

Network security and policies

Information

Title	Network security and policies	Course	General graduate school	Department	Computer Engineering
Complete units	3	Course Code	9441040	Course hours	Tuesday 2-4
담당교수	Jong Hyuk Park	Tel ☎	02-970-6702		

Abstract

In this lecture, we discuss about network security theory, its applications and policies, including basic concepts of network security-related attacks and defenses. We look at a possible attack on the network and examine the security technology such as intrusion detection systems and prevention systems, firewall, etc. to manage and control of the information security. Recently, we analyzes the network security by following the research papers, articles, books, and reports and discuss in depth on the theoretical and practical skills in the field of network security.

1. Contents

- ① Theory (Text book)
 - Cryptography
 - Network security applications
 - System security
- ② Network security and its application & services

2. Class format

- Presentation / discussion

3. Evaluation

Attendance	Presentation	Middle term	Final term	Total
10%	20%	30%	40%	100%

4. Material

- ① Paper and magazine
 - IEEE, Elsevier, Springer, etc.
- ② Major publisher Material
 - Networks & Network security
 - Internet & Communication (wired / wireless)

5. Book and References

- ① Text book
 - Network security essentials, William Stallings, 2013
- ② References
 - IITA-ITFIND, <http://www.itfind.or.kr>
 - KETI, <http://www.eic.re.kr>
 - KISA, <http://kisa.or.kr>
 - IEEE Digital library, <http://ieeexplore.com>
 - Elsevier, <http://www.elsevier.com>
 - Springer, <http://springer.com>

6. Schedule

Detail lecture for week	
Weeks	Chapter
1st	· Orientation 1. Introduction
2nd	2. Symmetric encryption and message confidentiality
3rd	3. Public–Key cryptography and message authentication
4th	4. Key distribution and user authentication
5th	5. Transport–Level security
6th	6. Wireless network security
7th	7. Email Security
8th	· Middle Term
9th	8. IP Security
10th	9. Intruders
11th	10. Malicious software
12th	11. Firewall
13th	12. Network Management Security
14th	13. Law and moral perspective
15th	· Final Term