# 朝陽科技大學 095學年度第2學期教學大綱
# Structural Reliability 結構可靠度

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| 當期課號 | 7135 | Course Number | 7135 |
| 授課教師 | 王淑娟 | Instructor | WANG,SHU CHUAN |
| 中文課名 | 結構可靠度 | Course Name | Structural Reliability |
| 開課單位 | 營建工程系碩士班一A | Department | |
| 修習別 | 選修 | Required/Elective | Elective |
| 學分數 | 3 | Credits | 3 |
| 課程目標 | 工程設計或決策不可避免地須在不確定性存在下作判斷，因此在學習工程分析時，應能估計至這些不確定性之影響，即系統可靠度之計算。本課程主要內容包括介紹各類可靠度之計算方法，其內容將涵蓋理論分析法、近似解法及數值模擬法。 | Objectives | Uncertainties are unavoidable in the design and planning of engineering systems. Properly, therefore, the tools of engineering analysis should include methods and concepts for evaluating the significance of uncertainty on system performance and design, i.e., reliability analysis. This course covers various numerical methods for reliability , including analytical approach, approximate approach and simulation method. |
| 教材 | "Probability Concepts in Engineering Planning and Design, Vol. Ⅱ, Decision, Risk, and Reliability" by A. H-S. Ang | Teaching Materials | |
| 成績評量方式 | 期中考 30%<br>期末考 30%<br>作業及小考 40% | Grading | mid-term exam.:30%<br>final exam.:30%<br>Homework and quiz:40% |
| 教師網頁 | | | |
| 教學內容 | 本課程旨在介紹各類可靠度之計算方法，其內容將涵蓋理論分析法、近似解法及數值模擬法。此外，並將比較各類方法之優缺點及其適用性。 | Syllabus | It provides students with knowledge of computatioanl methods for structural reliability, including analytical method, approximate method and simulation method. |