

### ■ Introduction

While the advancement of IT environment has been rapidly transforming nations, societies as well as our daily lives, various threats are emerging in cyberspace. Attacks in cyberspace now apply not only to individuals and corporations, but also core national facilities, infrastructures, and integrity. Facing the current cyber crisis, which often called "A Human Capital Crisis in Cybersecurity", a demand for information security specialists is skyrocketing. However, our nation does not have a sufficient number of information security specialists as well as required technologies, and subsequently depends heavily on private enterprises. To accommodate this issue, the Korean government had established GSIS (The Graduate School of Information Security) at KAIST in 2011, to foster researchers and students in the field of information security.

GSIS corporates theoretical background and practical skills; its curriculum offers a comprehensive study in network security, system security, cryptography, and practical application of security along with various cyber attack and defense drills to enhance problem-solving abilities. GSIS also cooperates with government organizations and private enterprises in security-related projects. GSIS ultimately seeks to nurture information security specialists with leadership who will be responsible for the nation's cyber security.

### ■ Education and Research Objectives

- Conduct Education and Research at a Level Equivalent to the Top 10 Schools in the World
- Cultivate High Quality Human Resources Capable of Protecting Information and Defending Cyberspace
- Foster Leaders in Information Protection
- Develop Industry Venturist for Information Security
- Absorb Hackers with Negative Intent into Normal Business

### ■ Education and Research Areas

- Theory
  - Cryptology, Information Theory Based Security, Contents Security, Security theory
- Technology
  - System Security, Physical security , Mobile Security, Network Security, Access Control, Intrusion Detection,, Reverse Engineering
- Management/ Policy/Law
  - Information Security Management/Policy, Digital Forensics/Law, Personal Information Protection, Industry Security
- Practical Training
  - Cyber Attack Analysis and Practical Training, Cyber Defense Analysis and Practical Training