

COURSE	Name	: Network Game Programming
	Code	: EE185653
	Credit(s)	: 2
	Semester	: (Elective Course)

### **Description of Course**

This course studies network architecture for multipayer games, network communication, network programming, internet protocols, game services to build in-game logic to apply to multiplayer games.

## **Learning Outcomes**

#### **Knowledge**

(P01) Mastering the concepts and principles of science in a comprehensive manner, and to develop procedures and strategies needed for the analysis and design of systems related to the field of power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics as a preparation for further education or professional career.

## **Specific Skill**

(KK01) Being able to formulate engineering problems with new ideas for the development of technology in power systems, control systems, multimedia telecommunications, electronics, intelligent multimedia network, or telematics.

#### **General Skill**

(KU11) Being able to implement information and communication technology in the context of execution of his/her work.

#### **Attitude**

(S09) Demonstrating attitude of responsibility on work in his/her field of expertise independently.

(S12) Working together to be able to make the most of his/her potential.

### **Course Learning Outcomes**

#### Knowledge

Understanding the concept of computer networks and protocols to build multiplayer game logic.

## **Specific Skill**

Able to explain network topology to be applied in multiplayer games.

#### **General Skill**

Able to develop computer programs to build a simple multiplayer game.

## Attitude

Demonstrating attitude of being responsible for the work in his area of expertise independently. Working together to be able to make the most of their potential.

## **Main Subjects**

- 1. Internet and protocol.
- 2. Data transmission over the internet.
- 3. Network Topology.
- 4. Logic game for multiplayer games.
- 5. Multiplayer game architecture.
- 6. Game servers and network programming.



# Reference(s)

- [1] Erik Bethke, Game Development and Production, Wordware Publishing, Inc., 2003
- [2] Chris Crawford, The Art of Computer Game Design
- [3] Andrew Rollings and Ernest Adams on Game Design, New Riders Publishing, 2003

## Prerequisite(s)

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