# Kisarazu National College of Technology



# **About Kisarazu National College of Technology (KNCT)**

KNCT was established in 1967 in Kisarazu, Chiba prefecture. It offers a regular course (five-year program for the Associate Degree; student capacity: 1,000) and an advanced course (two-year program; student capacity: 40). The current number of students is about 1,100. The KNCT campus area is about 10 ha, where many laboratories, state-of-the-art research equipment, an experiment practice center, and a dormitory are operated by 76 faculties and 44 staff members. Other main facilities are the Cooperative Technology Center (CTC) and the Library. CTC offers technical support to regional companies. The Library is open to the public.

The regular course is available at five departments of engineering: Mechanical, Electrical and Electronic, Control, Information and Computer, and Civil. About 60% of graduates go to universities (of technology mainly) or to the advanced course. The remaining graduates find employment.

The advanced course was started in 2001 to provide higher education to regular course graduates. The program comprises three courses: Mechanical and Electrical, Control and Information, and Civil and Environment. Graduates obtain a Bachelor's Degree after passing the examination by the National Institute for Academic Degrees and University Evaluation. Most will find employment or go on to a graduate school.

# **Regional Features and Partnership**

Kisarazu is a satellite city of central Tokyo, with a population of 130 thousand. It is located in the major industrial area in Chiba prefecture. Recently the population increased slightly owing to fast accessibility to Tokyo, Yokohama, Kawasaki, and Haneda Airport, after Tokyo Bay Aqua Line (high way) opened. Other reasons include the mild climate and the rich natural environment of Kisarazu. There are also the factories of big companies in the chemical industry and in steel production and research institutes. KNCT has many connections to these local companies and communities and to offer technical cooperation and to arrange for lectures for elementary school children and junior-high school students.

# **International Academic Exchange**

KNCT accepts many foreign students who enter the third year. At present, the number of foreign students is about 15, these mainly from Asian countries.

In 2006, KNCT signed an academic exchange agreement with the National United University of Taiwan. Since then, about 10-20 students have been on the exchange program. International symposia, in which students presented their academic papers, were organized in 2011 and 2012.

In 2008, KNCT signed an agreement with the Goethe Institut. Since then, it has promoted the education of German through the Schools: Partners for the Future (PASCH) initiative, as an authorized school by the German Government. The PASCH program provides many opportunities for students to visit Germany and other overseas countries.

The Institute of National Colleges of Technology organizes an overseas internship program in Asia for students of advanced courses in national KOSENs\*. Students of KNCT had participated in these programs. \* KOSEN, which is generally translated to "College of Technology", is the abbreviation of a specific type of higher education institution.

# Regular Course (Associate Degree Program)

- **Department of Mechanical Engineering** The Department of Mechanical Engineering aims to train students to become creative engineers in more fields than ever before. Therefore, experiments, practices, and graduate studies are very important subjects in the curriculum.
- **●Department of Electrical and Electronic Engineering** The department provides a wide variety of subjects including electrical and electronic engineering, control, communications, materials, computers, measurements and energy engineering. The department offers energy and electronics courses. Each course is carefully structured to ensure that all students acquire the skills to use up-to-date techniques.
- Department of Control Engineering The department trains students to be engineers, instilling the creativity to contribute to the development of future technologies. To achieve this objective, students study four categories of subjects from fundamentals to applications: electronics, mechanical engineering, control engineering, and computer science. Our research themes have expanded widely through the years and now include intelligent robots, optical devices, antenna, communication and measurement control, vibration control, circuit analysis and simulation, strength and fracture of materials, and utilization of natural energy.
- Department of Information and Computer Engineering The department provides education in both computer hardware and software, including systematic programming, design and analysis of data structures and algorithms, computer architecture and networks, computer graphics, and artificial intelligence. The curriculum focuses on practice, experiments and graduate research for engineers to be able to solve problems creatively and independently.
- **Department of Civil Engineering** The curriculum of this department covers issues concerning urbanization and environmental problems, as well as traditional civil engineering.

Civil engineering contributes to industrial development, for example in the construction of bridges, roads, and parks, and to the enrichment of public facilities, which are the basis of civil life. As the field develops, however, more attention is now focused on urban and environmental problems.

In response to this demand, the department aims to train engineers who seriously consider the safety and maintenance of the landscape and environment in constructing public facilities.

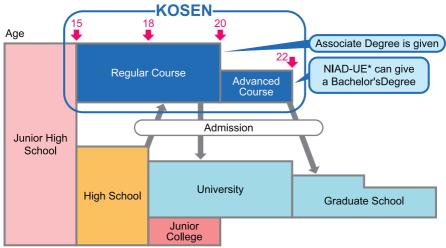
### **Advanced Course**

● Mechanical and Electrical Course ● This advanced course aims at cultivating creative and practical engineers with skills from both the mechanical and electrical fields, who thereby have the flexibility to research and develop new technologies.

- **●Control and Information Course** This advanced course aims at providing a wide variety of subjects including decision support, software, communication, and mechatronic and control technologies, on the basis of information processing engineering, and aims at training students to be core and leading engineers capable of dealing with creative and practical control systems.
- **Civil and Environment Course** This advanced course aims at training creative and imaginative engineers who can carry out research and development (R&D) and can flexibly cope with problems related to the environment and urbanization, which have become more serious and widely spread.

# System of "College of Technology (KOSEN)"

KOSEN has a unified school program of five years in the regular course. It is different from other higher education institutions, such as universities in that KOSEN accepts graduates from junior high school in order to foster engineers needed by industry or government. The number of national KOSENs including KNCT is now 51. They are administrated by the Institute of National Colleges of Technology.



\* National Institution for Academic Degrees and University Evaluation

#### **Features**

- -Five years of consistent engineering education from 15 years of age.
- -Possibility of continuing further study in the two-year advanced course.
- -Curriculum emphasizing scientific experiments, workshop training and practical manufacturing skills.
- -Small classes, allowing close attention to students. Detailed teaching and assistance by dedicated teachers.
- -Inter-college competitions, such as the Robot Contest, Programming Contest, and Design Contest.
- -International activities, such as teacher and student exchange (470 international students).

- -Accreditation by JABEE (Japan Accreditation Board for Engineering Education) as a qualified engineering education program.
- -A wide variety of career courses is available after graduation, from employment to advancing to higher level education.
- -A very good reputation both in industry and in academia.
- -PBL (Project-Based Learning) on practical engineering tasks.
- -A long term internship (over a month) and COOP (cooperative education)
- -Accreditation by JABEE as a qualified engineering education program.
- Student dormitory service



#### **TRANSPORTATION**

From New Tokyo International (Narita) Airport to Kisarazu

Take the JR Train and get off at Chiba station. Change train at platform #3 or #4,

Uchibo Line towards Kisarazu and Tateyama or towards Kimitsu.

From Tokyo (Haneda) Airport to Kisarazu

Take the Limousine Bus towards Kisarazu bus station, which is near JR Kisarazu station.

From Kisarazu station to KOSEN

Take the Local Bus towards Kiyomidai-danchi (15 minutes) or a Taxi (10 minutes).

### Kisarazu National College of Technology

Official Web-site URL: http://www.kisarazu.ac.jp/ Address: Kiyomidai-Higashi 2-11-1, Kisarazu, Chiba 292-0041, JAPAN Phone: +81-438-30-4000, Fax:+81-438-98-5717