國立交通大學課程綱要

開課單位
Computer Science Information Engineering

授課教師
Sheau-Ling Hsieh

授課學期
95 學年度 1 學期

授課學期

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<tr>
<th>課程名稱</th>
<th>中文名稱</th>
<th>英文名稱</th>
<th>人數上限</th>
<th>學分數</th>
<th>上課時數</th>
<th>先修課程</th>
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<td></td>
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<td>Middleware, SOA Technologies for e-Commerce Applications</td>
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課程目標：Introduce cutting edge Middleware (SOA Frameworks) Technologies in depth; Integrate (hybrid) Wireless/Wired Infrastructures for e-Commerce Applications, e.g., Hospital Information Systems, Banking, Financial Services, etc, over the infrastructure. Hands-on experience on available commercial products for each and every technology covered in class.

課程綱要：

(1) Class Focus Areas, Motivation and Objectives; Introducing Wired/Wireless Networking Fundamentals and Backbones that Middleware Technologies (SOA) based upon

(2) Wired Networking Infrastructure
   - Server-Based Middleware, SOA, Frameworks:
     Java, CORBA, Naming Service, Event Service (Notification Service), IIOP, RMI, RMI-IIOP etc., Technologies and Application Approaches including possible QoS.
   - Web/Server-Based Middleware, SOA, Frameworks:
     JSP Pages, XML, Servlets, EJB, JMS, JDBC (J2EE), WSDL, UDDI, SOAP, SIP, Web Services. Technologies and Application Approaches including possible QoS.
   - Integrated, Distributed, Server-Web Interoperable Framework and Application Approaches.

(3) Wireless Networking Infrastructure
   - Heterogeneous Hybrid Wireless Networks Integration and Interoperability via J2ME (KVM, CLDC, MIDP, MIDlet, etc.) WAP or Bluetooth-Internet gateway that Middleware, SOA Frameworks based upon

(4) Interoperable Applications using the Integrated Frameworks, e.g., Hospital Information Systems

參考書目：
(1) Specifications and Materials from various Web Sites for each and every individual topic and technology collected globally, mainly from US computer industry
(2) Mastering Enterprise JavaBeans (3rd Edition)
(3) Java 2: The Complete Reference, Fifth Edition
(4) Java Network Programming, 3rd Edition
(5) Client/Server Programming with Java and CORBA, 2nd Edition
(6) Program Development in Java: Abstraction, Specification, and Object-Oriented Design
(7) Effective Java Program Language Guide

課程進行方式、課程要求及評分標準：
(1) Class Interfaces, Students form groups for assigned Home works and Group Projects
(2) Home works: Students not only need to understand the technologies but also need to have hands-on experience for the corresponding available commercial products provided in class, e.g., CORBA (VisiBroker), Event Service, JDBC Driver (i-net Gate), J2EE (WebLogic Application Server), RMI tutorial, XML, Web Services, J2ME, etc. Products are downloadable from web sites.
(3) 2 (or 1) exams in class
(4) Projects and Presentations

※如需本課程綱要表格之電子檔，請至課務組網頁下載。