

**朝陽科技大學 092學年度第1學期教學大綱**  
**High-Rise Building Structural Design 房屋結構設計**

<b>當期課號</b>	6018	<b>Course Number</b>	6018
<b>授課教師</b>	金文森	<b>Instructor</b>	KING,WON SUN
<b>中文課名</b>	房屋結構設計	<b>Course Name</b>	High-Rise Building Structural Design
<b>開課單位</b>	營建工程系(二進)五A	<b>Department</b>	
<b>修習別</b>	選修	<b>Required/Elective</b>	Elective
<b>學分數</b>	3	<b>Credits</b>	3
<b>課程目標</b>	介紹高樓設計之各項規範及設計特點，各種高樓結構型態以及分析方法，學習如何使用結構分析軟體 ETABS，訓練如何以團隊方式完成設計方案。主要範圍包括框架、支撐框架、全牆、框架-耐剪牆、框筒、筒中筒、支撐桁架結構分析方法介紹，設計專題。	<b>Objectives</b>	This course offers a general introduction of the design codes, structural types, and methods of analysis for high-rise building. Learn to use the commercial software such as Etabs in computer lab. Team projects need to be accomplished at the end of the semester.
<b>教材</b>	1.課堂黑板推導講解2.平時給予學生作業3.期中考試一次4.期末考試一次。	<b>Teaching Materials</b>	1.To explain the contents on the blackboard 2.To give some homeworks 3.To give a mid-term examination 4.To give a final examination.
<b>成績評量方式</b>	平時作業(30%)、期中考(35%)、期末考(35%)	<b>Grading</b>	Homework(30%), Mid-Term Exam.(35%), Final Exam.(35%)
<b>教師網頁</b>	-		
<b>教學內容</b>	本課程根據結構學的基本理論。首先說明高樓構架的承載重型態，並以一些例題教導抵抗垂直載重與水平載重的構架。配合電腦程式的運用，並分析各構件的內力，以設計適當的桿件尺寸。許多建築物的消能系統也在此介紹。最後，鋼結構系統與鋼筋混凝土結構系統進行比較。	<b>Syllabus</b>	This course is based upon the elementary theories of structures. Several structural systems are introduced in this course. These types of external loads that are applied on buildings are instructed first. These framing systems to resist gravity loads and horizontal loads are taught with many examples. The internal forces in each member are analyzed by a computer program. Hence, these sections of members can be selected and designed properly. Many energy dissipation systems used in buildings are also introduced here. Finally, the system of steel structure is compared to that of reinforced concrete structure.

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