

## 99-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	工程數學(二)	Serial No. / ID	1847 / MAV2002
Dept.	機械與自動化工程學系	School System / Class	四技部2年1班
Lecturer	鄭江河	Full or Part-time	專任
Required / Credit	Required / 3	Graduate Class	No
Time / Place	(二)34 / H445 (四)2 / H445	Language	Chinese

Introduction
Engineering Mathematics (II) is a fundamental course connecting physics and mathematics with practical problems. This course will provide students a thorough understanding of linear algebra, vector differential calculus and vector Integral, Fourier Series, and partial differential equations. The adequate ability to develop the mathematical model and to analyze the engineering system will be developed.

Outline
<ol style="list-style-type: none"><li>1. Linear Algebra: Matrices, Vectors, Determinants, Linear Systems.</li><li>2. Linear Algebra: Matrix Eigenvalue Problems.</li><li>3. Vector Differential Calculus. Grad, Div, Curl</li><li>4. Vector Integral Calculus. Integral Theorems.</li><li>5. Fourier Series, Integrals, and Transforms.</li><li>6. Partial Differential Equations (PDEs).</li></ol>

Prerequisite
Calculus