102-1 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
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| Title | 編碼理論 | Serial No. / ID | 2047 / 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 / H369 | 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