

..課程資訊 (Course Information)					
科號 Course Number	11020IEEM510500	學分 Credit	3	人數限制 Size of Limit	0
中文名稱 Course Title	統計方法				
英文名稱 Course English Title	Statistical Methods				
任課教師 Instructor	葉維彰(YEH, WEI-CHANG)				
上課時間 Time	F2F3F4	上課教室 Room	ENG 工一 104		
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此科目對應之系所課程規畫所欲培養之核心能力 Core capability to be cultivated by this course	<ul style="list-style-type: none"> ■ 具備工工專業與系統分析能力 (60%) IE profession and systems analysis skills (60%) ■ 具備獨立研究及解決問題的實作能力 (20%) Capability of independent research and problem solving (20%) □ 具備領導、溝通與團隊合作能力 Leadership and coordination abilities ■ 具備自我充實能力 (20%) Capability of self-development and enrichment (20%) □ 具備國際觀視野、國際化互動與表達能力 Global interaction and communication skills 				
課程簡述 (Brief course description)					
This is a basic course in designing experiments and analyzing the resulting data. Students will learn how to plan, conduct and analyze experiments effectively and efficiently in this course. Several types of experiments that are frequently conducted in industrial settings will also be included.					
課程大綱 (Syllabus)					
<p>1. Introduction to DOE</p> <p>2. Basic Statistical Methods</p> <p>3. Analysis of Variance (ANOVA)</p> <p>4. Experiments with Blocking Factors</p> <p>5. General Factorial Experiments</p> <p>6. Two-level Factorial Designs (i.e. 2^k designs)</p> <p>7. Blocking and Confounding Systems for Two-level Factorial Designs</p> <p>8. Two-level Fractional Factorial Designs (i.e. 2^{k-p} designs)</p> <p>9. Other Topics (such as Regression Modeling, Response Surface Methodology, Random Effects Models, Nested and Split-Plot Designs)</p> <p>六、成績考核(Evaluation)</p> <p>1. Midterm Exam (15%+15%)</p> <p>2. Final Exam (20%)</p> <p>3. Quiz (40%)</p> <p>4 Final Project(10%)</p> <p>七、可連結之網頁位址</p> <p>Teaching materials and announcements for this course will be posted on the following two course systems:</p> <p>1.Moodle system at http://moodle.nthu.edu.tw 2.iLMS system at http://lms.nthu.edu.tw</p>					