國立台灣科技大學 112學年 第1學期 授課大綱

Fall 2023 NTUST Course Outline

授課教師：王瑞堂 2023-08-30

Instructor：RT Wang

課程名稱：混和雲平台技術實習

Course Title：Practicum in Hybrid Cloud Platform

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| 課程代號： ET2703301  Course Code  學分數： 1  Credits | | 必選修： 必修 /半學年  Required/Electve  先修課程：N/A  Prerequisites：N/A |
| 永續發展目標：  Sustainable  Development Goals | | |
| 上課時間：  Time/Location | R7(IB-712)、R8(IB-712)、R9(IB-712) | |
| 課程網址：  Course Website | N/A | |
| 課程宗旨:  Course Objectives | This course introduces the public cloud AWS platform based on practical orientation:   1. Make architectural decisions based on AWS recommended architectural principles and best practices 2. Use AWS services to make infrastructure scalable, reliable, and highly available 3. Use AWS managed services to make infrastructure more flexible and flexible 4. Make AWS-based infrastructure more efficient to improve performance and reduce costs 5. Use a well-structured structure with AWS solutions to improve the architecture, to understand the actual operation of the AWS cloud environment, and cultivate the ability of students to transfer experimental reports | |
| 課程大綱:  Outline of Lectures | Introduction of the public cloud AWS platform based on practical orientation.  Weekly content:   1. Course opening (Course introduction and study method) 2. Patent introduction – part 1 3. Patent introduction – part 2 4. Module 1: Core Knowledge 5. Module 2: Simple Storage Service 6. Students propose and report implementation plans 7. Module 3: EC2 8. Module 4: Network – VPC 9. Module 5: Database Service 10. Module 6: IAM 11. Module 7: Monitoring Caching 12. Module 8: Serverless Monitoring 13. Assignment 1 – part 1: Create a personal introduction page with AWS EC2 14. Assignment 1 – part 2: Create a personal introduction page with AWS EC2 15. Assignment 2 – part 1: Use AWS S3 and AWS SNS to implement alert mechanism 16. Final project | |
| 修課須知  Notice | This course will talk about the Cloud Foundation and also provide how to build a server on the internet to the students. Basically, we will let you know how to operate this service provided by AWS, and use the services to do some projects. The course is based on the PBL (Problem Based Learning), we hope all of you could enjoy this course and encourage to you raise the questions and interoperating with us. So don’t be afraid to ask questions, just ask and practice your English or Mandarin. | |
| 評量方式：  Grading | Items:  a. Q & A: 30%  b. Lab: 30%  c. Assignments: 40% | |
| 備註說明：  none | Notes | |