

Course Syllabus

SW60–212 Data Communication and Computer Network
School of Informatics, WU, THAILAND

Basic Information

- **Course Name**
 - SWE60-212 Data Communication and Computer Network
- **Credit**
 - 3(2-2-7), 2 hours for lecture and 2 hours for practices per week
- **Pre-requisite**
 - No

Lecture - 20 Hrs.

- Active Learning
 - Before class attending
 - Pre-test - online
 - Self study via courseware
 - Class Activities
 - Question and Discussion
 - Problem and Solution
 - After class attending
 - Post-test - online

Course Description

- Introduction to Computer Network
- Data Communication
- Network Architecture
- Application Layer
- Reliable Protocol
- Basic Network Security Concepts

Workshop (20 Hours)

- **Network OS management with Linux (5 Hours)**
 - Native Installation and Simulation with Window Linux Subsystem
 - User command: file/directory management, Text processing, File System Management.
 - Privileged command: Disk Management, User management, Process Management.
- **Micro-services with Docker (5 Hours)**
 - Basic Docker command
 - Basic Docker compose command
 - System Architecture design with Docker compose

Workshop (20 Hours)

- **Network Design and Implementation with CISCO devices (10 Hours)**
 - CISCO command with Packet Tracer: Basic command, Switch, Router
 - Hierarchical Network Implementation
 - Internal Routing Network Implement : Static Router, Dynamic Router
 - WAN implementation and it Routing Mechanism (Optional)

Lecturer

- **Chanankorn Jandaeng**
 - Ph.D. (Computer Engineering), PSU, 2012
- **Interested fields**
 - Computer Network Design/Management
 - Computer and Network Security
 - Information Security
 - Cloud Computing and Big Data
 - Internet of Things
- **Offices**
 - C3 RM259
 - 075672209