# 朝陽科技大學 096學年度第1學期教學大綱
# Finance Information Engineering 財務資訊工程

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| **當期課號** | 1088 | **Course Number** | 1088 |
| **授課教師** | 朱香蕙 | **Instructor** | CHU,HSIANG HUI |
| **中文課名** | 財務資訊工程 | **Course Name** | Finance Information Engineering |
| **開課單位** | 財務金融系(四日)四A | **Department** | |
| **修習別** | 選修 | **Required/Elective** | Elective |
| **學分數** | 3 | **Credits** | 3 |
| **課程目標** | 概略而言，舉凡金融商品的設計、組合、分解、定價、推廣與通路的建立等，均是「財務工程」的範疇。本課程對於財務工程相關議題，先闡述數學及統計原理， 討論其實際應用意義，幫助學生對此領域知的了解。 | **Objectives** | Financial engineering involves the design, the development, and the implementation of innovative financial instruments and process, and the formulation of creative solutions to problems in finance. For the related topics about financial engineering, we first involve the fundamental theories and methods, and then discuss their implementation in practical applications. |
| **教材** | 1.J. Hull, (2007) Options, Futures and Other Derivative Securities, 6th edition, Prentice Hall.<br>2.許誠洲,財務工程,雙葉書廊<br>3.財務金融中心編著,投資分析+Matlab應用,全華<br>4.財務工程,全華 | **Teaching Materials** | 1.J. Hull, (2007) Options, Futures and Other Derivative Securities, 6th edition, Prentice Hall.<br>2.許誠洲,財務工程,雙葉書廊<br>3.財務金融中心編著,投資分析+Matlab應用,全華 |
| **成績評量方式** | 平時 35%<br>期中報告 25%<br>期末考 40% | **Grading** | Participation+Homework 35%<br>Term paper + Presentation 25%<br>Final Exam 40% |
| **教師網頁** | | | |
| **教學內容** | 本課程先闡述數學及統計原理， 應用Excel與Matlab討論其實際應用意義。<br>1. 風險與報酬<br>2. 投資組合的風險<br>3. 金融商品的組合原理<br>4. 二元數評價模型<br>5. Black-Scholes 模型<br>6. 結構型債券的設計、訂價與風險評估 | **Syllabus** | 1. Risk and Return<br>2. Options<br>3. Binomial Trees<br>4. Black-Scholes Model<br>5. Exotic Options |

尊重智慧財產權，請勿非法影印。