100-2 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	錯誤控制編碼	Serial No. / ID	1613 / EDR5130
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	(-)123 / H719	Language	English

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