



KYUSHU UNIVERSITY



KYUSHU UNIVERSITY 2011
100th Anniversary

Introduction of Cybersecurity Center of Kyushu University

Koji OKAMURA

Director of Cybersecurity Center, Kyushu University

Fukuoka City



Japan
127,000,000



Tokyo



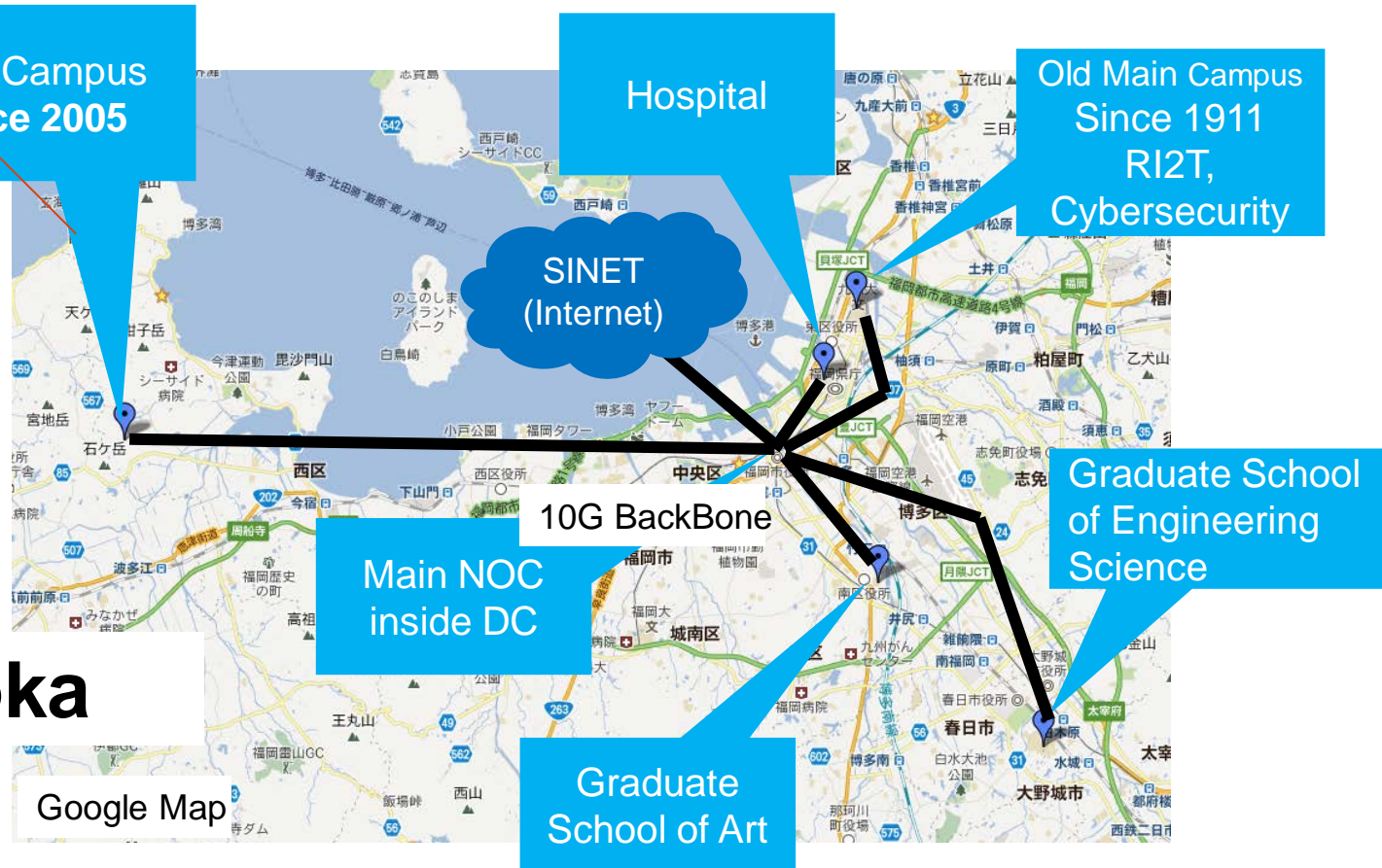
Fukuoka City
1,543,000



Kyushu University

20,000 Students and 10,000 faculties and officials

ASN 2508, 133.5.0.0/16



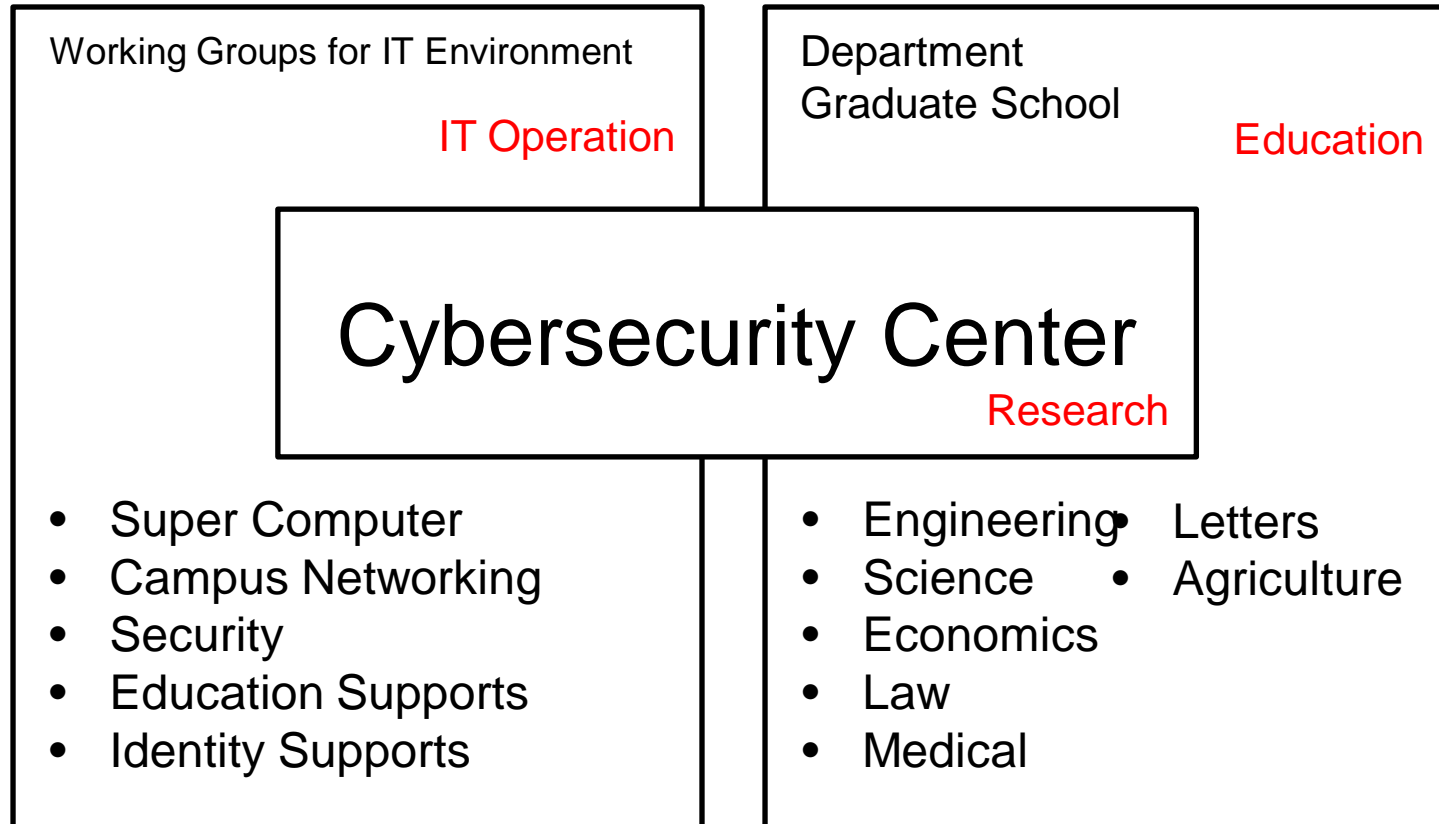
Fukuoka City

Google Map



Cybersecurity Center

III: Information Infrastructure Initiative

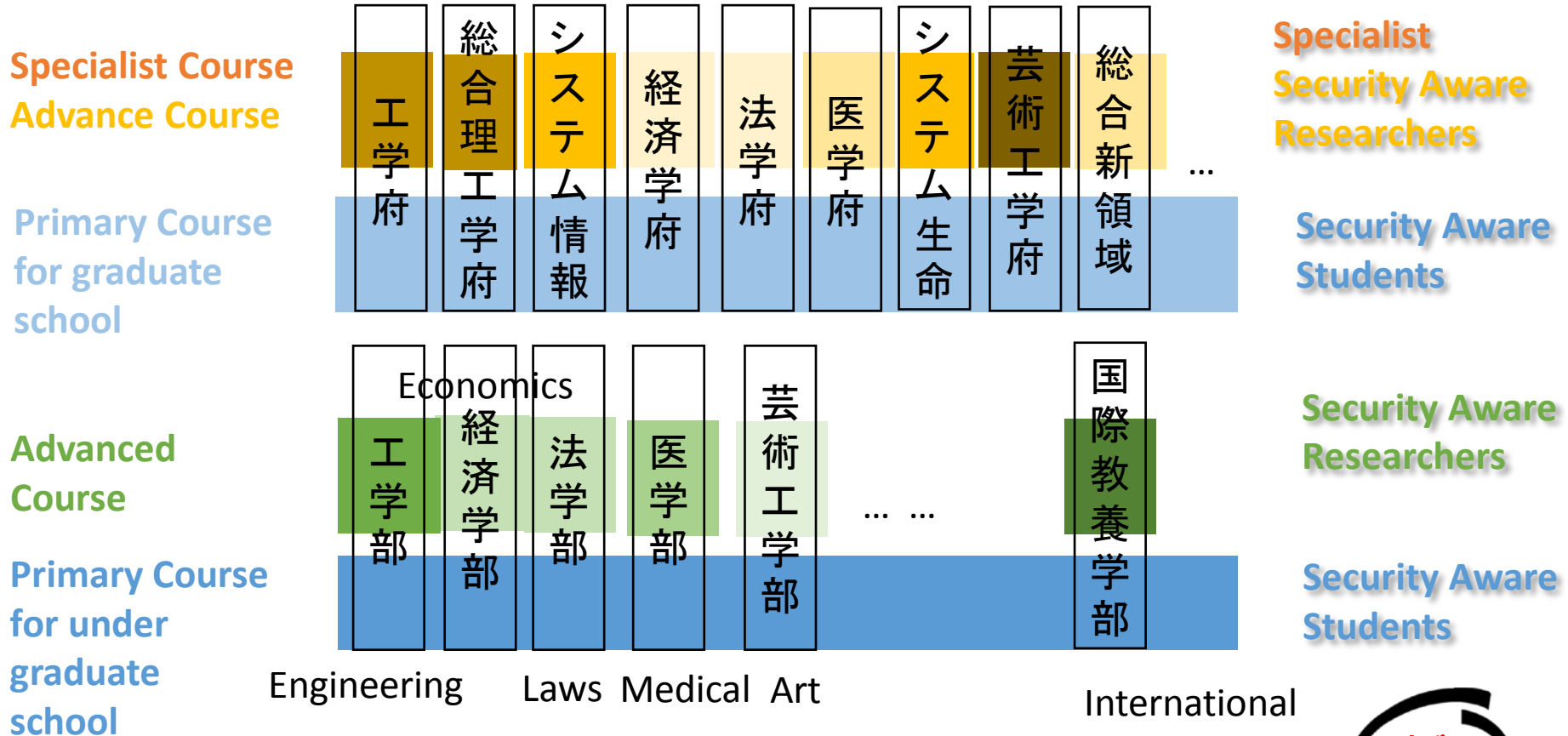


Research Topics

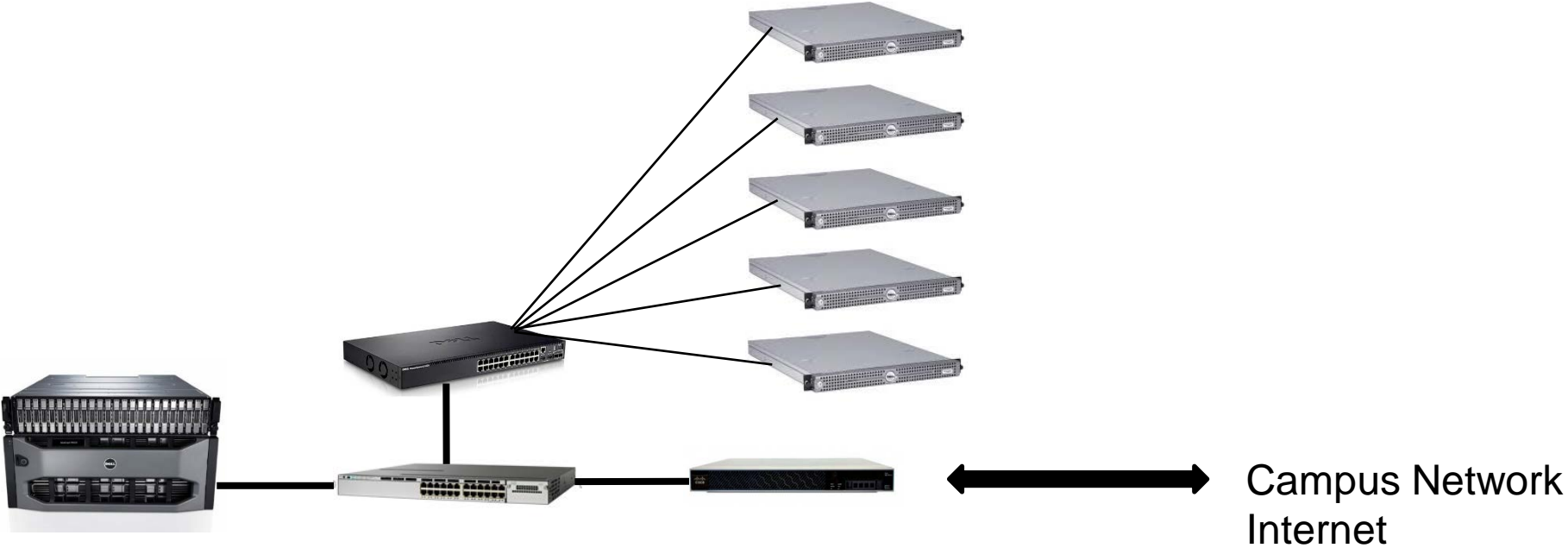
- **Education** for Cyber Security
 - Education for all
 - Education for each
 - Education for Specialist
- **Advanced Technologies** for Cyber Security
 - Basic Researches
 - Encryption
 - IoT
 - Advanced Researches
 - Mitigation from Attacks
 - Detection of Unknown Attacks/Threats
 - Apply to Social / Real World
- **Social** Cyber Security
 - Social Information Assurance
 - Security for University ICT
 - Security for Hospital



Cyber Security Educations



Cyber Range



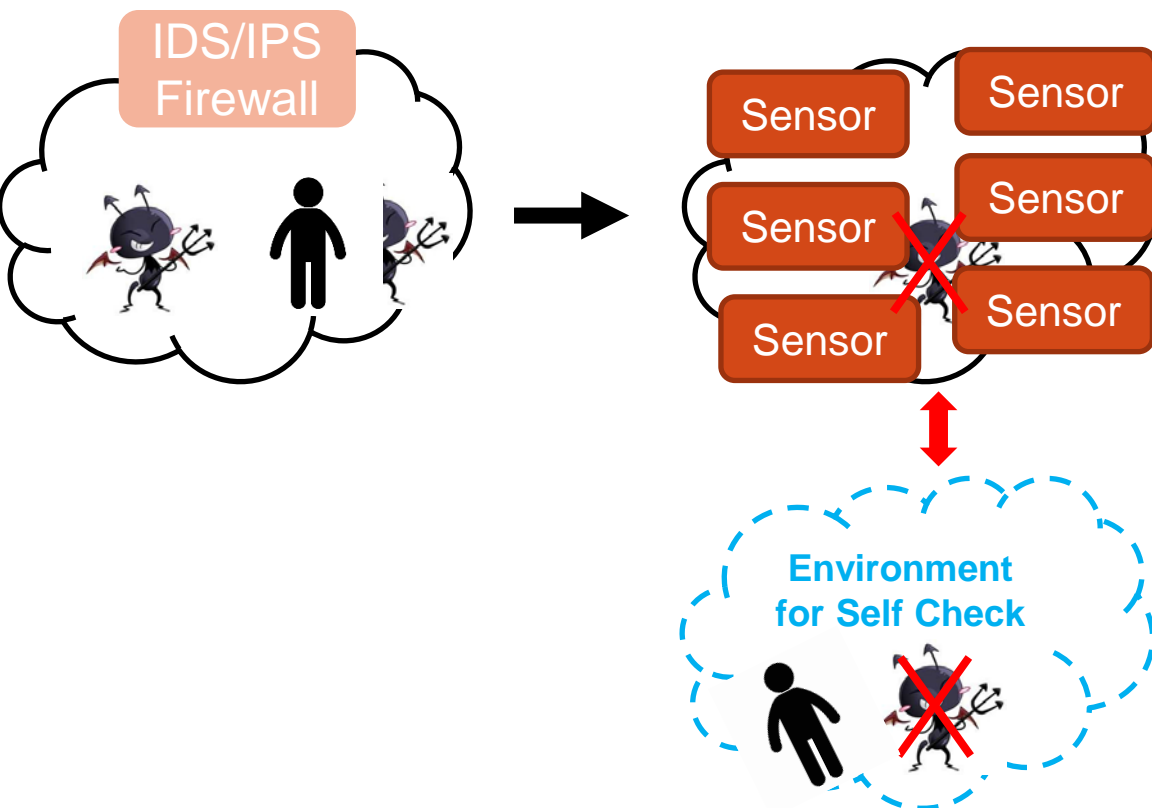
Beginner Course

Each student study by him/her self.

Advanced Course

Paired students study together.

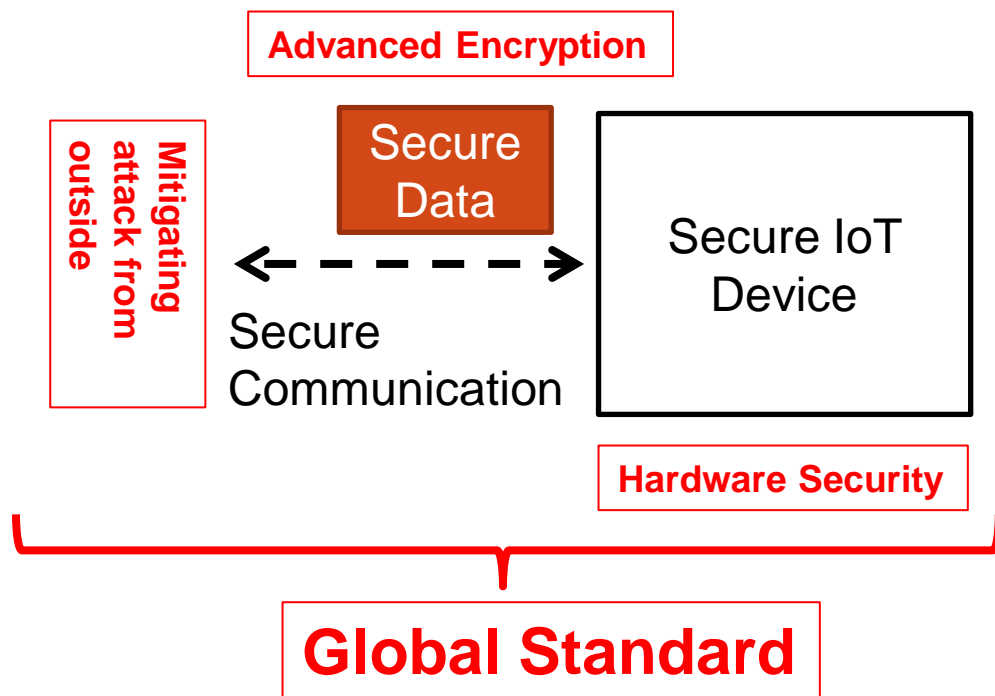
APT (Advanced Persistent Threat), Zero Day Attack



- Collaboration/Cooperation with Companies, Institutes and University in Japan and World
- Research and Operation in real networks
- Using AI



- Technology against IoT attack
 - IoT attack pattern is analyzed and the result mitigates future attacks. Attack pattern of PC servers can be used for mitigation of IoT device attack.
- Secure wireless IoT device and embedded Systems
 - IoT device itself becomes strong for Cybersecurity by hardware (e.g. Wifi) security
 - Advanced encryption
- Case study on IoT testbed



World of Cybersecurity Center

