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②图玄東華大學 粉學計劃表 Syllabus

教學計劃表 Syllabus									
	5稱(中文) ne in Chinese	影像視訊編碼			學年/學期 Academic Year/Seme	ester	113/2		
	名稱(英文) me in English	Image and Video Coding							
	目代碼 rse Code	EE71260	系級 Department & Year	電機工程學系					
	修別 Type	選修 Elective							
	課教師 tructor	/陳美娟							
先修課程 Prerequisite									
課程描述 Course Description									
提供數位影像與視訊編碼的基本概念和方法知識,引發學生與趣,進而介紹影像與視訊壓縮之國際標準。									
課程目標 Course Objectives									
讓學生在修習此一課程後,能對影像視訊編碼有深入的了解,以利研究工作 的進行。									
系專業能力 Basic Learning Outcomes							課程目標與系專業能 力相關性 Correlation between Course Objectives and Dept.'s Education Objectives		
Α	備電機電子資訊工和						•		
developing ability of electrical, electronics and information engineering。 B 培育系統分析、模擬驗證、實作實現之能力。To cultivate the advanced ability of									
analysis, verification and implementation of systems。 analysis, verification and implementation of systems。 analysis, verification and implementation of systems。									
the utilization of software tool and the verification of the hardware practice。 a li 訓練電機電子資訊專業知識與工程實務相互結合運用之能力。To train the integrate ability									
between professional EECS knowledge and engineering practice。 p 落實高科技研究之分工整合與團體合作之領導能力。To fulfill the leading ability in high									
- tech research with integration and teamwork cooperation。									
finding, logical analyzing, bottleneck overcoming and continuous learning。 了解學術倫理與智慧財產觀念,掌握國內外產業更迭需求與具備多元專長之能力。To obtain the ability of multi-specialization and to meet the industry demand as well as to have the ability of academic ethics and concept of intellectual property							0		
参與國際研討會了解國際市場變化與未來研究走向,具備純熟科技英文閱讀溝通寫作之能力。To participate the conferences to understand the change of global market and the future trend as well as to have the skillful ability of reading, conversation and technical writing in English。							0		
圖示說明Illustration : ● 高度相關 Highly correlated ○中度相關 Moderately correlated									
授 課 進 度 表 Teaching Schedule & Content									
週次Week		內容	Subject/Topi	cs		備註Remarks			
1 Introduction									

2	Huffman Coding, Arithmetic Coding						
3	Run Length Coding						
4	Quantization						
5	Predictive Coding, Block Truncation Coding						
6	Transform Coding						
7	Motion Estimation/ Compensation						
8	調整上課(放假)						
9	期中考試 Midterm Exam						
10	JPEG/ JPEG2000						
11	Н. 261/Н. 263/Н. 263+						
12	12 MPEG-1, 2, 4						
13	H. 264/AVC, Scalable Video Coding, Multiview Video Coding						
14	H. 265/HEVC, Scalable HEVC, 3D-HEVC, H. 266/VVC						
15	期末考試 Final Exam						
16	Final Project Report						
17	Final Project Report						
18	Final Project Report						
	教 學 策 略 Teaching Strategies						
✓ 課堂講	授 Lecture 分組討論Group Discussion 參觀實習 I	Field Trip					
✓ 其他Miscellaneous: <u>Project Report</u>							
	教學創新自評Teaching Self-Evaluation						
創新教學(Innovative Teaching)						
問題導	向學習(PBL) 解決導向學	로필(SBL)					
Mining and Market Moods Market							
社會責任(Social Responsibility)							
跨域合作(Transdisciplinary Projects)							
□跨界教學Transdisciplinary Teaching □跨院系教學Inter-collegiate Teaching							
□ 業師合授 Courses Co-taught with Industry Practitioners							
其它 other:							

學期成績計算及多元評量方式 Grading & Assessments									
配分項目	配分比例 Percentage	多元評量方式 Assessments							
Items		測驗 會考	實作 觀察	口頭 發表	專題 研究	創作 展演	卷宗 評量	證照 檢定	其他
平時成績(含出缺席) General Performance (Attendance Record)									
期中考成績 Midterm Exam	30%	>							
期末考成績 Final Exam	30%	>							
作業成績 Homework and/or Assignments									
其他 Miscellaneous (Final Project)	40%			>	>				

評量方式補充說明

Grading & Assessments Supplemental instructions

教科書與參考書目(書名、作者、書局、代理商、說明)

Textbook & Other References (Title, Author, Publisher, Agents, Remarks, etc.)

課程教材網址(含線上教學資訊,教師個人網址請列位於本校內之網址)

Teaching Aids & Teacher's Website(Including online teaching information.

Personal website can be listed here.)

其他補充說明(Supplemental instructions)