98-1 Preliminary Syllabus, Da-Yeh Univ

Information

Title		Serial No. / ID	2370 / MUR 5011
Dept.		School System / Class	1　1
Lecturer		Full or Part-time	
Required / Credit	Optinal / 3	Graduate Class	NO
Time / Place	(　)567 / H228	Language	Chinese

Introduction

Let students master the applications of applied mathematics methods to mechanical, solid and fluid mechanics, vibration, electrical circuits, heat transfer, wave propagation. Learn how to apply mathematics in the fields of mechanical, electrical, and civil engineering. Use the applied mathematics methods to obtain the approximate solution for the governing partial or ordinary differential equations. The contents of curriculum mentioned above comply with our department's educational objects (article A1.1, A1.2, A2.1, A3.1, A3.2, A3.3)　the cultivation of core capability (article B1, B2, B3, B4, B7)　the specialty of curriculum (article C1, C2, C3).

Outline

1. Ordinary Differential Equations including the Laplace Transform.
2. Vectors and Linear Algebra, Vector Anslysis
3. Systems of Differential Equations
4. Fourier Analysis, Orthogonal Expansion
5. Partial Differential Equations : The Wave Equation　The Heat Equation　The Potential Equation
6. Complex Variable.

Prerequisite

1. Calculus
2. Engineering Mathematics