

College of Information Technology

It's IT!
IT solves it!



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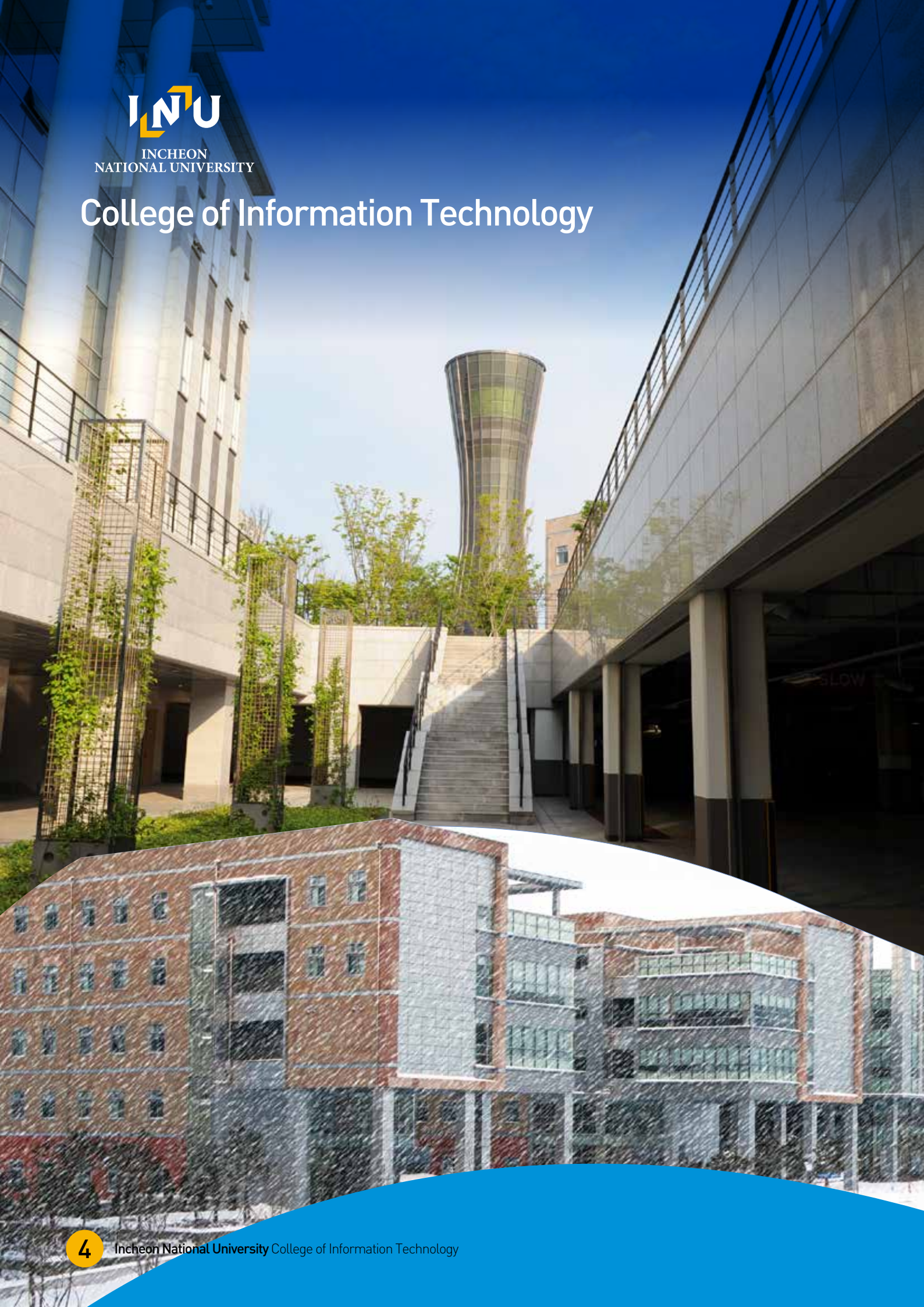
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INCHEON
NATIONAL UNIVERSITY

College of Information Technology



Welcome

Welcome to the College of Information Technology at Incheon National University!

Nowadays, scientific technologies, especially artificial intelligence (AI) and virtual reality (VR), are becoming increasingly influential in our daily lives. The College of Information Technology plays a core role in our university by providing education and research in AI and VR. Our college aims to nurture competent IT experts with creative capabilities and upright ethics who can become innovation leaders of industry.

Our college was established in 2003 to produce capable graduates in the field of IT and has been endeavoring to meet the demands for innovative advancement from technological industries. We provide comprehensive degree programs at the undergraduate and graduate levels for IT. We have three departments: the Department of Computer Science and Engineering, the Department of Information and Telecommunication Engineering, and the Department of Embedded Systems Engineering. We have a total of 39 full-time professors and 1163 students.

The educational goals of the College of Information Technology are:

- developing future global IT experts with creative and ethical mindset
- balancing theory and application to meet industrial standards
- emphasizing practical approaches for interdisciplinary IT fields

Our education is suitable for students who are planning to pursue careers in fields such as: computer hardware, software, artificial intelligence, virtual reality, mobile software, multimedia, computer vision, graphics, games, mobile communication, communication system, IoT (Internet of Things), embedded systems, bio computing, to name a few.

Our enthusiastic faculties are from prestigious institutions of higher education with extensive industrial experience. Their commitment to excellence in teaching and research aids our students to raise their levels to meet global standards. In addition to providing curricula customized for industrial collaborations, our college hosts exciting festivals such as "IT UFC" (Ultimate Festival Championship) and "Drone Challenge." These events encourage students to further cultivate their IT capabilities.

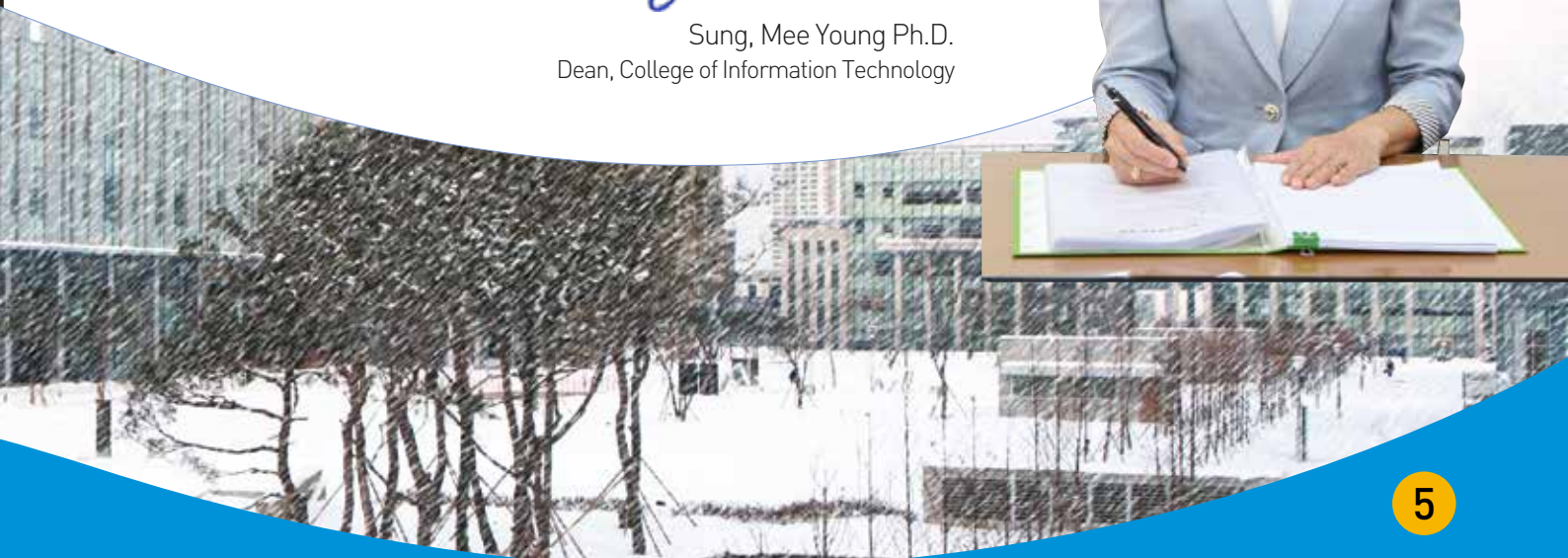
"It's IT. IT solves it."

People with IT skills can realize the great ideas that change the world.
The College of Information Technology at Incheon National University
will do its best to cultivate innovative talents
who can play central roles in shaping the upcoming era.

Thank you.



Sung, Mee Young Ph.D.
Dean, College of Information Technology



Songdo International Business District

Incheon National University (INU) is located in a newly developed international business district in Songdo, South Korea. The district hosts both global organizations and multinational corporations such as the World Bank Korea, United Nations Sustainability Office, Cisco, IBM, and Samsung Biologics. Our elegant and modern campus located across the street from a renowned Jack Nicklaus Golf Course overlooks the ocean and just minutes away from the central part of Songdo.

Songdo is a master-planned city for sustainability and uniqueness with the goal of urban innovation. It provides a vibrant and dynamic community that offers the luxury of green spaces, high-quality education, a variety of dining and shopping experiences and human-centric environment. Just 18-minute drive away from the national gateway airport, Incheon International Airport, Songdo presents an ideal business environment and infrastructure for companies newly targeting Asian markets. Besides INU, a group of world class educational institutions such as George Mason University, The State University of New York, Ghent University and the University of Utah have local campuses in the district.



Incheon National University

INU has 60 academic departments organized into 11 colleges. Our mission is dedicated to the highest academic excellency and innovative research that serves as a catalyst for advancing global economic growth, culture and education. Throughout its history, INU has always focused its efforts on preparing students to use their innovative skills and strong work ethic to solve real-world problems and improve the lives of people around the globe. Over the next decade, INU is planning to broaden its partnership with industry leading companies from around the world. Trusting in the value of cultural and racial diversity, INU is always welcoming foreign students and eager to expand its cooperation with global institutions.





Undergraduate Programs

Computer Science and Engineering

The undergraduate programs in the Department of Computer Science and Engineering focus on the practical applications of computer sciences and the technological needs of the society. The Computer Science and Engineering Department's curriculum addresses the critical need for innovative and creative engineers for the cutting edge economy of today and tomorrow. Students can take courses that include such topics as computer graphics, numerical analysis, game programming, operating systems, embedded systems, artificial intelligence, computer networks, software engineering, web programming, security and distributed systems. Moreover, our department actively collaborates with many IT companies in South Korea to teach practical applications of computer science. Our department also provides a practical course in cooperation with IBM Korea.

Career

Computer science graduates pursue careers in computer graphics, wireless systems, software engineering, information security, artificial intelligence, virtual reality, games, and mobile software. Many also go on to graduate or professional school in diverse areas. Recent graduates are employed at companies such as Naver, Kakao, Samsung Electronics, and Samsung SDS.

Information and Telecommunication Engineering

Information and Telecommunication Engineering focuses on the generation, distribution, analysis, and exchange of information, which lies at the heart of ubiquitous computing systems. Our program provides a blend of knowledge from computer science and electrical engineering, focusing on balanced and dual knowledge of software and hardware engineering.

In our undergraduate program, students develop their abilities to analyze and solve complex problems throughout the curriculum that includes both analytical and experimental studies. Students receive exposure to a wide range of topics, including signal processing, telecommunication systems, electromagnetics, network security, haptics, biomedical engineering, and analog/digital systems.

Career

The graduates will be prepared to have successful careers as software, hardware, and systems engineers in the diverse fields that Information and Telecommunication Engineering transcends such as computer engineering, software development, computer communications and networking, signal processing, broadcasting, biomedical engineering, analog and digital system design, control engineering, and quality assurance.



Embedded Systems Engineering

Established in 2003, the Department of Embedded Systems Engineering at INU is a part of the College of Information Technology. Our goal is to educate students into highly effective and successful engineers who can do research and development of embedded software with thorough understanding of hardware and SoC design. The research areas of our faculty members cover various aspects of embedded hardware and software systems, particularly focusing on intelligent systems including self-driving cars and drones. Our students learn system analysis and design, data structure, microprocessor, digital system and communication system, operating system, embedded SW design, sensors and actuators, embedded database management system, and signal processing.

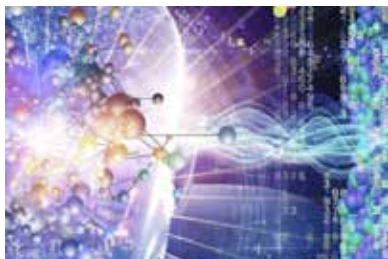
College of Information Technology Statistics <2016. 10. 01>

	Computer Science & Engineering	Information & Telecommunication Engineering	Embedded Systems Engineering	Total
Faculty	17	14	8	39
Undergraduate	528	326	176	1,030
M.S. program	✓	✓	✓	133
Ph.D. program	✓	✓	✓	



Graduate Programs

Computer Science and Engineering

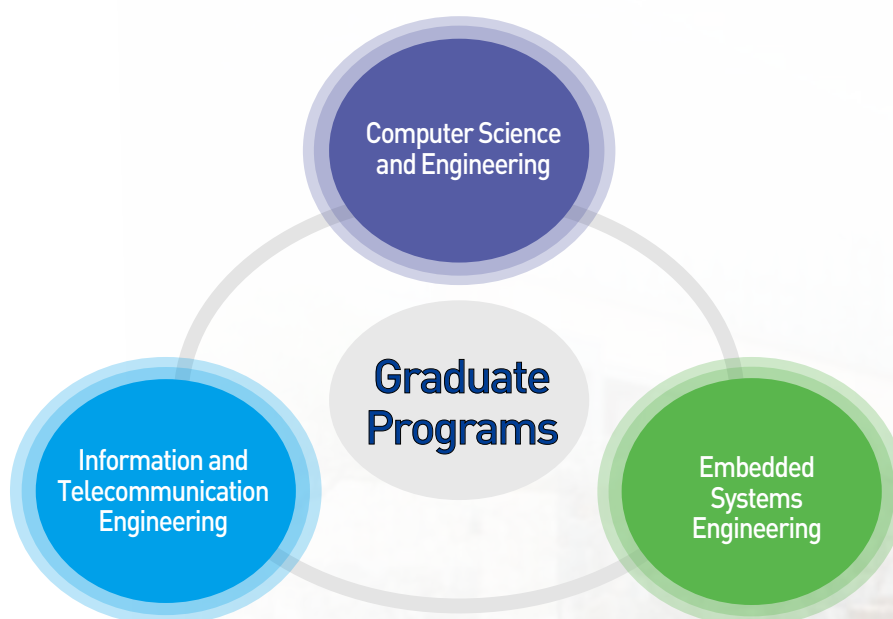


Our faculty consists of 17 tenure-track professors, as well as a number of adjunct professors and visiting lecturers. Many of them possess extensive experience in industry. The faculty of the Department of Computer Science and Engineering are committed to high quality graduate education. The broad scope of their research areas enable them to provide to graduate students a comprehensive and state-of-the-art understanding of computer science. A substantial level of sponsored research has been achieved thereby providing financial support for many graduate students in the form of research and teaching assistantships.

Information and Telecommunication Engineering



Information and Telecommunication Engineering offers students the opportunity of graduate study under the direction of faculty members in an atmosphere of enthusiasm for learning. Our graduate degree program prepares students for successful professional careers based on a broad foundation, together with specialized technical expertise such as signal processing, communication systems, microwave systems, network & information security, haptics, biomedical engineering, and analog & digital systems for various applications. We are looking for stand-out graduate students who want to do cutting-edge, hands-on research, work closely with extraordinary professors.





Embedded Systems Engineering

The emphasis of the Master's degree and Ph.D. degree programs in Embedded Systems lies on the design of efficient and reliable systems. Our faculty has distinguished itself by focusing on industry-oriented research and education. As a result the alumni of our department who are armed with the knowledge of software and hardware have been working as engineers in major high-tech companies around the world. The faculty and graduate students are conducting pioneering research activities in such areas as embedded S/W, intelligent S/W, intelligent robots, and UHD TV.



College Highlights

Capstone Design

Capstone Design is a culminating course offered to undergraduate students at the College of Information Technology. Students work in teams to design, build, and test prototypes with real world applications. The Capstone Design course provides students with the opportunity to work with real-world, open-ended, interdisciplinary challenges. Through this course, students can learn and apply the engineering design process: defining functional requirements, conceptualization, analysis, identifying risks and countermeasures, selection, and physical prototyping. Our Capstone Design teams are formed based on student background, interests, and strengths. Student teams are advised by professors and industry experts, who are specially selected for their technical expertise and for their proven ability to guide students through solving real-world, applied problems. By working in teams, students develop leadership skills and group dynamics. The Capstone Design projects span two semesters, beginning with the development of a project plan, whereby students define project objectives, design goals and constraints, and metrics for success. Proceeding through concept generation and selection, and then through the system-and component-level design stages, each team ultimately produces a working prototype that is tested and refined to meet the project objectives.



Internship

The internship program of the College of Information Technology provides students with opportunities to learn from real-world industry experiences and gain invaluable professional connections. Sometimes the most significant and important experiences are unexpected ones. During internships, students apply the concepts that they have learned from the classes as they fulfill their responsibilities required for the position at organizations. Students that participate in a structured internship program may be eligible to receive credit. The College of Information Technology allow students to apply their internship credit to their degree requirements.



INTERNSHIP

Competitions



There are two main competitions in the College of Information Technology: Information Technology Ultimate Festival Championship (IT-UFC) and INU Engineering Festival (INU-EF). The IT-UFC is held in May and the INU-EF is held in September. During the festivals,

students compete in the INU Coding Championship (C, C++, Matlab), Drone Competition, and Golden Bell (Quiz on Information Technology). Students of the College of Information Technology have been receiving several national awards and have shown amazing outcomes.



Faculty Members

Computer Science and Engineering



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Faculty Members

Embedded Systems Engineering



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College of Information Technology Incheon National University



01. Administrative Building
02. Faculty Office Building
03. Museum
04. BM Contents Building/Computing & Information Center
05. College of Natural Sciences
06. Haksan Library
07. College of Information Technology
08. College of Engineering
09. Central Laboratory
10. Guest House
11. Shops & Service Center
12. Convention Center
13. College of Social Sciences & Law
14. College of Northeast Asian Economics & Commerce, College of Business Administration
15. College of Humanities Language Institute
16. College of Arts & Physical Edu
17. Student Center
18. Dormitory
19. International Education Building
20. Sports Center(Golf Driving Range)
21. Gymnasium
22. Reserve Officer's Training Corps(ROTC)
23. Auditorium / Performing Arts Halle
24. Observatory
25. Children's Center
26. Greenhouse
27. The Second Central Laboratory
28. College of Urban Sciences
29. College of Life Science & Bioengineering
30. The Second Dormitory

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