

102-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	最佳化設計	Serial No. / ID	2545 / MPR5003
Dept.	工具機產業碩士學位學程	School System / Class	研究所碩士班1年1班
Lecturer	紀華偉	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(二)6 / H546 (五)34 / H546	Language	Chinese

Introduction
1. Teach students the numerical optimization theories and techniques.
2. Teach students how to implement the optimization techniques for engineering design tasks

Outline
1. Introduction
2. Single Variable Optimization
3. Multi-Variable Unconstrained Optimization
4. Multi-Variable Constrained Optimization Linear Programming, Non-linear Programming
5. Non-traditional Optimization Techniques: GA (Genetic Algorithm)
SA (Simulated Annealing)
ANN (Artificial Neural Network)
6. Case Study

Prerequisite
Engineering Mathematics
Calculus
Programming Language
Numerical Methods