98-1 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
|-------------------|--------------------------|-----------------------|----------------|
| Title | 工程數學(一) | Serial No. / ID | 1035 / MAI2001 |
| Dept. | 機械與自動化工程學系 | School System / Class | 大學日間部2年1班 |
| Lecturer | 鄭錕燦 | Full or Part-time | 專任 |
| Required / Credit | Required / 3 | Graduate Class | NO |
| Time / Place | (三)12 / H439 (四)3 / H439 | Language | Chinese |

Introduction

Engineering mathematics is an important tool for exploring and resolving engineering problems. The objectives of this course are to expose students to the problems frequently encountered in engineering fields, to make students grasp the fundamental capability of engineering mathematics, and to apply mathematics in mechanical engineering fields. The contents of this course are: 1. Analytical solutions of the first, second and higher order of ordinary differential equations; 2. Laplace transform.

Outline

Unit 1: First-Order ODEs
Unit 2: Second-Order ODEs

Unit 3: Higher Order Linear ODEs

Unit 4: Laplace Transforms

Prerequisite

English reading competence, fundamental mathematics, and calculus.