103-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	編碼理論	Serial No. / ID	2040 / EDR5044
Dept.	電機工程學系博士班	School System / Class	研究所博士班1年1班
Lecturer	胡大湘	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	No
Time / Place	(五)567 / H719	Language	Chinese

Introduction

The coding field has exploded with new theoretical developments, several of which have had significant practical consequences. Three of these new developments stand out in particular: coded-modulation, soft decision decoding and soft-in and soft-out iterative decoding techniques. These new developments have revolutionized the way coding is applied to practical systems.

Goal: covoluitional codes, coded-modulation, soft decision decoding, turbo decoding, low density parity check decoding

Outline

1. Introduction 2. Convolutional Codes 3. Trellis-Based Decoding Algorithms for Convolutional Codes

4. Sequential and Threshold Decoding of Convolutional Codes 5. Trellis-Coded Modulation

6. Turbo Coding & Decoding 7. low density parity check coding & decoding

8.Auto Repeat Request Systems

Prerequisite

error control coding