

朝陽科技大學 099學年度第1學期教學大綱  
Advanced Innovation Project Practice 高等創新專案實務

當期課號	7656	Course Number	7656
授課教師	林均燁	Instructor	LIN,JIUN YEH
中文課名	高等創新專案實務	Course Name	Advanced Innovation Project Practice
開課單位	工業工程與管理系碩士在職專班—A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	<p>在微笑曲線兩端的其中一端即是研發與創新工程。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，實際上研發與創新對於已經習慣於生產製造文化的大部份國內企業而言，是一個極為艱辛、但是勢必要積極提升的方向。本課程將以課程案例探討、加上實務案例引導的方式，一步一步引導產品設計與開發的整體流程。這門課與“高等創造力與研發工程”比較之下是屬於形而下的，從產品規劃、概念設計、概念選擇、直到產品開發與改善的整體架構探討。整體架構包括產品設計與開發的流程、以及流程中所需要的方法與工具、以及組織架構等構面。課程將以實務專題製作的方式引導學生進行研發相關之實務研討。</p>	Objectives	<p>Research/development (R&amp;D) and innovation is on the left-hand side of the well-known smiling curve. Under the circumstance that the Taiwanese government encourages industry to promote from OEM to ODM, and even to OBM, R&amp;D and innovation issues have become the most challenging issues to conquer because most Taiwanese industry are used to only production/manufacturing culture. The objective of this course is to guide students step by step throughout the entire product R&amp;D and innovation process by giving students practical case studies along with theoretical fundamentals. Compare with the course “advanced creativity and R&amp;D engineering”, this course is more realistic. This course will guide students throughout the R&amp;D and innovation process by heavy-weight term projects.</p>
教材	<ol style="list-style-type: none"> <li>Ulrich and Eppinger, Product Design and Development, 3/e, McGraw Hill.</li> <li>Otto and Wood, Product Design, Prentice Hall.</li> <li>講義。</li> </ol>	Teaching Materials	<ol style="list-style-type: none"> <li>Ulrich and Eppinger, Product Design and Development, 3/e, McGraw Hill.</li> <li>Otto and Wood, Product Design, Prentice Hall.</li> <li>Class handouts.</li> </ol>
成績評量方式	期中考30%、期中報告30%、期末報告40%。	Grading	Initial term project report 30%, Final term project report 40%, Midterm 30%.
教師網頁	<a href="http://www.cyut.edu.tw/~jlin/">http://www.cyut.edu.tw/~jlin/</a>		
教學內容	<p>產品設計與開發簡介，傳統研發流程與電腦輔助研發流程，專案管理方法與工具，產品開發流程與組織架構，客戶需求確認方法，產品規格訂定，概念產生方法，概念選擇方法，製造與組裝設計法則，其他產品優化設計法則。</p>	Syllabus	<p>Introduction to product design and development, traditional and computerized R&amp;D process, R&amp;D Project management, process and organization, customer need identification, specification definition, concept generation, concept selection, TRIZ, design for manufacturing and assembly, design for excellence.</p>

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