朝陽科技大學 097學年度第2學期教學大綱
Advanced Innovation and R&D 高等創造力與研發工程

當期課號	7218	Course Number	7218
授課教師	林均燁	Instructor	LIN,JIUN YEH
中文課名	高等創造力與研發工程	Course Name	Advanced Innovation and R&D
開課單位	數位化產品設計產業研發碩士專班二A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	在微笑曲線兩端的其中一端即是研發工程。在政府大力鼓吹民間企業由OEM升級到ODM、甚至於升級到OBM的企圖心之下，國人一直以來最爲薄弱的研發工程紮根的工作實在有必要藉由學校的教育來灌輸莘莘學子們相關的理論、應用與實務觀念。更甚者，在研發工程的整體流程中，除了相關理論的探討與實務應用的經驗累積之外，實際上還必須透過創新工程的培育方能夠強化研發過程中足以產生具備價值的創意、進而創造出具備競爭力之產品的能量。	Objectives	Advanced Innovation and R&D Engineering Objectives: Research and development (R&D) engineering is on the left side of the famous smiling curve. Since the government started encouraging industrialists to promote their companies from OEM to ODM, and even to OBM industries, it has really become a duty of educators to teach students the related theories and practical issues of R&D engineering. Moreover, beside simply R&D, creativity engineering is very important for engineers to empower R&D process, and create valuable product concepts.
教材	1.講義 2.Fourth Generation R&D: Managing Knowledge, Technology, and Innovation, W. L. Miller, and L. Morris, Wiley.	Teaching Materials	1.Class handouts 2.Fourth Generation R&D: Managing Knowledge, Technology, and Innovation, W. L. Miller, and L. Morris, Wiley.
成績評量方式	期中考30%、期中報告30%、期末報告40%。	Grading	Midterm 30%, 1st term project 30%, Final term project 40%.
教師網頁	http://www.cyut.edu.tw/~jlin/		
教學內容	由微笑曲線看研發與創造力、研發流程與方法的演進、產品設計與開發概論、研發與創造力的危機、企業競爭的外部架構、企業內部組織的研發與創新能力、連續與不連續式創新、知識管理、學習型組織架構。	Syllabus	Outlook from the smiling curve, evolution of R&D and innovation, fundamentals of product design and development, the crisis of R&D and innovation, the exterior framework of enterprise competition, the interior capability of of R&D and innovation inside an enterprise, continuous and discontinuous innovation, knowledge management, learning organization.

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