

朝陽科技大學 093學年度第2學期教學大綱
Next Generation Internet Technology 次世代網際網路技術

當期課號	7265	Course Number	7265
授課教師	張本杰	Instructor	CHANG,BEN JYE
中文課名	次世代網際網路技術	Course Name	Next Generation Internet Technology
開課單位	資訊工程系碩士班一A	Department	
修習別	選修	Required/Elective	Elective
學分數	3	Credits	3
課程目標	<p>這門課的目標是提供學生次世代網際網路技術的知識，主題包括：網際網路簡介、次世代網際網路網路層與傳輸層的演算法與協定、具服務品質保證的協定等。在完成這門課之後，學生將可以學習到下面幾點：1.瞭解次世代網際網路技術的功能；2.瞭解次世代網際網路的網路層與傳輸層互相運作；3.學習到具服務品質保證的協定運作；4.建立次世代網際網路技術整體的觀念、演算法與協定。</p>	Objectives	<p>The goal of this course is to provide students with a basic knowledge of the computer networking. The main topics include Internet introduction, Network layer of Next generation Internet, Transport layer of Next generation Internet, QoS-based protocols for Next generation Internet. Students will realize the following backgrounds of this course after completing the course: 1. The function of Next generation Internet; 2. The functions of Network/Transport layers of Next generation Internet; 3. Understanding the QoS-based protocols; 4. Understanding the algorithms and concepts of Next generation Internet.</p>
教材	<p>Textbook TBA Reference books J. Walrand and P. Varaiya, "High Performance Communication Networks", Morgan Kaufmann. W. Stallings, "High Speed Networks and Internets Performance and QoS", Prentice Hall.</p>	Teaching Materials	
成績評量方式	<p>Homework 30% Midterm 40% Project 10% Paper Study 20%</p>	Grading	<p>Homework 30% Midterm 40% Project 10% Paper Study 20%</p>
教師網頁	-		
教學內容	<p>Network Layer -Basic IP Routing -IPv6 Next Generation Internet Transport Layer -TCP -UDP Internet QoS Routing -Best-effort routing -RSVP -Scheduling and Policing Mechanisms Internet QoS Framework -Integrated Service -Differential Service -MPLS Wireless Internet QoS routing Multicast Routing -IP Multicast -Multicast Routing -Multicast Protocols Network Security (option) -Data Security -Firewall -Intrusion Detection System Paper study</p>	Syllabus	<p>Network Layer -Basic IP Routing -IPv6 Next Generation Internet Transport Layer -TCP -UDP Internet QoS Routing -Best-effort routing -RSVP -Scheduling and Policing Mechanisms Internet QoS Framework -Integrated Service -Differential Service -MPLS Wireless Internet QoS routing Multicast Routing -IP Multicast -Multicast Routing -Multicast Protocols Network Security (option) -Data Security -Firewall -Intrusion Detection System Paper study</p>