# **Advanced Internet of Things Security**

1. Information 2019-2nd

Title	Advanced Internet of Things Security	Course	General Graduate School	Department	Computer Engineering
Complete units	3	Course Code	9441043	Course hours	Tuesday (2-4)
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## 2. Abstract

Topics include the basic concepts of IoT-related device technology, network technology, sensor network technology, and context-aware technology. This lecture will discuss and analyze recent research on Internet of Things (IoT), analysis of books and research reports, the Internet of Things and related materials (books, papers, research reports, etc.).

#### 3. Class format

· Presentation / discussion

#### 4. Evaluation

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

### 5. Material

- 1 Paper and magazine
  - · IEEE, Elsevier, Springer, etc.
- 2 Major Publisher Material
  - · Internet & Communication (wired / wireless)

## 6. Book and References

① Text book

Internet of Things- Converging Technologies for Smart Environments and Integrated Ecosystems, Ovidiu Vermesan, Ricer Publisher

- 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, <a href="http://www.elsevier.com">http://www.elsevier.com</a>
  - · Springer, http://springer.com

## 7. Schedule

Detail lecture for week				
Weeks	Chapter			
1st	Orientation CHAPTER 01 An Introduction to IoT			
2nd	CHAPTER 02 Security Architecture in the Internet of Things			
3rd	CHAPTER 03 Security and Vulnerability in the Internet of Things1 CHAPTER 04 Security and Vulnerability in the Internet of Things2			
4th	CHAPTER 05 IoT Node Authentication			
5th	CHAPTER 06 Security Requirements in IoT Architecture CHAPTER 07 Security Architecture in the Internet of Things			
6th	CHAPTER 08 IoT Device and Gateway Security 1 CHAPTER 09 IoT Device and Gateway Security 2			
7th	CHAPTER 10 IoT Server and Infrastructure Security 1 CHAPTER 11 IoT Server and Infrastructure Security 2			
8th	Middle Term			
9th	Discussion for recent research issues – paper 1			
10th	Discussion for recent research issues – paper 2			
11th	Discussion for recent research issues – paper 3			
12th	Discussion for recent research issues – paper 4			
13th	Discussion for recent research issues – paper 5			
14th	Discussion for recent research issues – paper 6			
15th	Final Term			