# 朝陽科技大學 092學年度第1學期教學大綱
# Structural Matrix Analysis 結構矩陣分析

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| **當期課號** | 1060 | **Course Number** | 1060 |
| **授課教師** | 潘吉齡 | **Instructor** | PAN,CHI LING |
| **中文課名** | 結構矩陣分析 | **Course Name** | Structural Matrix Analysis |
| **開課單位** | 營建工程系(四日)三A | **Department** | |
| **修習別** | 選修 | **Required/Elective** | Elective |
| **學分數** | 3 | **Credits** | 3 |
| **課程目標** | 本課程是以矩陣方法來處理結構問題。結構矩陣學爲電腦數值分析結構問題的基本，若要瞭解電腦程式處理結構問題，應先瞭解矩陣法較爲適宜。結構矩陣學是以能量法爲基礎，可分成直接勁度法、位移法、力法等三種方法。 | **Objectives** | The course introduces the matrix method to solve the structural affairs. The matrix method is the base of the computer numerical analysis. Therefore, the matrix method should be learned before the learning of the computer program to solve the structural problems. The matrix method is based on the energy method. There are three methods in the course. They are force method, displacement method, and directly stiffness method. |
| **教材** | 教學以教材爲主，輔以適當之參考資料，並適時給予學生作業，並於適當時期舉行小考。 | **Teaching Materials** | Text material: lecture note, text book and handout in class<br>The homework will be assigned to the students during the class and quiz and examination will be conducted to evaluate the student's study. |
| **成績評量方式** | Mid term Examination (期中考)－30%<br>Final Examination (期末考)－40%<br>Quiz and Assignment (小考與作業)－30% | **Grading** | Mid term Examination－30%<br>Final Examination－40%<br>Quiz and Assignment－30% |
| **教師網頁** | | | |
| **教學內容** | 利用矩陣法處理結構問題<br>內容：能量原理、直接勁度法、位移法、力法 | **Syllabus** | Structural computation by using structural matrix method<br>Content: stiffness method,direct stiffness method, energy method, displacement method, and force method |

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