> <p>案例研討 Case study：0%</p> <p>操做練習 Practical exercises：0%</p> <p>講授 Lecture：Lecture 70%, Group Discussion + Case Study + Practice Training = 30%.%</p>	
<p>教科書：Applied Multivariate Statistical Analysis Textbooks by Richard A. Johnson, etc.</p>	
<p>參考書目：N/A References</p>	
<p>修課須知：N/A Notice</p>	
<p>評量方式：40% Homeworks Grading 30% Midterm 30% Final</p>	
<p>備註說明：Basic Statistics Notes Linear Algebra</p>	