



National Institute of Technology, Gifu College



To pursue applications in technological and scientific discovery
in order to better serve the needs of our society.



School Logo



Selected from a number of designs submitted by the public, Professor Ryoichi Shibata's (Department of Architecture) design was adopted as our official logo. The logo is used in our letterheads and envelopes. The design was created to reflect the surrounding scenic mountain landscape and expanse of sky. With the color green represents our departments and blue our advanced courses, the two colors express ever growing possibilities.

Emblem



Our school emblem originates from the former imperial university emblem that embodies simplicity, steadfastness and tradition. Within the outline of the university emblem, the characters 'Ko Sen' are embossed with no motif. This emblem was designed in the hope that our graduates attain success as engineers who are as respected in character and professional knowledge as university graduates.

"Gifu Kosen" (i.e., National Institute of Technology, Gifu College; abbreviated as "NIT, Gifu College") is a school under the independent administrative Institute of National Colleges of Technology (NIT, Japan) which organizes 51 National Institute of Technology in Japan. NIT, Gifu College has 5 departments of Mechanical Engineering, Electrical & Computer Engineering, Electronic Control Engineering, Civil Engineering, and Architecture, and 2 advanced courses of Electronic System Engineering, and Architecture and Civil Engineering.

"Kosen" in Japan is an institution for higher education in engineering field, and has long established good reputation as highly qualified school on engineering education and research. It accepts junior highschool graduates and provides a five-year education in one of the technological fields, and gives two more years of advanced education for a part of the students. The "Gifu Kosen (i.e., NIT, Gifu College)" graduate can pursue a variety of career paths. After completion of the five year educational program in NIT, Gifu College the graduate can directly enter industries as a leading engineer, can also continue his or her study for two more years in Advanced Courses (so called "Senko-ka" in Japanese) in NIT, Gifu College to earn bachelor's degree to be certified by the National Institution for Academic Degrees and University Evaluation, or can alternatively transfer to other national or private university as its third-year student for continuing study for the bachelor's degree. After the graduation from the advanced courses in NIT, Gifu College, the graduate can once again choose either to go to industries as an advanced leading engineer or to enter graduate school in national or private university for MS and PhD degrees. Once enrolled in NIT, Gifu College, the student focuses on his or her selected specialized field usually throughout the five years, though he or she has opportunity to change his or her main subject.

In the 21st century, we are facing and will continue to face two major problems. The first one is to build an energy efficient sustainable society that can cope with the worsening impact of the global warming. The second one, in particular, in Japan is to form an anti-natural-disaster society that has resisting potential against severe natural disasters such as earthquake and Tsunami with its magnitude encountered once every 1000 years. So far, human beings have ever done a number of technological developments to aim mainly at the ultimate convenience in their modern life. However, in the 21st century the vector of technological development should be directed to resolve the above two problems with the level of benefits ever achieved being kept. Because Japan lacks in natural resources, we have to contribute to the world society by developing human resources that can bear technological innovation of this new direction. Our educational goal is that the students acquire (1) the sense of ethics as a citizen and an engineer, (2) ability for planning and designing, (3) skills of communication in international community, (4) firm specialized knowledge and academic ability, and (5) skills in the modern information technology.

NIT, Gifu College ("Gifu Kosen") is the only school in Gifu Prefecture that provides the internationally accredited engineering education authorized by the Japan Accreditation Board for Engineering Education (JABEE); JABEE joins in the Washington Accords on the world standard for college level education system.

NIT, Gifu College has 80 experienced excellent faculty members in one department of Liberal Arts and Sciences, five departments of Mechanical Engineering, Electrical and Computer Engineering, Electronic and Control Engineering, Civil Engineering and Architecture, and two advanced courses of Electronic System Engineering, and Architecture and Civil Engineering. Please see this website for detailed information on each department and each advanced course.

NIT, Gifu College ("Gifu Kosen") has spacious campus, and well-designed facilities. Small-group instruction by faculty members is provided. A variety of club activities is prepared for All Japan Inter-Collegiate Athletic Competition, and other various national level contests such as Robot Contest, Programming Contest, Design Contest, and Presentation Contest in English. In addition, students can have opportunity for summer internship in overseas such as TYK Ltd. United Kingdom, Institute of Technology, Bandung in Indonesia, University of Technology Malaysia, University of Hannover, Germany, and University of Iowa, USA. As described above, under excellent environment students can study and develop their personality spontaneously.

We welcome everyone to visit our college.



Gifu National College of Technology
President KITADA TOSHIHIRO, Dr. Eng.

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History

Nov. 1962	The cooperative organization for establishing Gifu National College of Technology was authorized.	
Jan. 1963	The site of Gifu National College of Technology was decided (Shinsei-cho, Motosu-gun, Gifu)	
Apr. 1963	Gifu National College of Technology was established with three departments : Mechanical Engineering, Electrical Engineering, and Civil Engineering. Dr. Sc. Hiroshi Iinuma, the former Dean of the Faculty of Engineering at Gifu University, took office as the first President.	
Mar. 1964	Main Building I and Dormitory A were erected.	
//	Move from the temporary school building to the present one.	
Mar. 1965	Main Building II , Building for Practical Work and Dormitory D were erected.	
Mar. 1966	Main Building III , Gymnasium I and Dormitory C were erected.	
Apr. 1966	General Affairs and Finance Divisions were established.	
Dec. 1966	Kendo Training Hall was erected.	
May. 1967	Swimming Pool was erected.	
Jan. 1968	The site of Training Camp "Ryouonso" was erected.	
Apr. 1968	Department of Architecture was established.	
Mar. 1969	Building for Dep. Architecture was erected.	
Apr. 1971	Student Affairs Division was established.	
Mar. 1972	Library was erected.	
Feb. 1973	Computer Center was erected.	
Apr. 1974	The acceptance ceremony for Ando Memorial Hall was held.	
Apr. 1978	Dr. Eng. Yoshimasa Furuya, the former Dean of the Faculty of Engineering at Nagoya University, took office as the second President.	
Aug. 1978	Superintendence and the site of the 13th All-Japan Inter-Collegiate Athletic Competition.	
Mar. 1979	The Site of Training Camp "2nd Ryouonso" and drainage were erected.	
Mar. 1980	Gymnasium II was erected.	
Jul. 1981	Main Building IV was erected.	
Apr. 1984	Dr. Sc. Hitoshi Wakita, the former Dean of the Faculty of Engineering at Gifu University, took office as the third President.	
Mar. 1985	Welfare Hall "Ibuki" was erected.	
Apr. 1988	Department of Electronic Control Engineering was established.	
Mar. 1990	Main Building V was erected.	
Apr. 1991	Dr. Eng. Akiyoshi Okitsu, the former Professor at Toyohashi University of Technology, took office as the fourth President.	
//	Gifu National College of Technology began to accept overseas students.	
Apr. 1992	The five-day school week system was introduced.	
Oct. 1992	The agreement for the interchange of the academic affairs with Dong Yang Technical College, Korea.	
Mar. 1992	The renovation to the woman's dormitory men's dormitory.	
Apr. 1993	Restructuring of Department of Civil Engineering.	
Jun. 1994	Dormitory D was erected.	
Apr. 1995	Advanced Course was established.	
Mar. 1997	The international academic exchange agreement with Cossatot Technical College, Arkansas, USA.	
Mar. 1997	Advanced Course Building was erected.	
Apr. 1998	Dr. Eng. Masamitsu Kosaki, the former Professor at Toyohashi University of Technology, took office as the fifth President.	
Aug. 1999	Facilities for photovoltaic power generation were installed.	
Apr. 2000	Restructuring of Department of Electrical Engineering into Department of Electrical and Computer Engineering.	
Dec. 2000	Multimedia Building was erected.	
Apr. 2004	Transition to the Independent Administrative Institution, Institute of National Colleges of Technology, Gifu College of Technology.	
May. 2004	The educational program of Environmental System and Design Engineering was authorized by Japanese Accreditation Board of Engineering Education (JABEE).	
Apr. 2006	Dr. Eng. Tateki Sakakibara, the former Professor at Toyohashi University of Technology, took office as the sixth President.	
Mar. 2007	Certified its compliance with the accreditation standards of the National Institution for Academic Degrees and University Evaluation in 2006.	
Apr. 2009	The educational program of Environmental System and Design Engineering was authorized by Japanese Accreditation Board of Engineering Education (JABEE).	
Mar. 2010	The Regional Technology Center was renovated.	
Feb. 2011	The academic exchange agreement with Institute of Advanced Media Arts and Science (IAMAS).	
Apr. 2011	Dr. Eng. Toshihiro Kitada, the former Professor and Dean of School of Environmental and Life Sciences, Toyohashi University of Technology, took office as the seventh President.	
Jul. 2011	The domestic academic exchange agreement among Toyohashi University of Technology, four National Colleges of Technology of Gifu, Numazu, Toyota, and Suzuka and National College of Maritime Technology of Toba.	
Nov. 2011	The international academic exchange agreement with Institute of Technology, Bandung (ITB), Indonesia.	
Jul. 2012	The international academic exchange agreement with University of Technology, Malaysia (UTM).	
Sep. 2012	The international academic exchange agreement with Faculty of Mathematics and Physics, University of Hannover, Germany.	
Apr. 2013	The international academic exchange agreement with University of Iowa, USA.	
Nov. 2013	The celebration of the 50th anniversary ceremony.	
Mar. 2014	Certified its compliance with the accreditation standards of the National Institution for Academic Degrees and University Evaluation in 2013.	
Jun. 2014	The international academic exchange agreement with TTPU, Turin Polytechnic University in Tashkent, Uzbekistan.	
Apr. 2015	The educational program of Environmental System and Design Engineering was authorized by Japanese Accreditation Board of Engineering Education (JABEE).	

Unuma Temporary School Building (1963)

Main Building I (1964)

Planting of zelkova (1983)

50th Anniversary of Founding Monument (2013)

Outline and Educational Concept

1 Outline

National Institute of Technology, Gifu College was established in April of 1963 as a five-year national institution of higher education with three specialized departments of Mechanical Engineering, Electrical Engineering and Civil Engineering. In 1968, the Department of Architecture, and in 1988, the Department of Electronic Control Engineering, were newly attached as the college expanded into an institution with five specialized departments. Furthermore, in order to adjust our curriculum to meet social advancement and change, the Department of Civil Engineering was restructured in 1993. Additionally, the Department of Electrical Engineering was restructured into the Department of Electrical and Computer Engineering in 2000. Further enhancement at the College of Technology included the attachment of the Faculty of Advanced Engineering in 1995, where students can acquire bachelorship, within a two-year study program. In 2003, in order to internationally assure the academic achievements and technical capabilities of the graduates of the Advanced Faculty, the systematic educational program of the Environmental System and Design Engineering for students between the fourth year of the five-year course and the second year of the Advanced Faculty was constructed. Also in that same year, the college was assessed and authorized by Japanese Accreditation Board of Engineering Education (JABEE). With the transition of all national colleges becoming Independent Administrative Institutions in 2004, the college has set forth on a mission with "further individualization, activation and enhancement" as its main objectives.

The education philosophy at the college is to instruct expert knowledge and technique and to cultivate technological abilities indispensable to proficient engineers. The characteristic of the college lies in the provision of effective, continuous five-year education that leads students to become full-fledged members of society as well as proficient engineers. In the five-year term of study, three years of upper secondary school and two years of the first half of higher education combined, students are educated under a curriculum comprised of carefully selected subjects from general education of upper secondary school as well as specialized subjects of higher education.

Each department of the college has its own distinctive curriculum, striving to continuously modify and improve according to the changes and demands of society. Furthermore each department exercises its own admission policy. The contents of the specialized subjects instructed in our college are equivalent to university level, and various experiments and exercises with a high regard for the instruction of "Product Design" enable students to acquire practical skills necessary for appropriate application and development within each technical profession. Moreover, after completing the five-year regular course, students have the opportunity to further their studies of their specialized fields in the Faculty of Advanced Engineering, a program specifically designed to focus on advanced research and practical training.

The primary characteristic of the curriculum of the college is to develop proficient engineers who can fulfill the expectations of the industrial world. The method of education fosters a teaching environment with fewer students and a high regard for hands-on learning such as experiments, exercises and skills practice. Statistics have revealed in recent years that nearly 45 percent of our graduates of the five-year course either attend the Advanced Faculty Program or transfer to a university to further augment their specialized education.

2 Fundamental Concept of Education

With high expectations and ambition our college has set forth on a mission to further enhance the original merits of the College of Technology, differentiating our unique institution from those of senior high schools or universities. Therefore our fundamental concept of education is to cultivate engineers with a rich sense of environment, humanity and ethics in addition to academic achievements and creativity that enable them to respond effectively to the rapid changes of the industrial landscape both domestically and internationally.

We are exerting ceaseless effort and energy for the betterment of educational philosophy, objectives and content, while working systematically by way of education and application of practical research activities. More concretely, upholding "Educational Philosophy", "Educational Objectives" and "Engineer to Be Trained" shown below, our staff are working positively to realize these objectives.

3 Educational Philosophy

- (1) To pursue applications in technological and scientific discovery in order to better serve the needs of our society.
- (2) To broaden our global perspective while playing an active role in meeting the environmental challenges of today.
- (3) To work at the forefront of an information-based society.

4 Engineer to Be Trained

An engineer who works at the forefront of an information-based society with global perspective, pursuing applications in technological and scientific discovery in order to better serve the needs of our society.

5 Educational Objectives

Associate Degree Program

- (1) To produce engineers who possess the vision, knowledge, ambition, and character necessary for a career in science and technology.
- (2) To produce engineers who have abilities in basic attainment, as well as fundamental creative and application skills.
- (3) To produce engineers who have sufficient capabilities in international communication; in addition to advanced skills in information technology.
- (4) To produce engineers who possess technological ethics and integrity.
- (5) To produce engineers who will make vital contributions to society through applied scientific and technological education and research.

Advanced Course Program

- (1) To produce engineers who seek further understanding of their major fields of study, and also possess interdisciplinary insights.
- (2) To produce engineers with problem-solving capabilities who can search, organize, design and plan studies that are important to the society, and analyze, perform and improve them with continuous efforts.
- (3) To produce engineers who have strong verbal ability in Japanese, and also international communication ability.
- (4) To produce engineers who have the ability to organize and implement programs in their major field of study by taking advantage of cutting edge technology.
- (5) To produce engineers who have a solid understanding of professional and ethical responsibilities from a diverse, global point of view, and are willing to contribute the region's development.

6 Specific Educational Objectives in Academic Abilities and Qualifications for Each Department and the Advanced Course

Academic abilities and qualifications which are aimed to be developed in each department and the advanced course are categorized in five groups: (A) ethics, (B) designing ability, (C) communication ability, (D) knowledge in the major field of study and (E) information technology. Also, five watchwords are presented to the students. The chart below shows the correspondence between them and the watchwords.

Category of Educational Objectives of the College and Educational Objectives in Academic Abilities/Qualifications for Each Department, and Correspondence between Them and the Watchwords

(Associate Degree Program)

◎ shows deep involvement, and ○ involvement.

Category of Educational Objectives for the Development of Academic abilities and qualifications	(A) Ethics	(B) Designing Ability	(C) Communication Skill	(D) Knowledge and Ability of the Specialized Field	(E) Information Technology
Educational Objectives of the College					
(1) To produce engineers who possess the vision, knowledge, ambition, and character necessary for a career in science and technology.	○	○			
(2) To produce engineers who have abilities in basic attainment, as well as fundamental creative and application skills.		◎		◎	
(3) To produce engineers who have sufficient capabilities in international communication; in addition to advanced skills in information technology.			◎		◎
(4) To produce engineers who possess technological ethics and integrity	◎				
(5) To produce engineers who will make vital contributions to society through applied scientific and technological education and research.	○	◎		◎	
Watchword	Wide Education	Product Design	Internationalization	Deep Specialty	IT

(Advanced Course Program)

◎ shows deep involvement, and ○ involvement.

Category of Educational Objectives for the Development of Academic abilities and qualifications	(A) Ethics	(B) Designing Ability	(C) Communication Skill	(D) Knowledge and Ability of the Specialized Field	(E) Information Technology
Educational Objectives of the College					
(1) To produce engineers who seek further understanding of their major fields of study, and also possess interdisciplinary insights.				◎	
(2) To produce engineers with problemsolving capabilities who can search, organize, design and plan studies that are important to the society, and analyze, perform and improve them with continuous efforts.		◎			
(3) To produce engineers who have strong verbal ability in Japanese, and also international communication ability.			◎		
(4) To produce engineers who have the ability to organize and implement programs in their major field of study by taking advantage of cutting edge technology.					◎
(5) To produce engineers who have a solid understanding of professional and ethical responsibilities from a diverse, global point of view, and are willing to contribute the region's development.	◎				
Watchword	Wide Education	Product Design	Internationalization	Deep Specialty	IT

Educational Program of Environmental System Design Engineering

1 Objectives

National Institute of Technology, Gifu College is carrying out an educational program of Environmental System and Design Engineering for students to acquire sound backgrounds for engineers working internationally. The program is held during the fourth and fifth years of the five-year course plus two years of advanced education, and is authorized by Japanese Accreditation Board of Engineering Education. (JABEE). Graduates of this educational program are exempted from the first stage test of professional engineers and are qualified as a preparatory professional engineer.

2 Concept of this educational program

It is imperative to deeply consider the method of preventing depleted resource materials associated with industrial production and the diffusion of various materials affecting the ecological system for the sustainable development of human beings on the earth. Therefore, in "the manufacturing engineering society" the provision of artificial environments enabling efficient human labor and intelligent activities with high amenity, the conservation of global environment and the construction of recurring society must be contemplated.

The educational program of environmental system design engineering is aimed at fostering students' abilities as follows: comprehensive capability of designing environmental systems which are composed of various socially required functions; and realized by substances such as machines, electrical and electronic equipments buildings, and social infrastructures, as well as space: such as life, city and nature, energy, knowledge and information and their control and management.

3 Engineers trained by this educational program

Engineers trained by this educational program will have their own specialized engineering field along with a solid understanding of mechanical engineering, electrical and electronic engineering, information science, architecture and civil engineering. One also should be able to develop the combined systems of above-mentioned backgrounds. One should be able to display leadership in an international field by utilizing information technology and English.

The Educational Objectives and Specific Goals for Achievement in the Educational Program of Environmental System and Design Engineering Applied in the fourth-year of the five-year regular course, 2014

	Educational Objectives	Specific Goals for Achievement
(A) Ethics	(A-1) Social Ethics To possess ethical standards and practices, in addition to understanding the historical backgrounds, cultures and viewpoints worldwide. To comprehend social issues and environmental problems on a global scale.	① Understanding of Diversity To understand the historical, cultures, customs, climates, and the economies internationally and esteem the standpoints of others and other countries. ② Global Perspective To comprehend energy problems, social issues, and environmental problems, etc. on a global scale and make an ethical judgment from a broad perspective.
	(A-2) Engineer Ethics To exercise ethical practices as an engineer whose responsibility within the sphere of science and technology and its impact on the global environment is not diminished.	① Scientific Understanding of Social Issues To understand environmental problems and energy problems in a scientific manner. ② Engineer's Social Responsibility To understand individual responsibilities, including the enterprise of business and the country(top priority on the public health, safety and welfare, and environmental consideration).
(B) Designing Ability	(B-1) Planning To acquire the ability to understand business applications while realizing new challenges and opportunities in order to provide solutions voluntarily within a framework of ideas.	① Investigation and Retrieval Ability To perform marketing research, bibliographic search and patent search, and set the theme to the required levels demanded by society.
		② Planning and Creative Ability To propose creative themes and projects based on investigations and information retrieval.
		③ Problem Extraction and Examination Ability To prospect and extract the problems on the business which occur in the process of achieving the task and the plan (method of fabrication, materials, endurance, economical efficiency, safety, function, ethics, environmental factor, etc.), and To examine and judge whether it can be achieved or not.
		④ Designing and Planning Ability To express a concrete execution design to achieve the problem and the plan (concept design, concrete design, detail design) within a plan, program, or drawing, etc., adding creativity to knowledge and the augmentation of skills.

	Educational Objectives	Specific Goals for Achievement
(B) Designing Ability	(B-2) Practice To acquire the comprehensive designing and teamwork ability to organize the results obtained in a paper, pursuing a plan steadily for analysis based on fundamental knowledge.	① Knowledge and Skills Acquisition Ability To provide a solution using existing knowledge and skills freely. Conversely, to assess problematic situations and to voluntarily acquire knowledge and skills required to expediate a solution or troubleshoot accordingly.
		② Cooperative, Management and Leadership Ability (Teamwork Ability) To promote cooperation, management and leadership through communication with staff and users etc.
		③ Practical Skill To undertake a challenge or a plan voluntarily, continually and steadily, based on an execution design under various constraints.
		④ Continuous Improvement Ability To pursue an upward spiral of progress with continuous checking, respecting a plan and exercising one's creativity.
		⑤ Report Writing and Presentation Skill To write a report of a completed work or analysis of substance(space functionality, etc.) and to provide a presentation of the results.
		⑥ Evaluation Ability To conduct self-evaluations of a completed work or analysis of substance(space functionality, etc.) and appreciate other pieces of work, etc.
(C) Communication Skill	(C-1) Japanese To acquire the ability to describe, present, and teamwork ability discuss in Japanese.	① To express something definitely in Japanese ② To make a discussion in Japanese.
		(C-2) Foreign Languages To acquire the basic communication skill acceptable by international standards.
	(D) Knowledge and Ability of the Specialized Field	(D-1) Science To acquire the ability to solve problems with basic knowledge of mathematics (differential and integral calculus, a differential equation, probability and statistics, numerical value analysis and applied mathematics) and natural sciences (general physics, general chemistry and life science).
(D-2) Fundamental Engineering To acquire the fundamental knowledge and skills of design system, information logic, material biology, dynamics and social technology.		To understand the fundamental knowledge of design system, information logic, material biology, dynamics and social technology and solve the applied questions by using them. (The specific educational objectives and their standards of achievement are described in the syllabus.)
(D-3) Common Field of the Specialized Courses To acquire the knowledge and skills of the common field of the specialized courses of the Environmental System Design Engineering (the environment, revitalization, energy, measurement control, security, etc.).		To understand the fundamental knowledge of the common field of the specialized courses of the Environmental System Design Engineering and solve the applied questions by using them. (The specific educational objectives and their standards of achievement are described in the syllabus.)
(D-4) Specialized Field To acquire the knowledge and ability of the skilled specialized field.		To understand the fundamental knowledge of the specialized field which you are educated in and solve the applied questions by using them. (The specific educational objectives and their standards of achievement are described in the syllabus.)
(D-5) Different Fields To acquire the ability to develop the required system with consideration to environmental issues, teamwork ability combining the knowledge of the skilled specialized field as well as full comprehension of additional varried fields.		① To understand different technical fields. ② To make a plan over two or more fields teamwork ability and perform it. ③ To propose technical ideas with consideration of man and the environment.
(E) Information Technology	To acquire the skill of developing programs for the specialized field, fully utilizing information devices.	① To fully utilize information devices. ② To perform planning and development with information devices. ③ To perform programming necessary for specialized fields. ④ To represent and provide explanation of said topic.

General Education

Humanities ▶ <http://www.gifu-nct.ac.jp/jinbun/>
 Natural Sciences ▶ <http://www.gifu-nct.ac.jp/sizen/>



General Education

In the 21st century, an industrial technical expert will be expected without fail to have a wide variety of knowledge in any field of human activities as well as highly-developed technology. This is why even those who specialize in technology should learn liberal arts, natural science and other subjects in addition to their own specialized fields. Accordingly in our college, special attention is given to the acquirement of the subjects for general education, which correspond to those of senior high schools in lower grades and those of universities in higher grades. Those subjects are, however, interrelated from lower grades to higher grades so that students can acquire a large quantity of knowledge as consistently and effectively as possible within the limit of five years. Another advantage of the general education in our college is that there are many substantial facilities and equipments which can be freely utilized for class activities. By means of these educational aids, the general education of our college is being effectively carried on.

The Engineers to Be Trained in General Education (Humanities)

Technical knowledge and specialties associated with technology are undeniably important to the present age. Additionally, exhaustive research efforts to attain knowledge with respect to international and historical circumstances coupled with insight based on the foursquare ethic are also required. Furthermore, let us not underestimate the importance of applying motivational development and learning ability into the aforementioned categories.

Human resources inevitably handle resources of information, knowledge, and technologies. The department aims to provide for the educational development, cultural enrichment and practical skills which can be applied to each respective technological field.

Based on the background criteria mentioned above, this department lists the criteria of Engineers in Training as follows:

Engineer to Be Trained

1. An engineer who can think about social problems with broad outlook and ethical sense by way of understanding historic and cultural background of the human race and respecting a viewpoint of other people and countries.
2. An engineer who can communicate in a bilingual environment.
3. An engineer who has cultural, geographic, and ethical perspective.

The Engineers to Be Trained in General Education (Natural Sciences)

To utilize and develop well-served engineering for human beings, it is necessary to understand the rules of physics and chemistry as a basis of engineering and develop a scientific way of thinking. Since mathematics is the means that is required indispensability to express a scientific rule, engineers should learn its skills and ways of thinking adequately.

Furthermore, in order to live a healthy humanistic life using outcomes of technologies in the modern society, it is necessary to acquire the knowledge of healthcare and to understand the effects for physical education to give one's mind and body through his or her own learning experience.

Based on the background criteria mentioned above, this department lists the figure of the engineers to be trained as follows:

Engineers to Be Trained

1. An engineer who has fundamental knowledge of mathematics, physics, and chemistry, and can apply them to a specialized field.
2. An engineer who has knowledge about the health of mind and body, and can live a healthy life.

Concrete Educational Objectives for Achievement and Qualification to Be Attained in the Department of General Education

1. To understand historic and cultural background of the human race, and to learn the basics of outlook on ethic in order to capture social problems in deference to a viewpoint of other people and countries.
2. To acquire healthcare ability and physical strength in order to be an engineer with healthy mind and body, and to bring up breadth of mind and do his or her life wealthily through keen appreciation of arts, sense of cooperation, creativeness, imaginativeness.
3. To acquire the fundamental ability to describe, present, and discuss in Japanese.
4. To acquire the basic communication skills in English and German.
5. To acquire the fundamental knowledge of mathematics and natural science and the ability to solve problems with them

The educational objectives mentioned above are common to each specialized department corresponding to an associate bachelor course.

Curriculum of General Education

1st		2nd		3rd		4th		5th	
Japanese A	2	Japanese	2	Japanese	2	Japanese	1	English A	2
Japanese B	2	Ethics	2	Politics and Economics	2	Law	2	German	2
History	2	History	2	Mathematics A I	2	Physical Education	2		
Geography	2	Mathematics A I	2	Mathematics A II	2	Mathematics A II	2	English A	2
Mathematics A I	2	Mathematics A II	2	Physical Education	2	German	2		
Mathematics A II	2	Mathematics B	2	English A	2				
Mathematics B	2	Physics B I	2	English C	1				
Physics A	1	Physics B II	2						
Chemistry A	3	Chemistry B	2						
Health Education	2	Physical Education	2						
Physical Education	2	English A	2						
Art	1	English B	1						
Music	1	English C	2						
English A	2								
English B	2								
English C	2								



Electronic Blackboard being used in Ethics Class

Academic Staff

Title	Name	Degree	Subjects in charge
Professor	TAKAHARA, Kiyoshi	M. A.	German
	KUZE, Sanae		Health and Physical Education
	OKADA, Shozo	M. Sc.	Mathematics
	SHIMIZU, Akira		English
	※1◎ SAKABE, Kazuyoshi	D. Sc.	Physics
	UEHARA, Toshiyuki	D. Eng.	Chemistry
	※2◎ KAMEYAMA, Taichi	M. Ed.	English
	MIYAGUCHI, Noriyuki	M. A.	Japanese
	KUBOTA, Keiji	M. Ed.	Politics and Economics
	NAKASHIMA, Izumi	M. Sc.	Mathematics
Associate Professor	YAMAMOTO, Hiroki		Health and Physical Education
	MAGUSA, Atsushi		Health and Physical Education
	NAKAJIMA, Yasutaka	Ph. D.	Japanese
	OKAZAKI, Takanobu	D. Sc.	Mathematics
	NONOMURA, Sakiko	M. A.	English
Lecturer	SUGAHARA, Takashi	D. A.	English
	SORA, Kenta	M. Ed.	Law and Geography
	KAN, Nahomi	D. Sc.	Physics
Assistant Professor	KITAGAWA, Shinya	D. Sc.	Mathematics
	SATAKE, Naoki	M. Ed.	English
	YAGI, Shintaro	D. Sc.	Mathematics
	FUKUI, Suguru	D. Sc.	Geography and Ethics

※1◎ Chairman of Department (Science)

※2◎ Chairman of Department (Liberal Arts)



E-Learning in English Class



Mathematics Class



Physical Education Class

Department of Mechanical Engineering

<http://www.gifu-nct.ac.jp/mecha/index.html>



Department of Mechanical Engineering

Mechanical engineering is a fundamental science in the industrial society because mechanical engineering is a science system concerning the design and the manufacturing of several types of industrial machineries.

Mechanical engineering is based on several sciences and technologies including solid mechanics, fluid dynamics, thermodynamics, material science, science of manufacturing, etc. The recent rapid development of electronic technology and computer technology, which has changed industrial structure on a large scale, required the change of mechanical engineering to a new type of science including a new technology called "mechatronics."

To be able to accommodate to this rapid development of industrial technology, this department prepares enriched curriculum and subjects for mastery of fundamental and extensive ability of mechanical engineering. This department is also active in introducing up-to-date facilities - e.g., engineering work-stations, several robots, a multi-purpose 3-action hydraulic press and the electro-hydraulic controlled material testing machine - and these are available for student experiments and graduation research.

In this department, every student will get a good foundation as a mechanical engineer with much emphasis on creativity and practice not only through attractive lectures but also through well-designed practical subjects.

The Engineers to Be Trained and the Educational Objectives in the Department of Mechanical Engineering

Mechanical engineering is a cross-disciplinary field forming the basis of technology for "Product Design". "Product Design" consists of the two phases: 1) machine design (the planning phase for manufacturing machine products), and 2) machine work (the phase for embodying products).

Machine design is an effusion of creative activities realized by consolidating the wisdom and experiences of mechanical engineers. It is therefore essential for students aspiring to be mechanical engineers to learn mathematics and physics, which constitute the basis for machine design technique and information technology. Furthermore, based on this science and technology, they must learn subjects related to the dynamics like "Material dynamics", "Hydrodynamics", "Thermodynamics", and "Mechanical dynamics".

Machine work is a sublime, creative process to embody the images of products created by machine design technicians for real products. Mechanical engineers assume heavy responsibilities for finding out and realizing the most appropriate machining conditions under the prescribed, restricted conditions concerning 1) economical efficiency, 2) quality, 3) term of work and 4) environmental preservation and safety. Students hoping to be mechanical engineers must learn not only practical skills on operation of production machinery, but also subjects connected directly with production engineering like "Machinist manners", "Measurement engineering", "Control engineering", and "Production engineering".

Moreover, it is necessary for a mechanical engineer to acquire IT technology as a tool to accomplish "Product Design" effectively. In addition, to play an active part as a member of domestic and foreign "Product Design teams," communication skill and sociability on the basis of outlook on ethic are required. As for the students aiming at a mechanical engineer, nourishment of these ability must be necessary.

Engineer to Be Trained

An engineer who has basics scholarship to play an active part as a mechanical engineer in the global community and who learns information processing and analysis ability that can deal with a sudden change of social situation

Educational Objectives

(A) To exercise ethical practices.

(A-1) To possess basic ideas of ethical standards and practices, in addition to understanding the historical backgrounds, cultures and viewpoints worldwide. To comprehend social issues and environmental problems on a global scale.

(A-2) To exercise ethical practices mentioned above as a mechanical engineer whose responsibility within the sphere of the technology of mechanical engineering and its impact on the global environment is not diminished.

(A-3) To acquire health care ability and physical strength, to foster ability of appreciating arts, cooperativeness, creativity, and to enrich breadth of mind and finally his/her life, in order to become the engineer whose mind and body are healthy together.

(B) To acquire designing ability.

(B-1) To acquire the ability to understand problems of machine technology while realizing new challenges and opportunities in order to provide solutions voluntarily within a framework of ideas.

(B-2) To acquire the comprehensive designing ability to organize the results obtained in a paper, pursuing a plan steadily for analysis based on fundamental knowledge of mechanical engineering.

(C) To acquire communication skills.

(C-1) To acquire the ability to describe, present, and discuss in Japanese.

(C-2) To acquire the basic communication skill acceptable by international standards.

(D) To acquire the knowledge and ability of mechanical engineering, cross-disciplinary fields forming the basis of it and the surrounding cross-disciplinary fields.

(D-1) To acquire the fundamental knowledge of mathematics and natural science and the ability to solve problems with them.

(D-2) To acquire the fundamental knowledge and ability of the fundamental engineering (design and the system, information and logic, materials, and mechanics).

(D-3) To acquire the knowledge and ability of the cross-fields within the mechanical engineering structure and the surrounding cross-disciplinary ones (environment, creation, energy, measurement and control, safety, etc.)

(D-4) To acquire basics knowledge as a mechanical design engineer and to acquire the following four abilities for depth and systematization of knowledge

(1) Ability about the dynamics of materials to design the machinery whose strength is guaranteed and can be used safely

(2) Ability to grasp dynamic behavior of air or fluid, and to apply it to a mechanical design

(3) Ability to evaluate thermal pattern for power of machinery or its efficiency in terms of dynamics, and to apply it to a mechanical design

(4) Ability to understand dynamic behavior about motion or vibration of machinery to apply it to a mechanical design

(D-5) To develop the basic ability of combining the knowledge of mechanical engineering and different technical fields from mechanical engineering, and simultaneously stimulate student interest.

(E) To acquire information technology.

To acquire the skill of designing for the information processing system, fully utilizing information devices.

Curriculum of Department of Mechanical Engineering

1st	2nd	3rd	4th	5th
<Required Subjects>	<Required Subjects>	<Required Subjects>	<Required Subjects>	<Required Subjects>
Fundamentals of Manufacturing Engineering 3	Metal Cutting and Casting Process I 1	Applied Physic I 2	Applied Mathematics I 2	Applied Physic III 1
(Subtotal) 3	Metal Cutting and Casting Process II 1	Fundamentals of Mechanics 2	Applied Mathematics II 1	Machinery Dynamics II 1
	Computer Literacy 1	Mechanism 2	Applied Mathematics III 1	Strength of Materials III 1
	Machinery Design and Drafting I 2	Strength of Materials I 2	Applied Physic II 1	Fluid Mechanics II 1
	Mechanical Engineering Practice I 3	Material Technology I 1	Machinery Dynamics I 1	Fluid Mechanics III 1
	(Subtotal) 8	Instrumentation Technology 1	Strength of Materials II 1	Thermodynamics II 1
		Machine Design I 1	Fluid Mechanics I 2	Energy Engineering 1
		Information Processing I 1	Thermodynamics I 2	Material Technology III 1
		Information Processing II 1	Heat Transfer I 1	Production Engineering 1
		Machinery Design and Drafting II 2	Material Technology II 1	Control Engineering II 1
		Mechanical Engineering Experiment I 2	Metal Deformation Process I 1	Electronics 1
		Mechanical Engineering Practice II 3	Metal Deformation Process II 1	Engineering Analysis 2
		(Subtotal) 20	Control Engineering I 1	Engineering Ethics 1
			Machine Design II 1	Graduation Research 8
			Numerical Calculation I 1	<Elective Subject>
			Introduction to Electrical Engineering 1	Theory of Elasticity 1
			Mechanical Engineering Experiment II 2	Theory of Plasticity 1
			Engineering Practice 3	Numerical Calculation II 1
			Industrial English 1	Heat Transfer II 1
			Topics of Mechanical Engineering 2	Hydraulic Machinery 1
			(Subtotal) 27	Energy and Environment 1
				System Engineering 1
				Mechatronics 1
				Robot Engineering 1
				Total Credits 9
				Total of Necessary Credits on Elective Subjects 6 and more



Mechanical Engineering Practice I

Academic Staff

Title	Name	Degree	Subjects in charge
Professor	KATO, Kohzoh	D. Eng.	Metal Deformation Processings
	OGURI, Hisakazu	M. Eng.	Strength of Materials
	ISHIMARU, Kazuhiro	D. Eng.	Thermodynamics
	KATAMINE, Eiji	D. Eng.	Machine Design
	© (Chairman of Department) YAMADA, Minoru	D. Eng.	Control Engineering
Associate Professor	YAMAMOTO, Takahisa	D. Eng.	Heat Transfer
	NAKAYA, Jun	D. Eng.	Fluid Mechanics
	MOTOZUKA, Satoshi	D. Eng.	Material Technology
Lecturer	MIYAFUJI, Yoshitaka	D. Eng.	Mechanical Engineering Practice
Assistant Professor	TAKAHASHI, Kengo	M. Eng.	Machinery Design and Drafting



Fatigue Test of Metallic Materials



Engineering Analysis



Experiment of Plastic Deformation Process

Department of Electrical and Computer Engineering

<http://www.gifu-nct.ac.jp>



Department of Electrical and Computer Engineering

The department was originally the Department of Electrical Engineering established in 1963. In the spring of 2000, the department was reorganized to become the Department of Electrical and Computer Engineering. The objectives of developing this department are to pursue and develop the newest technologies not only in electrical and electronic engineering, but also in information engineering, to train professionals for electronic and information industries. Two courses, electrical and electronic engineering course and computer engineering course, are designed for students who have completed their first 3-year study in order to give them the opportunity to obtain deeper knowledge of specialized fields according to students' individual needs.

The department's first 3-year curriculum concentrates on basic subjects in physics and mathematics along with subjects stressing the fundamentals of electrical, electronic and computer engineering, such as electronics, circuit theory, electromagnetics, electronic materials science, and programming languages. The curriculum also provides extensive laboratory work to enable students to become familiar with operating principles in related fields. A variety of laboratories equipped with workstations, computer networking terminals, lasers, communication systems, semiconductor manufacturing system, and other related equipment of the newest type are available.

Students of electrical and electronic engineering course are required to study specialized subjects, including advanced digital circuits and systems, microwave engineering, transmission engineering, and advanced electro-magnetics. Students of computer engineering course are required to study specialized subjects, including information theory, signal processing, data structures and algorithms, and mathematics in computer sciences. Moreover, a lot of elective subjects, such as optical engineering, control theory, opto-quantum electronics, network operating systems, artificial intelligence, and image processing are also provided. Ultimately, students can acquire competence to cope with the ever-progressing, high-technology industries. Further details on the Department of Electrical and Computer Engineering are available at our department web site: <http://www.gifu-nct.ac.jp/elec/index-e.html/>

The Educational Objectives of the Department of Electrical and Computer Engineering

In order to train an international and ethical engineer who can respond to the ever-progressing technical landscape, the Electrical and Information Engineering Department aims to provide our students with an education by developing a critical and fundamental understanding of technology within the multi-layered fields of electricity, electronics and information technology, which forms the foundation of the information society.

To achieve our goal we have introduced a curriculum that follows a path that allows for each student to individually select their own course of specialized study during the final fourth and fifth years of their technical education.

Our aim is to produce engineers by applying a curriculum that divides into two courses, namely, the Electric and Electronic Engineering Course and the Information Engineering Course. Additionally, our students strive to acquire an equal balance in fundamental knowledge encompassing every facet of electricity, the electronics, and information. Aspiring engineers will undergo thorough training in order to fulfill the professional requirements of his or her specialized trade.

The expression and the table below respectively show the image of "Engineer to Be Trained" and the educational objectives of the Electrical and Information Engineering with respect to the criteria set by the JABEE program:

Engineer to Be Trained

Engineers who acquired fundamental knowledge encompassing every facet of electricity, the electronics, and information in equal balance, and the ability to undergo thorough training in order to fulfill the professional requirements of his or her specialized trade.

Educational Objectives

(A) To exercise ethical practices.

(A-1) To possess basic ethical standards and practices, in addition to understanding the historical backgrounds, cultures and viewpoints worldwide. And to comprehend social issues and environmental problems on a global scale.

(A-2) To exercise basic ethical practices as an engineer who has increasing responsibility within the sphere of electricity, the electronics, and the information technology and its impact on the global environment.

(A-3) To possess the health and physical strength to be a healthy engineer. To become appreciative, cooperative, creative and imaginative, so as to live an affluent life.

(B) To acquire the ability to design.

(B-1) To acquire the ability to understand technical problems and/or new issues concerning electricity, the electronics, and the information technology while realizing new challenges and opportunities in order to provide solutions voluntarily within a framework of ideas.

(B-2) To acquire the comprehensive designing ability concerning electricity, electronics, and information technology to organize the results obtained in a paper, pursuing a plan steadily for analysis based on fundamental knowledge.

(C) To acquire skill in communicating.

(C-1) To acquire basic ability to describe, present, and discuss in Japanese.

(C-2) To acquire basic communication skills in English and German.

(D) To acquire knowledge and the ability with in a specific interdisciplinary field in addition to outside domains that encompass electricity, electronics, and information engineering.

(D-1) To acquire the ability to solve problems with basic knowledge of mathematics and natural sciences.

(D-2) To acquire the fundamental knowledge and skills of design systems, information, logic, material, dynamics and technology.

(D-3) To acquire basic knowledge and applied ability in a common field (environment, energy, measurement, control, creation, and safety, etc.) to an interdisciplinary field in the surrounding field of electricity, the electron, and the information engineering.

(D-4) To acquire the basic knowledge of each specialized field in an electric, electronic course and the information course, and acquire the ability that problems can be solved based on the application of basic knowledge obtained in each course.

(1) To acquire the basic understanding of electronic, electronic and information technology and the ability to apply this knowledge.

(2) Electric and electronic course

To possess the ability to acquire the basic knowledge of electric and electronic engineering and the applied skills.

(3) Information engineering course

To possess the ability to acquire the basic knowledge of electronic and information engineering and the applied skills.

(E) To acquire information technology skills.

To master information instruments, and acquire the ability to complete construction of projects, and the reporting with an information processing system such as programming needed with in a specialized field.

Curriculum of Department of Electrical and Computer Engineering

1st	3rd	4th	5th	
(Required Subjects)	(Required Subjects)	(Required Subjects)	(Required Subjects)	(Elective Subject)
Design Drafting 3 (Subtotal) 3	Applied Mathematics A 1 Applied Physics I 2 Electromagnetics I 2 Electric Circuit I 2 Electronics 1	Common Subjects Applied Mathematics B 2 Applied Mathematics C 1 Applied Mathematics D 1 Applied Physics I 2 Electromagnetics I 1 Electronics 2 Electrical Materials I 1 Communication Engineering 2 Computer Architecture 2 Numerical Analysis 1 Signal Processing 1 Electrical and Computer Engineering Laboratories 2 Topics in Engineering Fundamentals 2 (Subtotal) 20	Common Subjects Engineering Ethics 1 Graduation Research 6 (Subtotal) 7 Electrical and Electronic Course Specific Subjects Computer Engineering Laboratories 4 (Subtotal) 4 Computer Engineering Course Specific Subjects Electrical and Electronic Engineering Laboratories 4 (Subtotal) 4	Common Subjects Artificial Intelligence 1 Computer Networks 1 Software Engineering 1 Introduction to Compilers 1 Image Processing Engineering 1 Operating Systems 1 Power Electronics 1 Energy Conversion 1 Electrical Materials II 1 Control Theory 2 Opto-Quantum Electronics 1 Plasma Engineering 1 Radio Wave Propagation and Its Electronic Devices 1 Electronic Measurements 1 Optical Engineering 1 System Engineering 1 Applied Physics II 1 (Subtotal) 18 Electrical and Electronic Course Specific Subjects Electromagnetics II 1 Electric Circuit II 1 Information Transmission Engineering 2 Digital Circuit Engineering II 1 Total Credits 23 Total of Necessary Credits on Elective Subjects 17 and more Computer Engineering Course Specific Subjects High Voltage Engineering 1 Power Generation and Transformation Engineering 1 Laws and Regulations of Electricity 1 Power Electronics 1 Information Theory 1 Data Structures and Algorithms 1 Formal Language Theory 1 Mathematics in Computer Science 2 Total Credits 27 Total of Necessary Credits on Elective Subjects 17 and more
2nd (Required Subjects) Electric Circuit I 2 Digital Circuit Engineering I 1 Programming and Its Seminar 2 Electrical and Computer Engineering Laboratories 3 (Subtotal) 8	Electronic Properties 1 Electric Circuit Engineering 2 Electric Machinery 2 Programming and Its Seminar 2 Scientific and Technical English 1 Electrical and Computer Engineering Laboratories 4 (Subtotal) 20	Electrical and Electronic Course Specific Subjects Computer Engineering Laboratories 2 Information Theory 1 Data Structures and Algorithms 1 Formal Language Theory 1 Mathematics in Computer Science 2 (Subtotal) 7 Computer Engineering Course Specific Subjects Electrical and Electronic Engineering Laboratories 2 Electromagnetics II 1 Electric Circuit II 1 Information Transmission Engineering 2 Digital Circuit Engineering II 1 (Subtotal) 7		



Tesla coil made by students



Alumni Lecturers



Alumni Lecturers

Academic Staff

Title	Name	Degree	Subjects in charge
Professor	YAMADA, Isao	D. Eng.	Information Transmission Engineering Information Theory
	© (Chairman of Department) TOKORO, Tetsuro	D. Eng.	High Voltage Engineering Electric Circuits I
	KUMAZAKI, Hironori	D. Eng.	Electromagnetics I Electric Machinery
	YASUDA, Makoto	D. Eng.	Computer Architecture Mathematics in Computer Science
	DEGUCHI, Toshinori	D. Eng.	Data Structures and Algorithms Formal Language Theory
Associate Professor	TOMITA, Mutuwo	D. Eng.	Control Theory Energy Conversion
	HABUCHI, Hitoe	D. Eng.	Electromagnetics I Optical Engineering
	YAMADA, Hirobumi	D. Eng.	Programming and Its Seminar Information Theory
Lecturer	TOMITA, Isao	Ph. D.	Communication Engineering Applied Mathematics A · B
	IIDA, Tamio	D. Eng.	Electronic Circuits Plasma Engineering
Assistant Professor	TAJIMA, Koji	D. Eng.	Computer Architecture Electrical and Computer Engineering Laboratories
	SHIRAKI, Eiji	D. Eng.	Design Drafting Electrical and Computer Engineering Laboratories
Temporary Professor	SHIBATA, Yoshihide	D. Eng.	Design Drafting Electrical and Computer Engineering Laboratories
	INABA, Seiki	D. Eng.	Opto-Quantum Electronics Electronics

Department of Electronic Control Engineering

<http://www.gifu-nct.ac.jp/elcon/>



Department of Electronic Control Engineering

In the modern society, development is earnestly desired with a system which provides humans with sufficient aid not only in simple work but also in intelligent jobs, and furthermore allows a variety of operations to be conducted for humans. Humans can grasp the affairs surrounding them through their sensory organs including eyes and ears, and can carry out various kinds of actions by thinking with their brains accompanied with the use of their hands and feet. Also in order to make use of the maneuvers referred above, by means of any devices, similar processings such as sensing and perception (eyes and ears), recognition and judgment (brains), control (hands and feet), etc. come to be required. Urgent appearance is required with intelligence-oriented systems allowing such processings to be completed autonomously without using human hands throughout the whole course of the operations. Intelligence-oriented systems are on the threshold of realization in all the fields ranging from establishment of production facilities in factories and plants, manufacture and construction of automobiles, aircraft, electronic apparatus, intelligent buildings, communication systems, medical equipment, promotion of bio-technology, etc. to production of household electric appliances. In our electronic control engineering department, fundamental technology to develop systems to conduct such intelligent actions is dealt with in an extensive scale. In this department, specific subjects related to measurement, control, information, and computers together with advanced theories concerning robotics engineering, system control engineering, etc. are also learned in addition to acquisition of the fundamental knowledge of electric, electronic, and mechanic systems. Meanwhile, importance is also attached to experiments and exercises, and thorough performances are also being made with our experiments and exercises of electronic control engineering, robotics control, information processings, etc.

As stated above, our department aims at growing up those engineers who will be competent enough to be engaged in development of creative systems which are so designed as to conduct intelligent actions for humans by accomplishing realization of the systems oriented toward intelligence by means of electronic-control / information-control technology.

The Educational Objectives of the Department of Electronic Control Engineering

Our aim is to cultivate engineers who are able to respond in a flexible manner to various technologies and meet the challenges of recent progress made in electronic control technology. Our educational objectives are to foster students who can familiarize themselves with the advancement and segmentation of electronic control technology and operate electronic control systems by applying the fundamental skills they have acquired. The social role of the department is to cultivate human resources who can make use of comprehensive skills of mechanics, electrics, electronics, and information technology and creatively develop more advanced and environmentally friendly intellectual systems.

Based on the above criteria, the Department of Electronic Control Engineering upholds its "Engineer to Be Trained" and its "Educational Objectives" below:

Engineer to Be Trained

An engineer who has acquired the fundamental knowledge and perspectives of mechanics, electrics, electronics, and information technology. An engineer who, on the basis of electronic control and information technology, has acquired the creative ability to improve and develop technology in order to serve the needs of the international community.

Educational Objectives

(A) To exercise ethical practices.

(A-1) To possess ethical standards and practices and comprehend social issues, in addition to understanding the historical backgrounds, cultures and viewpoints on a worldwide basis.

(A-2) To exercise ethical practices as an engineer who has an increasing responsibility within the sphere of electronic control engineering and its impact on the global environment.

(A-3) To exercise good health care and have the physical strength to be a physically healthy engineer. To enrich his/her life, as a mentally healthy engineer, by cultivating the appreciation of art, the spirit of cooperation, creativity, and imagination.

(B) To acquire designing ability.

(B-1) To acquire the ability to understand technical applications in electrics, electronics, information and control technology, and mechanics while realizing new challenges and opportunities in order to provide solutions voluntarily within a framework of ideas.

(B-2) To acquire the comprehensive designing ability to organize the results obtained in a paper. In addition to pursue a plan steadily for analysis based on fundamental knowledge of electrics, electronics, information and control technology, and mechanics.

(C) To acquire communication skills.

(C-1) To acquire the ability to describe, present, and discuss in Japanese.

(C-2) To acquire the basic communication skills in English and German.

(D) To acquire the knowledge and ability of electronic control engineering and cross-disciplinary fields forming an understanding of the surrounding cross-disciplinary fields.

(D-1) To acquire the fundamental knowledge of mathematics and natural science and the ability to solve problems with them.

(D-2) To acquire the fundamental knowledge and practical skills of engineering such as the design, system, information, logic, materials, and dynamics.

(D-3) To acquire the fundamental knowledge and practical skills of the cross-fields between the electronic control engineering fields and the surrounding cross-disciplinary ones (environment, energy, measurement and control, creation, safety, etc.).

(D-4) To acquire the basic knowledge of electronic control engineering, and develop the ability to operate electronic control systems by applying this basic knowledge. In addition, the ability to master the technical knowledge and skills to serve the social needs.

(1) To acquire the basic knowledge and viewpoints in the field of electronic control, on the basis of electrics and electronics.

(E) To acquire information technology.

To acquire the ability to perform, plan, develop and do representations within the information processing system. For example programming skills necessary in his/her specialized field, to fully utilize information devices.

Curriculum of Department of Electronic Control Engineering

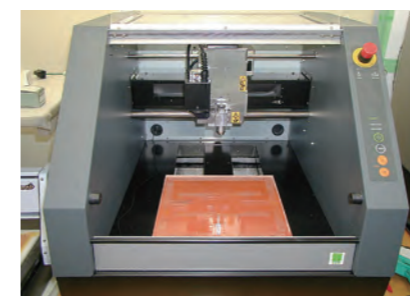
1st	2nd	3rd	4th	5th
(Required Subjects)	(Required Subjects)	(Required Subjects)	(Required Subjects)	(Required Subjects)
Introduction to Electronic Control Engineering 1	Information Processing I 2	Applied Mathematics A 1	Applied Mathematics B 2	Electronics I 1
Workshop Practice I 2	Digital Circuits 2	Applied Physics I 2	Applied Mathematics C 1	System Control I 1
(Subtotal) 3	Design and Drafting I 2	Information Processing II 2	Applied Mathematics D 1	Electric Power Devices I 1
	Workshop Practice II 2	Electromagnetics I 2	Applied Physics I 2	Electronic Devices I 1
	(Subtotal) 8	Electric Circuits I 2	Information Processing III 2	Computer Architecture I 1
		Electronic Circuits 2	Electromagnetics II 2	Computer Communication Engineering 1
		Kinematics of Machinery I 2	Electric Circuits II 1	Robotics I 1
		Strength of Materials I 2	Electric Circuits III 1	Material Technology 1
		Design and Drafting II 1	Electronic Control Circuits 1	Engineering Ethics 1
		Engineering Experiments I 4	Instrumentation Engineering 2	Environment and Energy Engineering 1
		(Subtotal) 20	Control Engineering 2	Engineering Experiments III 3
			Kinematics of Machinery II 1	Graduation Research 6
			Kinematics of Machinery III 1	(Subtotal) 19
			Strength of Materials II 1	(Elective Subject)
			Engineering Experiments II 3	Applied Physics II 1
			Advanced Engineering Experiments 2	Electronics II 1
			Fundamental Research of Electronic Control 2	System Control II 1
			(Subtotal) 27	Electric Power Devices II 1
				Electronic Devices II 1
				Computer Architecture II 1
				Robotics II 1
				Electronic Apparatuses 1
				Applied Robotics 1
				Image Engineering 1
				Design of Electronic Equipments 1
				Reliability Engineering 1
				Total of Credits 12
				Total of Necessary Credits on Elective Subjects 9 and more



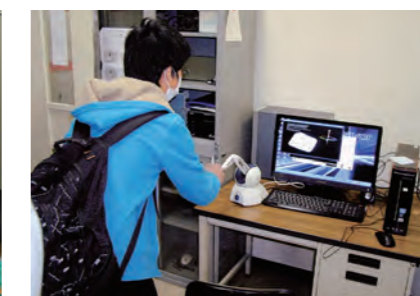
Advanced Engineering Experiments

Academic Staff

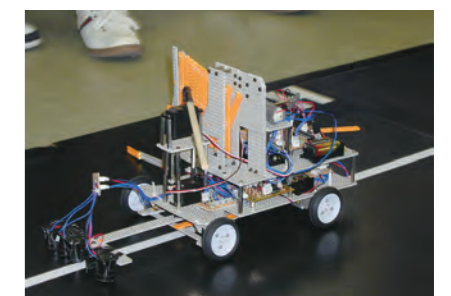
Title	Name	Degree	Subjects in charge
Professor	CHONAN, Isao	M. Eng.	Electric Circuits Electronic Circuits
	FUJITA, Kazuhiko	D. Eng.	Electromagnetics Electronic Control Circuits
	MORIGUCHI, Hirofumi	D. Sci.	Applied Mathematics
	KITAGAWA, Hideo	D. Eng.	Information Processing Robotics
	© (Chairman of Department) FUKUNAGA, Tetsuya	D. Eng.	Measurement Engineering Introduction to Electronic Control Engineering
Associate Professor	ENDO, Noboru	D. Eng.	System Control Information Processing
	MORI, Takahiko	D. Eng.	Engineering Experiments Control Engineering
	KOBAYASHI, Yoshimitsu	D. Eng.	Kinematics of Machinery Engineering Experiments
Lecturer	KITAGAWA, Teruhiko	M. Eng.	Engineering Experiments Design and Drafting
Lecturer	KURIYAMA, Yoshifumi	D. Eng.	Workshop Practice Strength of Materials
Assistant Professor	MOMIYAMA, Katsuaki	M. Eng.	Electronic Devices Engineering Experiments
Temporary Professor	USUI, Toshio	M. Eng.	Electronics



Three-dimensional processing machine



Haptic Device



Lancer robot

Department of Civil Engineering

<http://www.gifu-nct.ac.jp/civil/>



Department of Civil Engineering

Natural disasters have often occurred in recent Japan. Especially, the unprecedented big earthquake and tsunami, called 'Tohoku Earthquake and Tsunami' on Mar. 11, 2011, recorded the greatest magnitude and brought extensive damages to the eastern part of Japan. Through the experience, we did realize that vulnerability to serious natural disasters still exists in our national land. In the damaged area, many engineers including some graduates of the Department of Civil Engineering are still working hard to reconstruct the infrastructure.

The Department of Civil Engineering in Gifu National College of Technology offers programs to learn technology concerned with 'Disaster Prevention' for protecting national land from natural disasters, such as 'Infrastructure Services' for decreasing environmental impact and 'Sustainable Urban Planning' for symbiotic relationship between human and nature.

The students graduated from this department mainly take professional career related to disaster prevention plans and infrastructure services (government or local officials, employees of energy, transport and information technology companies) or design, construction and management of infrastructure facilities (construction companies, etc.). Both careers should contribute to making the society comfortable and safe. We believe that studying civil engineering is worthy of learning if you want to contribute to our society with strong public spirit.

The Educational Objectives of the Department of Civil Engineering

Things called "infrastructure" are, for example, those supporting ordinary life in our community, such as the use of a car, electricity, and drinking water. In addition, to supporting safe and smooth social activities such as communication, distribution of goods and transportation, and, more importantly, those protecting our natural environment from natural disasters. All of them are absolutely essential for us and they will never disappearing in future. Also, to build a mechanism for achieving our objectives within the realm of "infrastructure improvement".

Japan's world's preeminent technology has significantly contributed not only to Japan but to other countries. However, in future, further consideration of acceptable environmental limits will be a high-priority issue. For sustainable human development, in coexistence with nature, it is hoped that engineers will be fostered who have the ability to realize creative urban development and infrastructure improvement in harmony with the regional history and culture.

Based on the above criteria, the Department of Civil Engineering upholds its "Engineer to Be Trained" and its "Educational Objectives" below:

Engineer to Be Trained

The department's goal is to develop an engineer who has acquired basic knowledge and concepts concerning infrastructure improvement and methods, and the means to protect our natural environment and support a comfortable, safe living environment. The Engineer to be trained will have utmost concern for environmental load reduction and sustainable development with the ability to positively promote infrastructure improvement to support human development.

Educational Objectives

(A) To possess ethical standards and practices.

(A-1) To possess ethical standards and practices and comprehend social issues, in addition to understanding the historical backgrounds, cultures and viewpoints worldwide.

(A-2) To recognize the necessity of ethics for an engineer engaged in civil engineering.

(A-3) To exercise good health care and have the physical strength to be a healthy engineer. To enrich his/her life, as a mentally healthy engineer, by cultivating the appreciation of art, the spirit of cooperation, creativity, and imagination.

(B) To acquire the designing ability.

(B-1) To acquire the ability to understand the technical problems and new themes concerning civil engineering and to make plans to voluntarily solve the problems.

(B-2) To acquire the basic ability to organize the results that have been achieved in a paper and to pursue a plan for analysis and practice, based on fundamental knowledge of civil engineering.

(C) To acquire communication skills.

(C-1) To acquire the ability to describe, present, and discuss in Japanese.

(C-2) To acquire the basic communication skills in English and German.

(D) To acquire the knowledge and ability of civil engineering, cross-disciplinary fields forming the basis of it and the surrounding cross-disciplinary fields.

(D-1) To acquire the basic knowledge of mathematics and natural science and the ability to solve problems with them.

(D-2) To acquire the basic knowledge of engineering such as the design, system, information, logic, materials, dynamics.

(D-3) To acquire knowledge and skills in common fields of Environmental System Design Engineering (environment, energy, measurement/control, creation, safety, etc.)

(D-4) To acquire the following basic knowledge and concepts of civil engineering as his/her specialized field:

(1) To acquire basic knowledge and concepts concerning infrastructure improvement to protect our national land from natural disasters and support a comfortable, safe living environment.

(2) To acquire basic knowledge and concept concerning the creation of "sustainable urban development" in harmony with nature and in consideration of environmental load reduction.

(D-5) To be interested in some other fields within the main four fields of civil engineering (structure, hydraulics, soil, and planning/environment) different from their specialized skills, and to develop the basic ability to combine their knowledge of their skilled field with these other fields.

(E) To acquire information technology.

To acquire the ability of performing, planning, development and presentation with the information processing system in his/her specialized field, fully utilizing information devices. Example would be computer programming.

Curriculum of Department of Civil Engineering

1st	2nd	3rd	4th	5th
(Required Subjects)	(Required Subjects)	(Required Subjects)	(Required Subjects)	(Required Subjects)
Introduction to the Civil Engineering 2	Surveying I 1	Applied Physics 2	Applied Mathematics 2	Spatial Information Engineering 1
Computer Literacy 1	Surveying Exercises I 2	Surveying II 1	Numerical Analysis 2	Experiments in Civil Engineering 1.5
(Subtotal) 3	Fundamental drawing 2	Surveying Exercises II 2	Surveying III 2	Sustainable Society Formation 1
	Fundamental Materials of Construction 1	Fundamental Experiments I 3	Design and drawing 2	Management of Construction 1
	Fundamental Mechanics 2	Concrete Engineering I 2	Fundamental Experiments II 3	Disaster Prevention Engineering 1
	(Subtotal) 8	Structural Mechanics I 2	Concrete Engineering II 2	Exercises in Civil Engineering II 1.5
		Hydraulics I 2	Structural Mechanics II 3	Engineering Ethics 1
		Soil Mechanics I 2	Hydraulics II 3	Graduation Research 8
		Planning Theory in Civil Engineering I 2	Soil Mechanics II 3	(Subtotal) 16
		Environmental Engineering I 2	Planning Theory in Civil Engineering II 1	(Elective Subject)
		(Subtotal) 20	Environmental Engineering II 2	Structural Analysis 1
			Urban Engineering 1	Steel Structure 1
			Exercises in Civil Engineering I 1	Concrete Engineering III 1
			(Subtotal) 27	Aseismic Engineering 1
				Applied Soil Mechanics 1
				Geotechnical Engineering 1
				Water Resources Engineering 1
				River Hydraulics 1
				River Hydrology 1
				River Mechanics and Ecology 1
				Biological Wastewater Treatment 1
				Urban and Regional Planning 1
				Traffic Engineering 1
				Energy Engineering 1
				Total of Credits 14
				Total of Necessary Credits on Elective Subjects 12 and more



Surveying Exercise

Academic Staff

Title	Name	Degree	Subjects in charge
Professor	IWASE, Hiroyuki	D. Eng.	Concrete Engineering
	WADA, Kiyoshi	D. Eng.	Hydraulic Engineering Environmental Engineering
	© (Chairman of Department) YOSHIMURA, Yuji	D. Eng.	Soil Mechanics Geotechnical Engineering
	SUZUKI, Masato	D. Eng.	Hydraulic Engineering Planning Theory in Civil Engineering
Associate Professor	HIROSE, Yasuyuki	M. Eng.	Surveying Disaster Prevention Engineering
	MIZUNO, Kazunori	D. Eng.	Soil Mechanics
	SUMINO, Haruhiko	D. Eng.	Environmental Engineering Surveying
Lecturer	SAKAMOTO, Jun	D. Eng.	Urban Engineering Traffic Engineering
	MIZUNO, Yoshinori	D. Eng.	Structural Mechanics
	WATANABE, Naohiko	D. Eng.	Applied Mathematics Aseismic Engineering
Assistant Professor	KIKU, Masami	M. Eng.	Hydraulics
Temporary Professor	SUZUKI, Takao	M. Eng.	Hydraulics



Tsunami wave-making experiment



Exhibit



Lab work

Department of Architecture

<http://www.gifu-nct.ac.jp/archi/>



Department of Architecture

Architecture is often said to be a receptacle in which human life and culture is developing. It is created as a combined product of art and engineering, and at the same time it must be safe, beautiful and functional.

Based on this idea, the department of architecture offers the curriculum consisting of various fundamental subjects which comprehend social sciences, humanities and fine arts, and of specialized subjects such as structural engineering, construction engineering and environmental engineering. Hence, students can choose any field which makes the most of their personalities and talents and satisfies their desires of learning and creating.

Completing the five-year program, students are expected to take active roles in building industries as designers, planners, engineers and builders.

Students will be qualified for the examination to become second class architect, which is a legal license of Japan, immediately after graduation, then they will be candidates for first class architect four years later.

The Educational Objectives of the Department of Architecture

The department of Architecture aims to educate practical engineers while cultivating creative originality, by transferring the comprehensive skills of technology and culture. These skills are related to construction techniques of building and city space, environmental adjustment and constructive safety, for the purpose of constructing social space.

Based on the above criteria, the Department of Architecture upholds its "Engineer to Be Trained" and its "Educational Objectives" below:

Engineer to Be Trained

An engineer who has, and comprehensively develops, fundamental technology and culture on the construction techniques of building and city space, environmental adjustment and constructive safety, for the purpose of constructing social space.

Educational Objectives

(A) To possess ethical standards and practices.

(A-1) To possess ethical standards and practices and comprehend social issues, in addition to understanding the historical backgrounds, cultures and viewpoints worldwide.

(A-2) To exercise ethical standards and practices as an engineer, in addition to understanding the historical backgrounds and cultures in addition to comprehending social issues and environmental problems caused by construction technology.

(A-3) To exercise good health care practices and have the physical strength to be a physically healthy engineer. To enrich his/her life, as a mentally healthy engineer, by cultivating the appreciation of art, the spirit of cooperation, creativity, and imagination

(B) To acquire the ability to design.

(B-1) To acquire the ability to understand the technical problems and new themes concerning architecture and to make plans to solve the problems voluntarily using a wide variety of ideas.

(B-2) To acquire the comprehensive ability to design and organize the results in a report or in a designing plan. In addition to successfully complete these plans based on their fundamental knowledge.

(C) To acquire communication skills.

(C-1) To acquire the ability to describe, present, and discuss in Japanese.

(C-2) To acquire the basic communication skills in English and German.

(D) To acquire the knowledge and ability within a specialized field.

(D-1) To acquire the fundamental knowledge of mathematics and natural science and the ability to solve problems with them.

(D-2) To acquire the fundamental knowledge and practical skills of engineering such as the design, information, materials and dynamics.

(D-3) To acquire the fundamental knowledge and practical skills of the cross-fields between the architecture fields and the surrounding cross-disciplinary ones (environment, energy, measurement, safety, etc.).

(D-4) To acquire the fundamental knowledge of the technical fields of architecture and the necessary ability and skills to systematize them in the following spheres:

(1) The necessary skills for designing, by developing social and local viewpoints related to architecture and city life, and by acquiring the skill of planning better living space from functional and artistic viewpoints.

(2) The necessary skills for designing, by acquiring the methods of estimating, assessing and adjusting environmental resources to maintain the proper environment for saving energy.

(3) The necessary skills for design, by planning structurally safe building space and construction form for sure social activities within a building's interior and exterior.

(E) To acquire information technology.

To represent and provide explanation of previously mentioned topics by fully utilizing information devices.

Curriculum of Department of Architecture

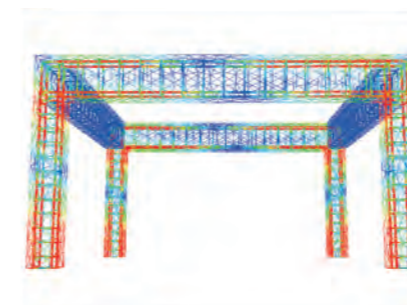
1st	2nd	3rd	4th	5th
<Required Subjects>	<Required Subjects>	<Required Subjects>	<Required Subjects>	<Required Subjects>
Structural Analysis 1	Construction Methods II 1	Applied Physics I 2	Applied Mathematics I 1	Reinforced Concrete Structure II 1
Construction Methods I 1	Introduction to Spatial Design 1	Digital Design I 1	Applied Mathematics II 2	Steel Structure II 1
Architectural Drawing I 2	Introduction to Interior Design 1	Information Processing I 1	Applied Physics II 1	Environment Design I 1
(Subtotal) 4	History of Architecture I 2	Structural Mechanics I 2	Digital Design II 1	Building Production 2
	Architectural Drawing II 2	Strength of Materials 1	Information Processing II 1	Building Law 2
	(Subtotal) 7	Wooden Structure 1	Structural Mechanics II 2	Surveying 1
		Interior Design 1	Building Materials I 1	Surveying Exercises 1
		Interior Planning and Design I 1	Reinforced Concrete Structure I 2	Disaster Prevention Engineering 1
		History of Architecture II 1	Steel Structure I 2	Graduation Research 8
		Architectural Planning I 2	Interior Planning and Design II 2	(Subtotal) 18
		Environment Engineering I 1	Architectural Planning II 2	<Elective Subject>
		Planning and Design I 4	Urban and Regional Planning 1	Applied Mathematics III 1
		Experiment of Architectural Engineering I 2	Environment Engineering II 2	Soil Mechanics and Foundation Engineering 1
		(Subtotal) 20	Building Equipment I 2	Structural Design I 1
			Planning and Design II 4	Structural Design II 1
			Experiment of Architectural Engineering II 1	Advanced Topics in Planning 1
			Engineering Ethics of Architecture 1	Participative Design 1
			(Subtotal) 28	History of Architecture III 1
				Planning and Design III 2
				Environmental Design II 1
				Building Equipment II 1
				Building Materials II 1
				Composite structure 1
				Environmental Sociology 1
				Total of Credits 14
				Total of Necessary Credits on Elective Subjects 9 and more



Interior Design

Academic Staff

Title	Name	Degree	Subjects in charge
Professor	SHIMOMURA, Hagai	D. Eng.	Steel Structure Engineering Ethics of Architecture
	© (Chairman of Department) INUKAI, Toshitsugu	D. Eng.	Building Materials Reinforced Concrete Structure
	TSURUTA, Yoshiko	D. Eng.	Urban and Regional Planning Planning and Design
	OGAWA, Nobuyuki	D. Eng.	Applied Physics Statistical Mechanics
	SHIBATA, Ryouichi	D. Eng.	Structural Mechanics Information Processing
Associate Professor	IMADA, Taichiro	M. Eng.	Planning & Design Digital Design
	AOKI, Tetsu	D. Eng.	Environmental Engineering Architectural Equipment
	FUJITA, Daisuke	M. Eng.	Planning and Design Architectural Design
Lecturer	SHIMIZU, Takahiro	D. Eng.	History of Architecture Interior Design
	NAKAYA, Takashi	M. Phi.	Environmental Engineering Architectural Equipment



Numerical Experimentation of RC Structure



Experiment of Architectural Structure



Touring a Forest

Advanced Course

<http://www.gifu-nct.ac.jp/senkoka/>



Advanced Course

The Advanced Course provides opportunities of acquiring Bachelor's degree in Engineering for undergraduate students under the courses completed within two calendar years.

The Course at National Institute of Technology, Gifu College, diversified into both academic training and engineering experience on the basis of a five-year course of study, supervises many researches and design-oriented plannings through two advanced courses; "Course of Electronic System Engineering" and "Course of Architecture and Civil Engineering."

The Advanced Course intends to cultivate not only technological potential for creative talent and refined insight into social systems but also rich human character, which are all indispensable to competent engineers. The educational program of Environmental System and Design Engineering is held during the fourth and fifth years of the five-year course plus two years of this Advanced Course.

Course of Electronic System Engineering

On the basis of knowledge acquired during the five-year course at the Departments of Mechanical, Electrical and Electronic Control Engineering, this advanced course offers many subjects required for the electronic system engineering. In this course, students will obtain the ability not only to substitute the energy consuming labor but also to develop the intelligent electronic, mechanical system with humanfriendly operation.

This advanced course has two foundations with specialized subjects ; one deals with the mechanical science, which requires students to analyze physical functions essential to intelligent mechanical system and to build them up to organic system ; the other deals with the electronic science, which is concerned with the control of the system's physical functions and with the methods and equipments to collect, transfer, analyze and evaluate required information.

Course of Architecture and Civil Engineering

On the basis of the knowledge acquired during the five-year course at the departments of Architecture and Civil Engineering, this advanced course offers many subjects required for design-oriented plannings of building and regional environments. This course is concerned with structural engineering, environmental engineering, construction engineering, hydraulic engineering, geotechnical engineering, transportation engineering, and architectural science.

Furthermore, students can not only establish a program, which copes with significantly advanced technology through well-equipped institutions in the Course, but also develop their skills for research and the spirit of harmonization between human society and nature.

The Image of "Engineer in Training" and the Educational Objectives of the Faculty of Advanced Engineering

For the development of humanity, increased awareness must be given to the prevention of depleting resources for production and diffusion of contaminated matters that affect the ecosystem on the earth. For this reason, future "Product Design" concepts must give special consideration to preserving the global environment while simultaneously promoting the creation of a recycling society. Additional attention will be granted to this artificial environment supporting human labor and intellectual activities for the betterment of society.

The expression and the table below respectively show the image of "Engineer in Training" and the educational objectives of the Faculty of Advanced Engineering.

Engineer in Training

Course of Electronic System Engineering

Engineers who can produce user-friendly, intellectually functional systems that provide a harmonious coexistence with the natural environment through the application of reliable knowledge as well as concerning effective use of environmental resources.

Course of Architecture and Civil Engineering

Engineers who can understand and produce systems that correspond and coexist with the various areas, having the advanced thinking ability to create a recycling society that strives for an interdependent and harmonious commitment with the natural environment, spaces for social life and their protection system from natural disasters.

Educational Objectives

(A) To exercise ethical practices.

(A-1) To possess ethical standards and practices to comprehend social issues and environmental problems on a global scale.

(A-2) To exercise ethical practices as an engineer whose responsibility within the sphere of technology and its impact on the global environment is not diminished.

(B) To acquire the designing ability.

(B-1) To acquire the ability to understand technical problems and/or new issues in practice while realizing new challenges and opportunities in order to provide solutions voluntarily within a framework of ideas.

(B-2) To acquire the comprehensive designing teamwork ability to organize the results obtained in a paper, pursuing a plan steadily for analysis based on fundamental knowledge.

(C) To acquire communication skill.

(C-1) To acquire the ability to describe, present and teamwork and discuss in Japanese.

(C-2) To acquire the basic communication skill acceptable by international standards.

(D) To acquire technical knowledge.

(D-1) To acquire the ability to solve problems with basic knowledge of mathematics and natural sciences.

(D-2) To acquire the advanced knowledge and skills of fundamental engineering (design system, information, logic, material, dynamics and technology).

(D-3) To acquire the advanced knowledge and applied ability in a common field of Environmental System Design Engineering (environment, creation, energy, measurement, control and safety, etc.).

(D-4) To acquire the more advanced knowledge of each specialized field.

(D-5) To understand other technical fields which differ from their own, and to acquire the ability to combine the knowledge and skills of each respective entity to create an environmental system that is friendly to human and the earth.

(E) To acquire information technology skills.

To master the information instruments, and acquire the ability to construct a plan for information processing system.

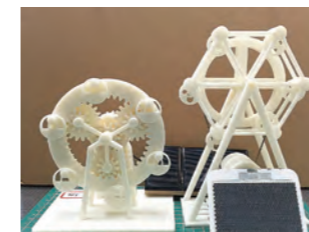
Curriculum of Advanced Course

Course of Electronic System Engineering

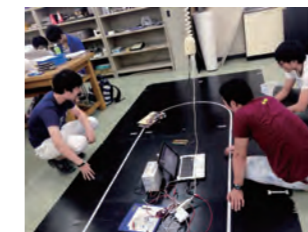
1st		2nd	
General Subjects		General Subjects	
〈Required Subjects〉		〈Required Subjects〉	
General English A1	1	Social Ethics	2
General English A2	1	General English B	2
(Total of All Credits on Required Subjects)	2	(Total of All Credits on Required Subjects)	4
〈Elective Subject〉		〈Elective Subject〉	
General German 1	1	Literature	2
General German 2	1	(Total of All Credits on Elective Subjects)	2
A la Carte of Mathematics	2	Specialized-Common Subjects	
(Total of All Credits on Elective Subjects)	4		
〈Required Subjects〉		〈Required Subjects〉	
Specialized-Common Subjects		Specialized-Common Subjects	
〈Required Subjects〉		〈Required Subjects〉	
Life Science	2	Material Chemistry	2
Ecological Engineering	2	Engineering of Information Processing Devices	2
Applied Physics	2	Information Engineering	2
(Total of All Credits on Required Subjects)	6	Creative Engineering Practice	2
〈Elective Subject〉		(Total of All Credits on Required Subjects)	8
Quantum Mechanics	2	〈Elective Subject〉	
Continuum Mechanics	2	Statistical Mechanics	2
Environmental Material Science	2	Human Interface Design	2
Systems Engineering	2	Project Management	2
Advanced Topics in Applied Mathematics	2	(Total of All Credits on Elective Subjects)	6
A la carte of Experiments	2	Specialized-Advanced Subjects	
Business Accounting	2	〈Required Subjects〉	
Science Literacy Education Practice	2	Graduation Thesis 2	8
(Total of All Credits on Elective Subjects)	16	(Total of All Credits on Required Subjects)	8
〈Required Subjects〉		〈Required Subjects〉	
Specialized-Advanced Subjects		Specialized-Advanced Subjects	
〈Required Subjects〉		〈Required Subjects〉	
Advanced Experiment in Electronic System Engineering	4	Elasticity and plasticity of Engineering Materials	2
Practical Training in Electronic System Engineering	3	Computational Mechanics	2
Graduation Thesis 1	6	Advanced Mechatronics	2
(Total of All Credits on Required Subjects)	13	Medical Image Processing	2
〈Elective Subject〉		Advanced Control Engineering	2
System Measurements	2	Digital Control Engineering	2
Advanced Course of Fluid Mechanics	2	Advanced Topics of Electric Machinery	2
Circuit Theory	2	Theory of Computation	2
Solid-State Electronics	2	(Total of All Credits on Elective Subjects)	16
Fundamentals of Digital Systems	2	〈Required Subjects〉	
Applications of Digital Systems	2	〈Required Subjects〉	
Diffusion Phenomena	2	Advanced Experiments in Architectural and Civil Engineering	4
(Total of All Credits on Elective Subjects)	14	Practical Training in Architectural and Civil Engineering	3
〈Required Subjects〉		Graduation Thesis 1	6
〈Required Subjects〉		(Total of All Credits on Required Subjects)	13
〈Required Subjects〉		〈Elective Subject〉	
〈Required Subjects〉		Advanced Structural Analysis	2
〈Required Subjects〉		Infrastructure Planning	2
〈Required Subjects〉		Environmental Control Engineering	2
〈Required Subjects〉		(Total of All Credits on Elective Subjects)	6

Course of Architecture and Civil Engineering

1st		2nd	
General Subjects		General Subjects	
〈Required Subjects〉		〈Required Subjects〉	
General English A1	1	Social Ethics	2
General English A2	1	General English B	2
(Total of All Credits on Required Subjects)	2	(Total of All Credits on Required Subjects)	4
〈Elective Subject〉		〈Elective Subject〉	
General German 1	1	Literature	2
General German 2	1	(Total of All Credits on Elective Subjects)	2
A la Carte of Mathematics	2	Specialized-Common Subjects	
(Total of All Credits on Elective Subjects)	4		
〈Required Subjects〉		〈Required Subjects〉	
Specialized-Common Subjects		Specialized-Common Subjects	
〈Required Subjects〉		〈Required Subjects〉	
Life Science	2	Material Chemistry	2
Advanced Topics in Applied Mathematics	2	Engineering of Information Processing Devices	2
Applied Physics	2	Information Engineering	2
(Total of All Credits on Required Subjects)	6	Creative Engineering Practice	2
〈Elective Subject〉		(Total of All Credits on Required Subjects)	8
Ecological Engineering	2	〈Elective Subject〉	
Environmental Material Science	2	Statistical Mechanics	2
Quantum Mechanics	2	Human Interface Design	2
Continuum Mechanics	2	Project Management	2
Systems Engineering	2	(Total of All Credits on Elective Subjects)	6
A la carte of Experiments	2	Specialized-Advanced Subjects	
Business Accounting	2	〈Required Subjects〉	
Science Literacy Education Practice	2	Graduation Thesis 2	8
(Total of All Credits on Elective Subjects)	16	(Total of All Credits on Required Subjects)	8
〈Required Subjects〉		〈Required Subjects〉	
Specialized-Advanced Subjects		Specialized-Advanced Subjects	
〈Required Subjects〉		〈Required Subjects〉	
Advanced Experiments in Architectural and Civil Engineering	4	Renovation Design	2
Practical Training in Architectural and Civil Engineering	3	Advanced Geotechnical Engineering	2
Graduation Thesis 1	6	Water Management Engineering	2
(Total of All Credits on Required Subjects)	13	Advanced Random Vibration for Civil Engineering	2
〈Elective Subject〉		Environmental Planning	2
Advanced Structural Analysis	2	Theory of Urban Planning and Design	2
Infrastructure Planning	2	Maintenance and Management	2
Environmental Control Engineering	2	(Total of All Credits on Elective Subjects)	14
(Total of All Credits on Elective Subjects)	6	〈Required Subjects〉	



Practice of 3D printing



Advanced Experiment in Electronic System Engineering



Wooden Tower created by students at Design Competition



Academic Calendar

April

First Semester. Entrance Ceremony
Freshmen School Orientation Annual Health Examination
Leaders Workshop



Athletic Meet

May

Ball games
Book Hunting
Dormitory Festival



College Festival



Study Tour

June

Mid-Semester Examination

July

Tokai Region Inter-Collegiate Athletic Competition
Term-End Examination



Dormitory Festival

August

Term-End Examination
Summer Vacation begins.
All-Japan Inter-Collegiate Athletic Competition



Robot Contest



Graduation Ceremony

September

Summer Vacation ends.
First Semester ends.

October

Second Semester begins. College Festival
Robot Contest

Ball games
Programming Contest



Book Hunting



Dormitory Festival

November

Study Tour
(for the 3rd and 4th year students)
Library Awards

Design Competition
Tokai, Hokuriku region English Speech Contest



Entrance Ceremony



Ball games

December

Mid-Semester Examination
Winter Vacation begins.

January

Winter Vacation ends.
English Presentation Contest



Library Awards

February

College Entrance Examination
Term-End Examination

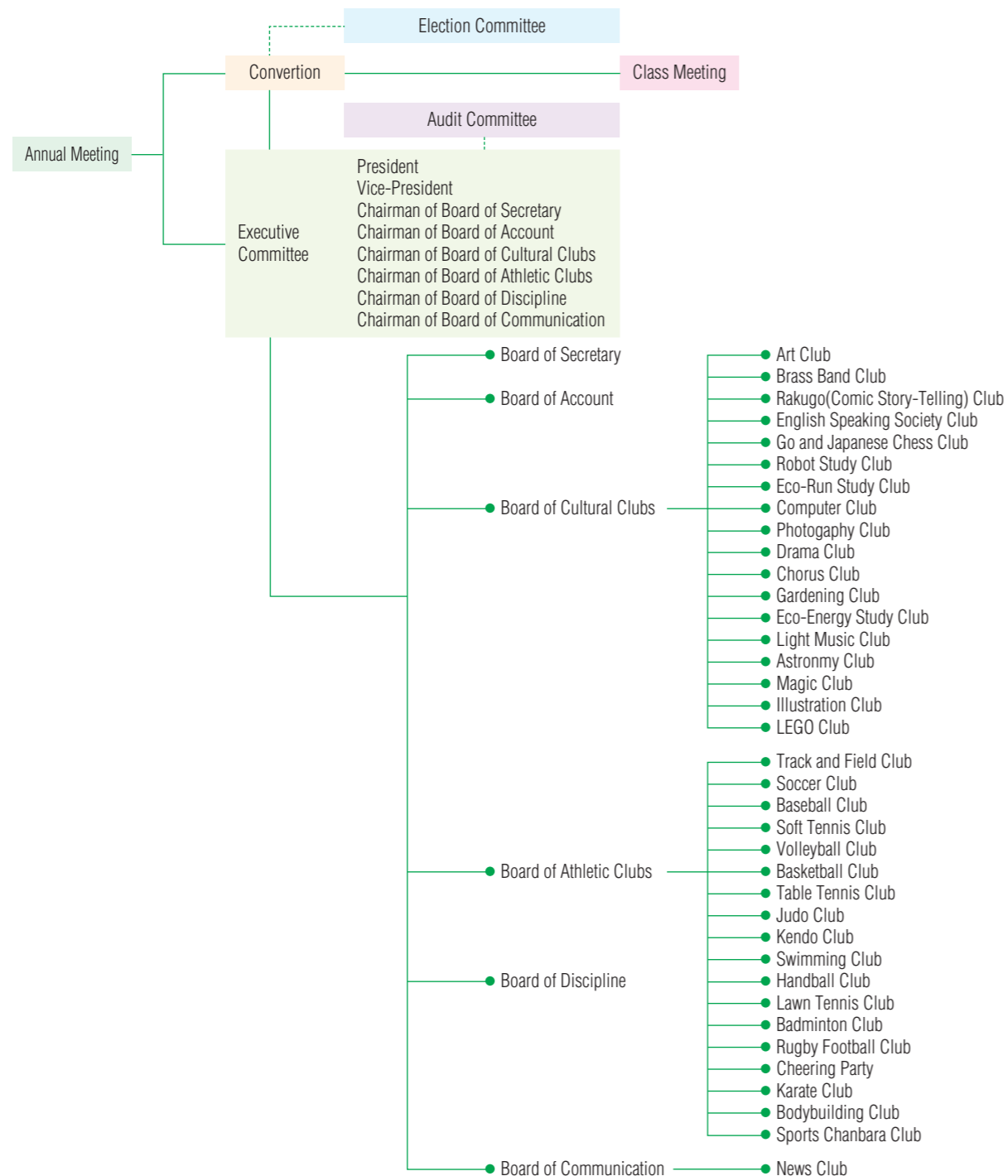
March

Graduation Ceremony
Second Semester ends.

The Student Council aims at contributing to the fulfillment of the educational purposes of the college, offering opportunities to students for voluntary activities under the guidance of instructors. To achieve this aim, the Student Council makes every effort:

- ① to secure a happy, enriched and disciplined college life and to maintain traditional school spirit.
- ② to develop personality by cultivating sound hobbies and rich cultural experiences.
- ③ to promote mental and physical health by effectively utilizing spare time.
- ④ to cultivate the spirit of independence and democracy through active participation in group activities.
- ⑤ to foster students in becoming respectable members of society through voluntary participation in every field of the college life.

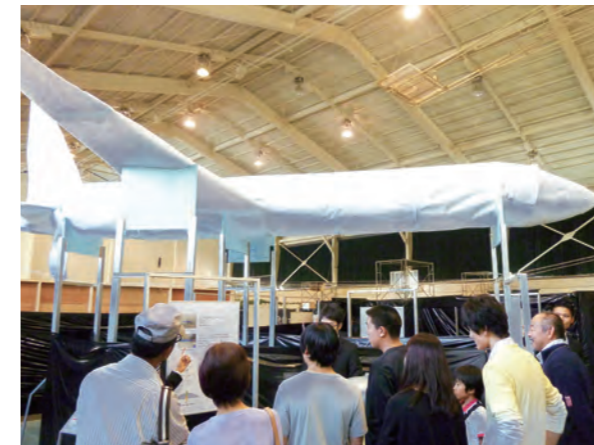
Organization of Student Council



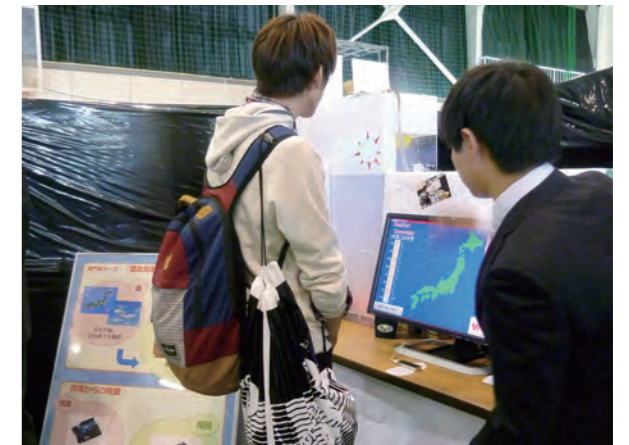
Academic Exhibition

All the fourth grade students organize an academic exhibition every year in College Festival at National Institute of Technology, Gifu College. In the exhibition, the students design, create and display their products related to their majors. Also, visitors of the exhibition can enjoy interactive exhibits.

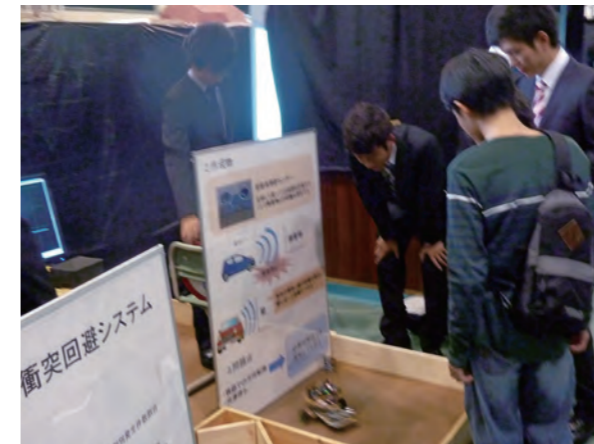
At the exhibition in 2014, students at each major displayed their products as seen in the pictures below. Not only did they display their products at the exhibitions, but the students also gave presentations and answered questions from the audience. So visitors and audience could enjoy the exhibitions without and knowledge on engineering.



Exhibition of Mechanical Eng.



Exhibition of Electrical and Computer Eng.



Exhibition of Electronic Control Eng.



Exhibition of Civil Eng.



Exhibition of Architecture

IAO (International Affairs Office) is in charge of all the international activities of National Institute of Technology (NIT), Gifu College, including enrollment of foreign students, and exchanges of students, faculty members, and research information with universities and other higher educational and research organizations in foreign countries.

Enrollment of Foreign Students

Since 1991, NIT, Gifu College has enrolled 70 foreign students in total who are sponsored by either Japanese or Malaysian government, or are privately funded. Currently, five international students from Malaysia, Mongolia, and Laos are enrolled.



Skiing school in winter for the foreign students

Enrolled foreign students by country (1991~2015)

Country	Departments※	M	E	D	C	A	Total
Malaysia		14	4	16	2	2	38
Laos		0	6	0	0	0	6
Vietnam		0	3	0	0	1	4
Mongolia		1	0	0	1	3	5
Indonesia		0	2	1	0	0	3
Sri Lanka		0	1	1	1	0	3
Other Countries ※		1	2	3	0	5	11
Total		16	18	21	4	11	70

※ M : Department of Mechanical Engineering C : Department of Civil Engineering E : Department of Electrical and Computer Engineering A : Department of Architecture D : Department of Electronic Control Engineering

Our Partner Universities in the World (as of April, 2014)

To promote international activities of NIT, Gifu College such as students' internship (a short-term exchange program), exchange of faculty members, research collaboration, etc., we have concluded comprehensive exchange agreements with foreign universities; first, in November, 2011, Institut Teknologi Bandung (ITB), Indonesia, Universiti Teknologi Malaysia (UTM) in July, 2012, University of Hannover, Germany in September, 2012, University of Iowa, USA in April, 2013 and TTPU, Turin Polytechnic University in Tashkent, Uzbekistan in June, 2014. We plan to enlarge these activities.

Comprehensive Exchange Agreements

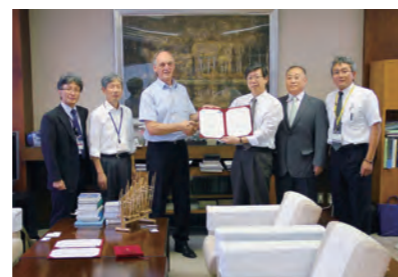
Country	Institutions	Date signed
Indonesia	Institut Teknologi Bandung	Nov. 3, 2011
Malaysia	Universiti Teknologi Malaysia	July 30, 2012
Germany	University of Hannover, Faculty of Mathematics and Physics	Sept. 24, 2012
U.S.A.	University of Iowa	April 12, 2013
Uzbekistan	TTPU, Turin Polytechnic University in Tashkent	June. 25, 2014



With Rector Prof. Akhmaloka at Institut Teknologi Bandung, Indonesia



With President Dr. S. Mason at University of Iowa, USA



With Prof. G. Gross at University of Hannover, Germany



With Deputy Vice Chancellor Prof. Datuk Tajudin Ninggal at Universiti Teknologi Malaysia



With the First Vice Rector Dr. K. Sharipov, TTPU, Turin Polytechnic University in Tashkent

International Internship in Industry and Partner University

Since 2003, by the courtesy of TYK corporation (Head office in Tajimi city), NIT, Gifu College has sent the students in Advanced Engineering Course to TYK America Inc. in Pittsburg, USA and TYK Ltd. in Durham, UK for their three weeks' internship.

In 2012, we expanded its activity to foreign universities with which NIT Gifu College has concluded comprehensive exchange agreements. From 2013, we have accepted students from the foreign universities for short term study, and these true "exchange" of students between NIT, Gifu College and foreign universities has started. The number of the students who participated in the exchange program is summarized in the table. These exchange activities have been financially supported by JASSO after 2013.

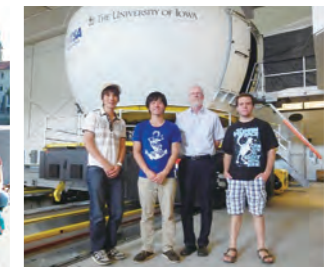
In 2015, we will dispatch 13 students to foreign universities while will accept 18 students from the universities.

International Internship

Universities & Company	Academic year	2003 2012	2013	2014	2015
TYK Ltd.	Dispatched	18	2	2	2
	Accepted	3	3	1	3
Institut Teknologi Bandung	Dispatched	0	0	3	3
	Accepted	0	3	2	2
Universiti Teknologi Malaysia	Dispatched	0	3	4	5
	Accepted	0	3	4	5
University of Hannover	Dispatched	0	2	0	2
	Accepted	0	0	3	3
University of Iowa	Dispatched	-	2	1	2
	Accepted	-	0	2	3
TTPU, Turin Polytechnic University in Tashkent	Dispatched	-	-	0	2
	Accepted	-	-	0	4



University of Hannover



University of Iowa



(From activities during the internship at ITB in 2012) Tour to Toyota Motor Factory, Jakarta. Presentation on global warming at an elementary school, Bandung.

Academic Exchange (2nd Joint Seminar ESDP 2015)

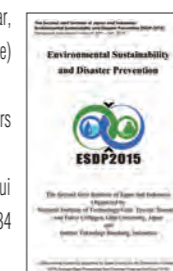
In July, 2012, the president of NIT, Gifu College visited ITB and introduced research activities of NIT, Gifu College to the faculty members of Civil and Environmental Engineering (FCEE), ITB. From the ITB side, in October, 2012, two Vice Deans and in June, 2013, Dean and Vice Dean visited our laboratories and discussed about mutual research interests. Based on these activities, NIT, Gifu College and FCEE, ITB agreed to have a joint seminar, and to extend our knowledge on new methods of the development of infrastructure in rapidly-growing urban areas in Indonesia, which would ensure both environmental sustainability and resilient nature of the mega cities against natural disasters.

Based on these activities, we had the first Joint Seminar on Environmental Sustainability and Disaster Prevention (ESDP) at Bandung Institute of Technology (ITB) on 21 Nov. 2013. The seminar was held as an extension of SIBE 2013 which was an international conference hosted by ITB-FCEE during 19-20 Nov. 2013. Five faculty members of NIT, Gifu College joined in.

Following to the successful 1st Joint Seminar of ESDP, the 2nd Joint Seminar, ESDP 2015, was held at Denpasar, Indonesia during 22-23 March, 2015. This meeting was supported by JSPS (Japan Society of Promotion of Science) through the Bilateral Open partnership Program between Japan and Indonesia.

In the seminar, one key note lecture by Prof. G. Gross at University of Hannover, Germany and 21 ordinary papers from both Japan and Indonesia sides were presented.

Participants included 8 faculty members from NIT, Gifu College, each from NIT, Toyota, Numazu and Fukui College, and 3 from Gifu University on Japan side. The proceedings including the 22 presented papers with 234 pages was published.



Our school also focuses on community involvement, in which the Techno Center has taken the lead. The main aims of the center are the development of educational research and the contribution to the improvement and progress of industrial technology within the local area. The center has taken an active role in its district to achieve these goals. In addition, the Association of Regional Alliances has been established to promote regional industry and culture through the cooperation of our school's research and education. The center also actively supports seminars for the cultivation of human resources, and conducts explanation meetings and observation tours of the association's member companies.



Techno Symposium



Association of Regional Alliances General Meeting



Core Human Resources Training Seminar

Relevant Websites

Projects	Websites
Association of Regional Alliances	http://www.gifu-nct.ac.jp/techno/chikirenkei/
Industry-Academia-Government Collaboration Advisors	http://www.gifu-nct.ac.jp/techno/obrenkei/
Technological Literacy Education Promotion Office	http://www.gifu-nct.ac.jp/techno/literacy/
On Campus Lectures	http://www.gifu-nct.ac.jp/kikaku/kouza.html
Industry-Academia-Government Collaboration and Research Seeds Collection	http://www.gifu-nct.ac.jp/techno/seeds2013/

Schedule of Activities

projects	date
The 2014 Core Human Resources Training Tutoring School	(Basic Course) April 17, 2014/ May 8, 2014/ May 22, 2014/ June 6, 2014/ June 19, 2014/ July 3, 2014 (Advanced Course) August 8, 2014/ August 21, 2014/ September 4, 2014/ September 18, 2014/ October 2, 2014/ October 16, 2014
The 2014 Lecture of Intellectual Property	September, 2014
Association of Regional Alliances General Meeting The 23rd Industry-Government-Academic Exchange Council Technology Symposium 2014	December 5, 2014

Contents of Activities

projects	details
Literacy-related activities, debriefs and events	•Science Technology Exhibition in Gifu City Culture Center
Research projects between Association of Regional Alliances and Gifu National College of Technology	3 research projects
Gifu Network University Consortium	scheduled classes: •Mathematics •Experiments •Digital system basis •Digital system application

Contents of Activities

• Science and Technology Literacy Education Practice

Chance to have the people including the child interest in science and technology is needed for those to develop as the whole society. However, at first an explainer must have the ability to discuss, verify, and describe science and technology to explain to the people. So at our school, the educational activities as which student's literacy is trained are put into effect through the training which describe acquired knowledge and skills to the people in easy-to-understand informations.

In this activity, workshop classes and experiences are planned and performed to elementary and junior high schoolers or adult peoples at the outside of the school. Students prepare necessary original teaching materials, tool kits for workshop, laboratory equipments for the demonstration, exclusive applications, announcement manuals, description posters and so on. Student's unit judgment estimates by each presentation and report. As examples of the activity theme are exploration robot, rocket, GPS, radiation, earthquake disaster prevention, the technology with the relation is treated in our life including the community improvement.

In this way, the people's literacy of science and technology is intended to improve by student's learning the sociality and explaining.

• Extension courses

Courses

JHS : Junior High school ES : Elementary school

No	Lecture	Department Incharge	Date	Participants	Fee
1	Kinokuni Robotics Competition for junior high school students	Mechanical Engineering	① 7/19(Sun) ② 10/18(Sun)	JHS students	free
2	Kinokuni Robotics Competition for elementary school students	Mechanical Engineering	① 7/19(Sun) ② 10/18(Sun)	ES students	free
3	Basic Electrical Engineering and Electronics : Building a circuit	Electrical and Computer Engineering	7/21(Tue)	JHS students	free
4	Location-based Web Service Tutorial	Electrical and Computer Engineering	7/21(Tue)	JHS students	free
5	Fabrication of a robot using electronic circuits	Electronic Control Engineering	7/18(Tue)	JHS students	free
6	Origami structures - Form and Strength -	Civil Engineering	10/24(Sat)	JHS students	free
7	Introduction Course of House Planning	Architecture	8/20(Sat)	JHS students and their parents, JHS teachers	free
8	Cloisonne "Shippoyaki" art class	Tech Office	8/5(Tue)	JHS and older (5th and 6th graders are also welcomed)	free
9	Postcard card design using 3D-CG software	Tech Office	8/21(Fri)	JHS and older	free
10	Let's make illumination using LED	Tech Office	9/6(Sun)	JHS and older (5th and 6th graders accompanied by an adult are also welcomed)	free

• Classes on Demand

The college offers a lot of delivery classes in order to encourage junior high school students to experience higher education briefly. Professors visit junior high schools and teach their specialization fields: natural science, humanities, engineering of mechanical, electrical, computer, electronic control, civil and architecture. These experiences would be precious opportunities for the students. In fiscal 2014, twelve themes (twenty classes) were implemented.

Table Title of Delivery Class implemented in fiscal 2014

Let's build robots using Lego	The shapes of structures made of paper
Let's learn the strength of bridges	Science Workshop
Architectural acoustics	Let's enjoy a webcam
Let's try use the GPS	Puzzle class Inspire your brain !
Theory of fractions	Let's enjoy a sensor
Let's learn English through movies	Code-breaking

Library

The library provides its users with various kind of information for the purposes of education and research, mainly consisting of approximately 90,000 books of which the majority concerns technology. Users feel open and bright atmosphere in the library with open-stack shelves located according to their categories such as qualifying tests, job-hunting, patent, etc.

The library has its annual events in each season like book-hunting, workshop on document retrieval and so on. It is open from 8:30 a.m. to 8:00 p.m. on weekdays, and from 9:00 a.m. to 4:00 p.m. on Saturdays. In the 2013 fiscal year, we expanded the area of studying space, and the opening hours on Saturdays during the examination weeks have been extended for the students' convenience.

(1) Hours of opening

Term Monday...Friday
8:30 a.m. ... 8:00 p.m.
Saturday
9:00 a.m. ... 4:00 p.m.
Closing Term of Dormitory
8:30 a.m. ... 5:00 p.m.

(2) Closed

Sundays, National Holidays, Winter Holidays (Dec. 29th...Jan. 3rd), Saturdays during Spring, Summer and Winter Vacation, End-of-the-School-Year holidays and Closing Term of Dormitory.
Notices will be given when the library is to be closed in other occasions.

Visit our website for more information
<http://www.gifu-nct.ac.jp/tosho/>



Book Hunting
(for 2nd,4th students)

Collection of Books

(2015.4.1)

Classification	Japanese	Foreign	Total
General	2,177	206	2,383
Philosophy	2,739	192	2,931
History	5,891	125	6,016
Social Science	6,687	195	6,882
Natural Science	14,639	3,799	18,438
Technology	27,636	3,879	31,515
Industry	1,079	27	1,106
Arts	3,659	150	3,809
Language	3,392	1,917	5,309
Literature	12,227	2,411	14,638
Total	80,126	12,901	93,027

Kinds of Periodicals

Japanese	Foreign	Total
73	3	76

Audio-Visual Materials

DVD	246
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Library Guidance (for 1st-year students)



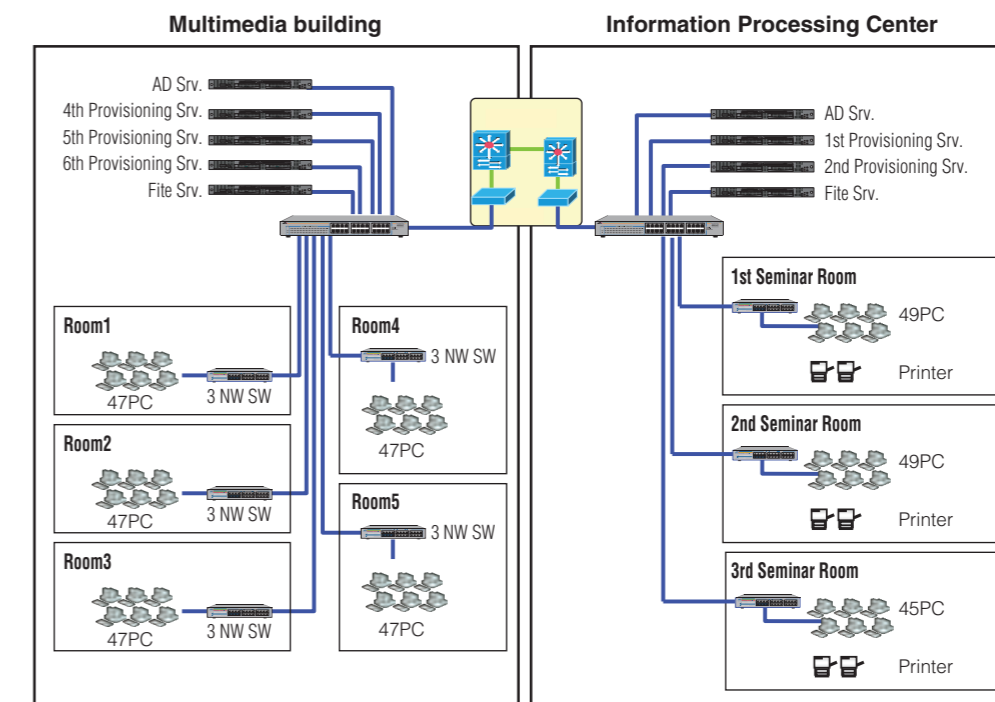
Teachers Recommended Books

Computer Center

The Information Processing Center is the common facilities which can be used for computer education, e-learning, CAI (Computer Assisted Instruction), CAD (Computer Aided Design), graduation studies, academic research and so on.

The school's local network runs on the gigabit Ethernet, and is connected to SINET and Gifu Information Super Highway. Since the existing system was updated in April of 2011, 143 PCs in the Center's three classrooms and 235 PCs in the multimedia building run on the network boot system. They are connected to the Internet, so the students can use them to communicate with various people by e-mail, to look around the websites and to search for references.

Systems



Lecture in Seminar room



1st Seminar Room



Servers

Dormitory

Our college has boarding houses attached to it. The dormitory named "Yushiryo" can accommodate up to 291 students whose hometown is so far from the college. Every year about 60 new students are permitted to enter. It is located within several minutes' walk to the main buildings of the college. It consists of five boarding houses with furnished rooms, three for boys (A, B · C and D houses) and two for girls (Girls house 1 and 2). A part of the B house and Girls house 2 accommodates students from overseas.

The dormitory also has a large dining hall where almost all the boarders can have meals together. The students are expected to promote their autonomy activity so that upper-class students can give lower ones some advice and aid. The fee for boarding itself is 700 yen except for the C and D house (800 yen here). Total monthly pay is approximately 35,000 yen including food expenses, lighting and heating expenses and so on.

Capacity of Boarders

Name	Capacity of room	Number of Room	Capacity
A house	1~2	42	77
B · C house	1~2	63	88
D house	1	84	84
Girl's house 1	2	16	32
Girl's house 2	2	5	10
Total		210	291

Current Number of Boarders

(As of April, 2013)

Grade Course	Grade					Total
	1st	2nd	3rd	4th	5st	
Mechanical Eng.	(1) 11	15	9	11	6	(1) 52
Electrical and Computer Eng.	(1) 11	7	(3) 10	8	(1) 12	(5) 48
Electronic Eng.	(1) 15	17	12	(1)① 13	① 7	(2)② 64
Civil Eng.	(1) 9	(3) 10	(1) 9	4	8	(5) 40
Architecture	(4) 10	(4) 12	(2)① 10	(1)① 8	(2) 11	(13)② 51
Total	(8) 56	(7) 61	(6)① 50	(2)② 44	(3)① 44	(26)④ 255
Electronic System Eng. Advanced Course	1	1				2
Architecture Civil Eng. Advanced Course	2	1				3
Total	3	2				5

() Female Students, ○ Overseas Students



Dormitory



Boarders Room (A house)

Techno Center

Techno Center including Machine Practice Workshop is an institution for use of all the departments for manufacturing laboratory class. It also offers machine tools and production of equipments for manufacturing education, research activities and club activities. Design and production works for graduation research or for the NHKRobot Contest are some of the projects done at Machine Practice Workshop. Some short courses for utilization of machine tools for visiting students, and open classes for fundamental manufacturing technologies are offered here.

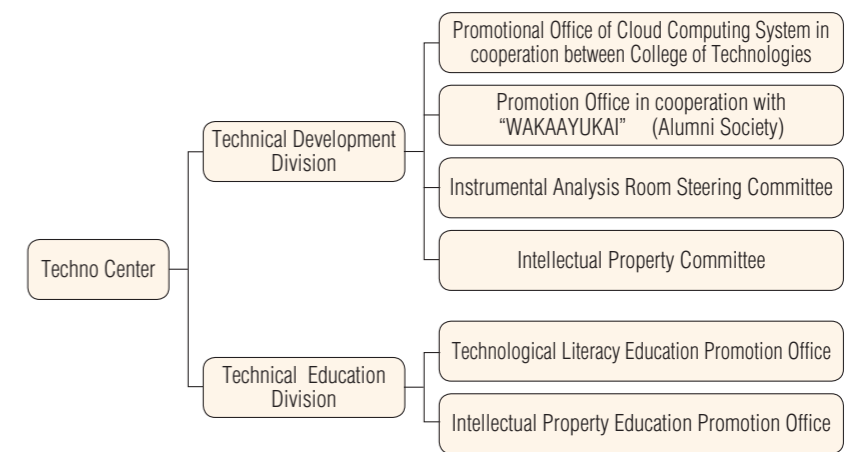
Besides fundamental machine tools for manufacturing education, the Machine Practice Workshop has various kinds of newly developed multifunctioning equipments with computers. Some major equipments installed in this workshop are shown in Table 1.

Furthermore, a comprehensive manufacturing laboratory class is set for the 4th grade students of Mechanical Engineering Department. In this class, students experience the whole process from the design through the production of goods.

Website: <http://www.gifu-nct.ac.jp/techno/>

Table 1. Major equipments installed

Equipment	Number
lathe	12
milling machine	9
shearing machine	1
electric furnace	2
CNC turning center	2
CNC milling machine	1
machining center	2
electric discharge machine	2
CNC profire grinding machine	1
industrial robot	2
arc welder	11
gas welder	2
factory automation practice teaching system	1



Techno Center Organization Chart



Machining Center



Electric Discharge Machine



Factory Automation Practice Teaching System

• Instrumental Analysis Room



Scanning Electron Microscope, Hitachi High Technology, S-3400



X-ray Diffractometer, Rigaku, SmartLab



Thermo Science, iS50 FT-IRFourier Transform Infrared Spectroscopy

• Activities of the Technological Literacy Education Promotion Office



Gifu Science Festival



HIRAMEKI Puzzle

• Lecture For Obtaining Competitive Funds



Lecture For Obtaining Competitive Funds

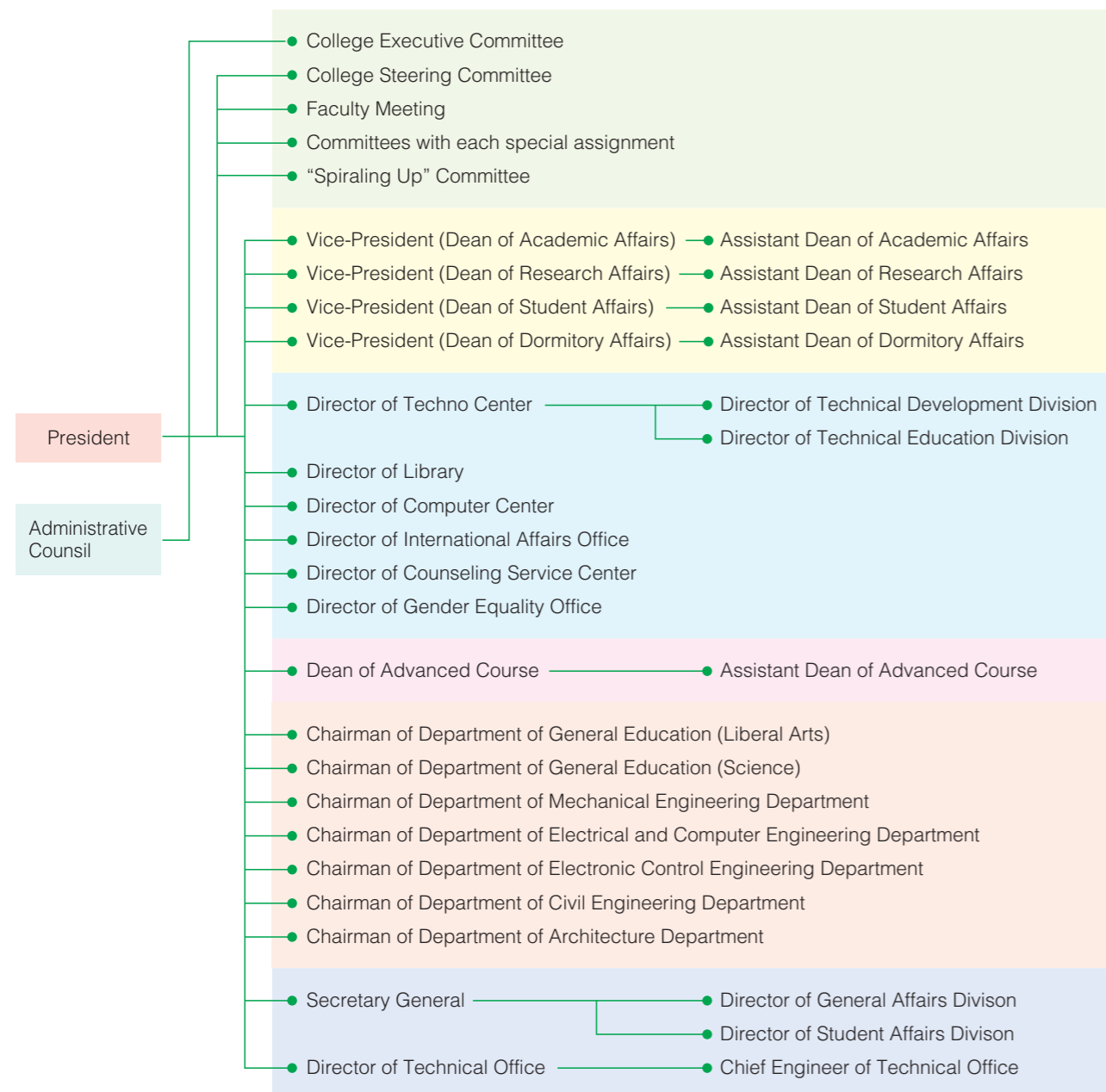
Organization

Present Staff

As of April 1, 2015

Classification	Present
Teaching Staff	
President	1
Professor	36
Associate Professor	24
Lecturer	9
Assistant Professor	8
Research Assistant	0
Officials	42
Total	120

Chart of Organization



Executives

Title	Name	Title	Name
President	KITADA, Toshihiro	Director of Counseling Service Center	KOBAYASHI, Yoshimitsu
Vice-President (Dean of Academic Affairs)	KUMAZAKI, Hironori	Director of Gender Equality Office	UEHARA, Toshiyuki
Vice-President (Dean of Research Affairs)	WADA, Kiyoshi	Dean of Advanced Engineering Faculty	KITAGAWA, Hideo
Vice-President (Dean of Student Affairs)	KUBOTA, Keiji	Chief of Advanced Course	IWASE, Hiroyuki
Vice-Presidential (Dean of Dormitory Affairs)	MAGUSA, Atsushi	Chairman of Department of General Education (Liberal Arts)	KAMEYAMA, Taichi
Director of Techno Center (Director of Technical Office)	KATAMINE, Eiji	Chairman of Department of General Education (Science)	SAKABE, Kazuyoshi
Director of Technical Development Division	KATAMINE, Eiji	Chairman of Department of Mechanical Engineering	YAMADA, Minoru
Director of Technical Education Division	MORIGUCHI, Hirofumi	Chairman of Department of Electrical and Computer Engineering	TOKORO, Tetsuro
Director of Library	NAKAJIMA, Yasutaka	Chairman of Department of Electronic Control Engineering	FUKUNAGA, Tetsuya
Director of Computer Center	OGAWA, Nobuyuki	Chairman of Department of Civil Engineering	YOSHIMURA, Yuji
Director of International Affairs Office	HABUCHI, Hitoe	Chairman of Department of Architecture	INUKAI, Toshitsugu

Administrative Staff

Title	Name	Title	Name
Secretary General	ONOSE, Katsuji	Assistant Director of Student Affairs Division (Academic Affairs and Library)	WATANABE, Hiroko
Director of General Affairs Division	KABA, Mitoko	Assistant Director of Student Affairs Division (Student Affairs)	ARO, Makoto
Director of Student Affairs Division	UMEMURA, Tomofumi	Chief Engineer of Technical Office	KATOH, Shinji
Assistant Director of General Affairs Division (Finance)	SAITO, Atsushi		

Health Service Staff

Title	Name	Title	Name
Physician	HORIBE, Ren	Pharmacist	MORI, Toshimi
Physician	YOKOYAMA, Hitomi	Counselor	USUI, Toshio
Physician	AMANO, Yuhei	Counselor	YAMAMOTO, Hiroyo
Dentist	TAKEUCHI, Mikio		

Curriculum

General Education

Students enrolled after 2014

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Japanese	Japanese A	2	2				
	Japanese B	2	2				
Social	Japanese	5		2	2	1	
	Ethics	2		2			
	Politics and Economics	2			2		
	History	4	2	2			
	Geography	2	2				
Mathematics	Mathematics A I	6	2	2	2		※1
	Mathematics A II	6	2	2	2		
	Mathematics B	4	2	2			※2
Science	Physics A	1	1				
	Physics B I	2		2			
	Physics B II	2		2			
	Chemistry A	3	3				
	Chemistry B	2		2			
Health and Physical Education	Health Education	2	2				
	Physical Education	8	2	2	2	2	
Art/Required Subjects	Art	1	1				
	Music	1	1				
Foreign Language	English A	10	2	2	2	2	※3
	English B	3	2	1			※4
	English C	5	2	2	1		※5
	German	4				2	2
Total of Credits Offered			30	25	13	9	4
Total of Necessary Credits			30	25	13	9	4
Home Room Activities			1	1	1		

- ※1 analysis
- ※2 algebra
- ※3 English reading
- ※4 English grammar and composition
- ※5 oral communication

Department of Mechanical Engineering

Students enrolled after 2012

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics I	2					2	
Applied Mathematics II	1					1	
Applied Mathematics III	1					1	
Applied Physics I	2				2		
Applied Physics II	1					1	
Applied Physics III	1						1
Fundamentals of Mechanics	2				2		
Mechanism	2				2		
Machinery Dynamics I	1					1	
Machinery Dynamics II	1						1
Strength of Materials I	2				2		
Strength of Materials II	1					1	
Strength of Materials III	1						1
Fluid Mechanics I	2					2	
Fluid Mechanics II	1						1
Fluid Mechanics III	1						1
Thermodynamics I	2					2	
Thermodynamics II	1						1
Heat Transfer I	1					1	
Energy Engineering	1						1
Material Technology I	1				1		
Material Technology II	1					1	
Material Technology III	1						1
Metal Cutting and Casting Process I	1			1			
Metal Cutting and Casting Process II	1			1			
Metal Deformation Process I	1					1	
Metal Deformation Process II	1						1
Production Engineering	1						1
Control Engineering I	1					1	
Control Engineering II	1						1
Instrumentation Technology	1				1		
Machine Design I	1				1		
Machine Design II	1					1	
Computer Literacy	1			1			
Information Processing I	1				1		
Information Processing II	1				1		
Numerical Calculation I	1					1	
Introduction to Electrical Engineering	1					1	
Electronics	1						1
Fundamentals of Manufacturing Engineering	3		3				
Machinery Design and Drafting I	2			2			
Machinery Design and Drafting II	2				2		
Mechanical Engineering Experiment I	2				2		
Mechanical Engineering Experiment II	2					2	
Mechanical Engineering Practice I	3			3			
Mechanical Engineering Practice II	3				3		
Engineering Practice	3					3	
Engineering Analysis	2						2
Industrial English	1					1	
Topics of Mechanical Engineering	2					2	
Engineering Ethics	1						1
Graduation Research	8						8
Total of Credits	80	3	8	20	27	22	
Theory of Elasticity	1					1	
Theory of Plasticity	1					1	
Numerical Calculation II	1					1	
Heat Transfer II	1					1	
Hydraulic Machinery	1					1	
Energy and Environment	1					1	
System Engineering	1					1	
Mechatronics	1					1	
Robot Engineering	1					1	
Total Credits	9					9	
Total of Necessary Credits on Elective Subjects	6and more					6and more	
Total of All Credits	89	3	8	20	27	22	
Total of Necessary Credits on Specialized Subjects	86and more	3	8	20	27	28and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation		33	33	33	36	32and more	

Department of Electrical and Computer Engineering

(Electrical and Electronic Course)

Students enrolled after 2007

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics A	1				1		
Applied Mathematics B	2					2	
Applied Mathematics C	1					1	
Applied Mathematics D	1					1	
Applied Physics I	4				2	2	
Electromagnetics I	3				2	1	
Electric Circuit I	4			2	2		
Electronics	3				1	2	
Electronic Properties	1				1		
Electronic Circuit Engineering	2				2		
Electrical Materials I	1					1	
Electric Machinery	2				2		
Communication Engineering	2					2	
Digital Circuit Engineering I	1		1				
Computer Architecture	2					2	
Numerical Analysis	1					1	
Signal Processing	1					1	
Programming and Its Seminar	4		2	2			
Scientific and Technical English	1				1		
Engineering Ethics	1						1
Design Drafting	3	3					
Electrical and Computer Engineering Laboratories	9		3	4	2		
Topics in Engineering Fundamentals	2					2	
Graduation Research	6						6
Electrical and Electronic Engineering Laboratories	6					2	4
Electromagnetics II	1					1	
Electric Circuit II	1					1	
Information Transmission Engineering	2					2	
Digital Circuit Engineering II	1					1	
Total of Credit	69	3	8	20	27	11	
High Voltage Engineering	1					1	
Power Generation and Transformation Engineering	1					1	
Power Transmission and Distribution Engineering	1					1	
Laws and Regulations of Electricity	1					1	
Power Electronics	1					1	
Energy Conversion	1					1	
Electrical Materials II	1					1	
Control Theory	2					2	
Opto-Quantum Electronics	1					1	
Plasma Engineering	1					1	
Radio Wave Propagation and Its Electronic Devices	1					1	
Electronic Measurements	1					1	
Optical Engineering	1					1	
System Engineering	1					1	
Applied Physics II	1					1	※1
Information Theory	1					1	
Data Structures and Algorithms	1					1	
Formal Language Theory	1					1	
Mathematics in Computer Science	2					2	
Artificial Intelligence	1					1	
Computer Networks	1					1	
Software Engineering	1					1	
Introduction to Compilers	1					1	
Image Processing Engineering	1					1	
Operating Systems	1					1	
Total Credits	27					27	
Total of Necessary Credits on Elective Subjects	17and more					17and more	
Total of All Credits	96	3	8	20	27	38	
Total of Necessary Credits on Specialized Subjects	86and more	3	8	20	27	28and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation	167and more	33	33	33	36	32and more	

※1 Identical with Department Electronic Control Engineering

(Computer Engineering Course)

Students enrolled after 2007

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics A	1				1		
Applied Mathematics B	2					2	
Applied Mathematics C	1					1	
Applied Mathematics D	1					1	
Applied Physics I	4				2	2	
Electromagnetics I	3				2	1	
Electric Circuit I	4			2	2		
Electronics	3				1	2	
Electronic Properties	1				1		
Electronic Circuit Engineering	2				2		
Electrical Materials I	1					1	
Electric Machinery	2				2		
Communication Engineering	2					2	
Digital Circuit Engineering I	1		1				
Computer Architecture	2					2	
Numerical Analysis	1					1	
Signal Processing	1					1	
Programming and Its Seminar	4		2	2			
Scientific and Technical English	1				1		
Engineering Ethics	1						1
Design Drafting	3	3					
Electrical and Computer Engineering Laboratories	9		3	4	2		
Topics in Engineering Fundamentals	2					2	
Graduation Research	6						6
Computer Engineering Laboratories	6					2	4
Information Theory	1					1	
Data Structures and Algorithms	1					1	
Formal Language Theory	1					1	
Mathematics in Computer Science	2					2	
Total of Credit	69	3	8	20	27	11	
Artificial Intelligence	1					1	
Computer Networks	1					1	
Software Engineering	1					1	
Introduction to Compilers	1					1	
Image Processing Engineering	1					1	
Operating Systems	1					1	
Electromagnetics II	1					1	
Microwave Engineering	1					1	
Electric Circuit II	2					2	
Information Transmission Engineering	1					1	
Digital Circuit Engineering II	1					1	
Power Electronics	1					1	
Electrical Materials II	1					1	
Control Theory	2					2	
Opto-Quantum Electronics	1					1	
Plasma Engineering	1					1	
Radio Wave Propagation and Its Electronic Devices	1					1	
Electronic Measurements	1					1	
Optical Engineering	1					1	
Advanced Electrical and Computer Engineering	1					1	
Applied Physics II	1					1	※1
Total Credits	23					23	
Total of Necessary Credits on Elective Subjects	17and more					17and more	
Total of All Credits	92	3	8	20	27	34	
Total of Necessary Credits on Specialized Subjects	86and more	3	8	20	27	28and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation	167and more	33	33	33	36	32and more	

※1 Identical with Department Electronic Control Engineering

Curriculum

Department of Electronic Control Engineering

Students enrolled after 2012

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics A	1			1			
Applied Mathematics B	2				2		
Applied Mathematics C	1				1		
Applied Mathematics D	1				1		
Applied Physics I	4			2	2		
Information Processing I	2		2				
Information Processing II	2			2			
Information Processing III	2				2		
Introduction to Electronic Control Engineering	1	1					
Electromagnetics I	2			2			
Electromagnetics II	2				2		
Electric Circuits I	2			2			
Electric Circuits II	1				1		
Electric Circuits III	1				1		
Electronic Circuits	2			2			
Digital Circuits	2		2				
Electronic Control Circuits	1				1		
Electronics I	1					1	
System Control I	1					1	
Electric Power Devices I	1					1	
Electronic Devices I	1					1	
Computer Architecture I	1					1	
Computer Communication Engineering	1					1	
Instrumentation Engineering	2				2		
Control Engineering	2				2		
Robotics I	1					1	
Kinematics of Machinery I	2			2			
Kinematics of Machinery II	1				1		
Kinematics of Machinery III	1				1		
Strength of Materials I	2			2			
Strength of Materials II	1				1		
Material Technology	1					1	
Engineering Ethics	1					1	
Environment and Energy Engineering	1					1	
Design and Drafting I	2		2				
Design and Drafting II	1			1			
Engineering Experiments I	4			4			
Engineering Experiments II	3				3		
Engineering Experiments III	3					3	
Advanced Engineering Experiments	2				2		
Workshop Practice I	2	2					
Workshop Practice II	2		2				
Fundamental Research of Electronic Control	2				2		
Graduation Research	6					6	
Total of Credits	77	3	8	20	27	19	
Applied Physics II	1					1	※1
Electronics II	1					1	
System Control II	1					1	
Electric Power Devices II	1					1	
Electronic Devices II	1					1	
Computer Architecture II	1					1	
Robotics II	1					1	
Electronic Apparatuses	1					1	
Applied Robotics	1					1	
Image Engineering	1					1	
Design of Electronic Equipments	1					1	
Reliability Engineering	1					1	
Total of Credits	12					12	
Total of Necessary Credits on Elective Subjects	9and more					9and more	
Total of All Credits	89	3	8	20	27	31	
Total of Necessary Credits on Specialized Subjects	86and more	3	8	20	27	28and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation	167and more	33	33	33	36	32and more	

※1 Identical with Electrical and Computer Engineering

Department of Civil Engineering

Students enrolled after 2007

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics	2				2		
Applied Physics	2			2			
Introduction to the Civil Engineering	2	2					
Computer Literacy	1	1					
Numerical Analysis	2				2		
Surveying I	1		1				
Surveying Exercises I	2		2				
Surveying II	1			1			
Surveying Exercises II	2			2			
Surveying III	2				2		
Spatial Information Engineering	1					1	
Fundamental drawing	2		2				
Design and drawing	2				2		
Fundamental Experiments I	3			3			
Fundamental Experiments II	3				3		
Experiments in Civil Engineering	1.5					1.5	
Fundamental Materials of Construction	1		1				
Concrete Engineering I	2			2			
Concrete Engineering II	2				2		
Fundamental Mechanics	2		2				
Structural Mechanics I	2			2			
Structural Mechanics II	3				3		
Hydraulics I	2			2			
Hydraulics II	3				3		
Soil Mechanics I	2			2			
Soil Mechanics II	3				3		
Planning Theory in Civil Engineering I	2			2			
Planning Theory in Civil Engineering II	1				1		
Environmental Engineering I	2			2			
Environmental Engineering II	2				2		
Sustainable Society Formation	1					1	
Urban Engineering	1				1		
Management of Construction	1					1	
Disaster Prevention Engineering	1					1	
Exercises in Civil Engineering I	1				1		
Exercises in Civil Engineering II	1.5					1.5	
Engineering Ethics	1					1	
Graduation Research	8					8	
Total of Credits	74	3	8	20	27	16	
Structural Analysis	1					1	
Steel Structure	1					1	
Concrete Engineering III	1					1	
Aseismic Engineering	1					1	
Applied Soil Mechanics	1					1	
Geotechnical Engineering	1					1	
Water Resources Engineering	1					1	
River Hydraulics	1					1	
River Hydrology	1					1	
River Mechanics and Ecology	1					1	
Biological Wastewater Treatment	1					1	
Urban and Regional Planning	1					1	
Traffic Engineering	1					1	
Energy Engineering	1					1	
Total of Credits	14					14	
Total of Necessary Credits on Elective Subjects	12and more					12and more	
Total of All Credits	88	3	8	20	27	30	
Total of Necessary Credits on Specialized Subjects	86and more	3	8	20	27	28and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation	167and more	33	33	33	36	32and more	

Department of Architecture

Students enrolled after 2013

Subjects	Credits	Credits by Grade					Notes
		1st	2nd	3rd	4th	5th	
Applied Mathematics I	1					1	
Applied Mathematics II	2					2	
Applied Physics I	2			2			
Applied Physics II	1					1	
Introduction to Architecture	1	1					
Digital Design I	1			1			
Digital Design II	1				1		
Information Processing I	1			1			
Information Processing II	1				1		
Structural Mechanics I	2			2			
Structural Mechanics II	2				2		
Building Material I	1					1	
Strength of Materials	1			1			
Construction Methods I	1	1					
Construction Methods II	1		1				
Wood Structure	1			1			
Reinforced Concrete Structure I	2				2		
Reinforced Concrete Structure II	1					1	
Steel Structure I	2				2		
Steel Structure II	1					1	
Introduction to Spatial Design	1		1				
Introduction to Interior Design	1		1				
Interior Design	1			1			
Interior Planning and Design I	1				1		
Interior Planning and Design II	2					2	
History of Architecture I	2		2				
History of Architecture II	1			1			
Architectural Planning I	2			2			
Architectural Planning II	2				2		
Urban and Regional Planning	1				1		
Environment Engineering I	1			1			
Environment Engineering II	2				2		
Building Equipment I	2				2		
Environment Design I	1					1	
Architectural Drawing I	2	2					
Architectural Drawing II	2		2				
Planning and Design I	4			4			
Planning and Design II	4				4		
Experiment of Architectural Engineering I	2			2			
Experiment of Architectural Engineering II	1				1		
Engineering Ethics of Architecture	1					1	
Building Production	2					2	
Building Law	2					2	
Surveying	1					1	
Surveying Exercises	1					1	
Disaster Prevention Engineering	1					1	
Graduation Research	8					8	
Total of Credits	77	4	7	20	28	18	
Applied Mathematics III	1					1	
Soil and Foundation Engineering	1					1	
Structural Design I	1					1	
Structural Design II	1					1	
Advanced Topics in Planning	1					1	
Participative Design	1					1	
History of Architecture III	1					1	
Planning and Design III	2					2	
Environmental Design II	1					1	
Building Equipment II	1					1	
Building Material II	1					1	
Composite structure	1					1	
Environmental Sociology	1					1	
Total of Credits	14					14	
Total of Necessary Credits on Elective Subjects	9and more					9and more	
Total of All Credits	91	4	7	20	28	32	
Total of Necessary Credits on Specialized Subjects	86and more	4	7	20	28	27and more	
Total of Necessary Credits on General Subjects	81	30	25	13	9	4	
Total of Necessary Credits for Graduation	167and more	34	32	33	37	31and more	

Curriculum

Course of Electronic System Engineering

Students enrolled after 2014

Subjects	Class Method	Credits	Credits by Grade		Notes	
			1st	2nd		
General Subjects	Required Subject	Social Ethics	Lecture	2	2	
	General English A1	Exercise	1	1		
	General English A2	Exercise	1	1		
	General English B	Exercise	2	2		
	Total of All Credits on Required Subjects		6	2	4	
	Elective Subjects	Literature	Lecture	2	2	
	General German 1	Exercise	1	1		
	General German 2	Exercise	1	1		
	A la Carte of Mathematics	Lecture	2	2		
	Total of All Credits on Elective Subjects		6	4	2	
Total of All Credits on General Subjects		12	6	6		
Specialized-Common Subjects	Required Subject	Life Science	Lecture	2	2	
	Material Chemistry	Lecture	2	2		
	Ecological Engineering	Lecture	2	2		
	Engineering of Information Processing Devices	Lecture	2	2		
	Applied Physics	Lecture	2	2		
	Information Engineering	Lecture	2	2		※1
	Creative Engineering Practice	Experimental and Practice	2	2		
	Total of All Credits on Required Subjects		14	6	8	
	Elective Subjects	Quantum Mechanics	Lecture	2	2	
	Continuum Mechanics	Lecture	2	2		
Environmental Material Science	Lecture	2	2			
Systems Engineering	Lecture	2	2			
Advanced Topics in Applied Mathematics	Lecture	2	2			
Statistical Mechanics	Lecture	2	2			
Human Interface Design	Lecture	2	2			
A la carte of Experiments	Lecture	2	2			
Business Accounting	Lecture	2	2			
Project Management	Lecture	2	2			
Science Literacy Education Practice	Experimental and Practice	2	2			
Total of All Credits on Elective Subjects		22	16	6		
Total of All Credits		36	22	14		
Specialized-Advanced Subjects	Required Subject	Advanced Experiment in Electronic System Engineering	Experimental and Practice	4	4	
	Practical Training in Electronic System Engineering	Special Practice	3	3		
	Graduation Thesis 1	Experimental and Practice	6	6		
	Graduation Thesis 2	Experimental and Practice	8	8		
	Total of All Credits on Required Subjects		21	13	8	
	Elective Subjects	System Measurements	Lecture	2	2	
	Advanced Course of Fluid Mechanics	Lecture	2	2		
	Circuit Theory	Lecture	2	2		
	Solid-State Electronics	Lecture	2	2		
	Fundamentals of Digital Systems	Lecture	2	2		
Applications of Digital Systems	Lecture	2	2			
Diffusion Phenomena	Lecture	2	2			
Elasticity and plasticity of Engineering Materials	Lecture	2	2			
Computational Mechanics	Lecture	2	2			
Advanced Mechatronics	Lecture	2	2			
Medical Image Processing	Lecture	2	2			
Advanced Control Engineering	Lecture	2	2			
Digital Control Engineering	Lecture	2	2			
Advanced Topics of Electric Machinery	Lecture	2	2			
Theory of Computation	Lecture	2	2			
Total of All Credits on Elective Subjects		30	14	16		
Total of All Credits on General Subjects		51	27	24	*	
Total of All Credits on Specialized-Advanced Subjects		22	14			
Total of All Credits on Specialized-Common Subjects		87	49	38		
Total of All Credits on Specialized Subjects						
Total of All Credits on General Subjects		99	55	44		

Course of Architecture and Civil Engineering

Students enrolled after 2014

Subjects	Class Method	Credits	Credits by Grade		Notes	
			1st	2nd		
General Subjects	Required Subject	Social Ethics	Lecture	2	2	
	General English A1	Exercise	1	1		
	General English A2	Exercise	1	1		
	General English B	Exercise	2	2		
	Total of All Credits on Required Subjects		6	2	4	
	Elective Subjects	Literature	Lecture	2	2	
	General German 1	Exercise	1	1		
	General German 2	Exercise	1	1		
	A la Carte of Mathematics	Lecture	2	2		
	Total of All Credits on Elective Subjects			4	2	
Total of All Credits on General Subjects		12	6	6		
Specialized-Common Subjects	Required Subject	Life Science	Lecture	2	2	
	Material Chemistry	Lecture	2	2		
	Engineering of Information Processing Devices	Lecture	2	2		
	Advanced Topics in Applied Mathematics	Lecture	2	2		
	Applied Physics	Lecture	2	2		
	Information Engineering	Lecture	2	2		※1
	Creative Engineering Practice	Experimental and Practice	2	2		
	Total of All Credits on Required Subjects		14	6	8	
	Elective Subjects	Ecological Engineering	Lecture	2	2	
	Environmental Material Science	Lecture	2	2		
Quantum Mechanics	Lecture	2	2			
Continuum Mechanics	Lecture	2	2			
Systems Engineering	Lecture	2	2			
Statistical Mechanics	Lecture	2	2			
Human Interface Design	Lecture	2	2			
A la carte of Experiments	Lecture	2	2			
Business Accounting	Lecture	2	2			
Project Management	Lecture	2	2			
Science Literacy Education Practice	Experimental and Practice	2	2			
Total of All Credits on Elective Subjects			16	6		
Total of All Credits on General Subjects		36	22	14		
Specialized-Advanced Subjects	Required Subject	Advanced Experiments in Architectural and Civil Engineering	Experimental and Practice	4	4	
	Practical Training in Architectural and Civil Engineering	Special Practice	3	3		
	Graduation Thesis 1	Experimental and Practice	6	6		
	Graduation Thesis 2	Experimental and Practice	8	8		
	Total of All Credits on Required Subjects		21	13	8	
	Elective Subjects	Advanced Structural Analysis	Lecture	2	2	
	Infrastructure Planning	Lecture	2	2		
	Environmental Control Engineering	Lecture	2	2		
	Renovation Design	Lecture	2	2		
	Advanced Geotechnical Engineering	Lecture	2	2		
Water Management Engineering	Lecture	2	2			
Advanced Random Vibration for Civil Engineering	Lecture	2	2			
Environmental Planning	Lecture	2	2			
Theory of Urban Planning and Design	Lecture	2	2			
Maintenance and Management	Lecture	2	2			
Total of All Credits on Elective Subjects			6	14		
Total of All Credits on General Subjects		41	19	22	*	
Total of All Credits on Specialized-Advanced Subjects			22	14		
Total of All Credits on Specialized-Common Subjects		77	41	36		
Total of All Credits on Specialized Subjects						
Total of All Credits on General Subjects		89	47	42		

Students

Admission Capacity and Current Number of students

(As of May 1, 2015)

Departments	Capacity of Admission	1st	2nd	3rd	4th	5th	Total
Mechanical Eng.	40	41 (2)	41	43 (2)	48	39 (3)	212 (7)
Electrical and Computer Eng.	40	42 (7)	43 (3)	46 (6)	40 (6)	39 (2)	210 (24) ①
Electronic Control Eng.	40	42 (2)	43 (2)	41 (2)	44 (3) ①	34 ①	204 (9) ②
Civil Eng.	40	43 (7)	40 (12) ①	47 (13)	40 (10)	41 (7)	211 (49) ①
Architecture	40	41 (22)	40 (14)	46 (14) ①①	41 (14) ①	47 (19) ①	215 (83) ②②
Total	200	209 (40)	207 (31) ①	223 (37) ①①	213 (33) ②	200 (31) ①①	1052 (172) ④⑤
Electronic System Eng. Advanced Course	12	17	14 (1)				31 (1)
Architecture and Civil Eng. Advanced Course	8	2	20 (3) ①				22 (3) ①
Total	20	19	34 (4) ①				53 (4) ①

() Female Students, ○Overseas Students, ●Prolonged absence Students

Current Number of Overseas Students

(As of May 1, 2015)

Departments	Grade	Malaysia	Mongolia	Cambodia	Total
Mechanical Eng.	3rd				
	4th				
	5th				
Electrical and Computer Eng.	3rd				
	4th				
	5th				
Electronic Control Eng.	3rd				
	4th	1 (1)			1 (1)
	5th	1			1
Civil Eng.	3rd				
	4th				
	5th				
Architecture	3rd			1	1
	4th		1 (1)		1 (1)
	5th				
Total		2 (1)	1 (1)	1	4 (2)

() Female Students

Japan Student Services Organization

(2014)

Departments	1st	2nd	3rd	4th	5th	Total
Mechanical Eng.		1	1	5 (1)	3	10 (1)
Electrical and Computer Eng.		1 (1)	1	3 (1)	2 (1)	7 (3)
Electronic Control Eng.	2	1	5	3	2	13
Civil Eng.		3 (2)	1	4 (1)	2	10 (3)
Architecture	1	1 (1)		4 (1)	1 (1)	7 (3)
Total	3	7 (4)	8	19 (4)	10 (2)	47 (10)
Electronic System Eng. Advanced Course		3				3
Architecture and Civil Eng. Advanced Course		8 (1)				8 (1)
Total		11 (1)				11 (1)

() Female Students

Students

Number of Students by Home Prefecture

(As of May 1, 2015)

Departments	Grade	Gifu	Aichi	Shiga	Other	Total
Mechanical Eng.	1st	33(1)	4	3	1(1)	41(2)
	2nd	34	6	1		41
	3rd	41(2)	2			43(2)
	4th	35	11	2		48
	5th	32(2)	6(1)	1		39(3)
Electrical and Computer Eng.	1st	38(6)	3(1)	1		42(7)
	2nd	40(3)	2	1		43(3)
	3rd	44(5)	1	1(1)		46(6)
	4th	34(6)	4	2		40(6)
	5th	28(1)	7	3(1)	1	39(2)
Electronic Control Eng.	1st	30(2)	11	1		42(2)
	2nd	32(2)	10		1	43(2)
	3rd	39(2)	2			41(2)
	4th	35(2)	7		2(1)	44(3)
	5th	27	4		3	34
Civil Eng.	1st	38(7)	4	1		43(7)
	2nd	37(12)	3			40(12)
	3rd	45(12)	2(1)			47(13)
	4th	38(10)	2			40(10)
	5th	39(6)	2(1)			41(7)
Architecture	1st	30(15)	7(4)		4(3)	41(22)
	2nd	33(13)	5		2(1)	40(14)
	3rd	42(13)	3(1)		1	46(14)
	4th	33(13)	6		2(1)	41(14)
	5th	42(18)	4		1(1)	47(19)
Total		899(153)	118(9)	17(2)	18(8)	1052(172)
(%)		85.5	11.2	1.6	1.7	100.0

() Female Students

Number of Students by Home College

(As of May 1, 2015)

Departments	Grade	NIT,Gifu College	NIT,Toyota College	Total
Electronic System Eng. Advanced Course	1st	16	1	17
	2nd	14(1)		14(1)
Architecture and Civil Eng. Advanced Course	1st	2		2
	2nd	20(3)		20(3)
Total		52(4)	1	53(4)

() Female Students
NIT=National Institute of Technology.

Number of Applicants and Applicants/Enrollees Ratio

(As of May 1, 2015)

Departments	Capacity	2012		2013		2014		2015	
		Applicants	Ratio	Applicants	Ratio	Applicants	Ratio	Applicants	Ratio
Mechanical Eng.	40	82(0)	2.1	60(4)	1.5	55(1)	1.4	61(3)	1.5
Electrical and Computer Eng.	40	80(9)	2.0	89(7)	2.2	74(6)	1.9	64(9)	1.6
Electronic Control Eng.	40	94(3)	2.4	68(2)	1.7	89(3)	2.2	77(3)	1.9
Civil Eng.	40	64(12)	1.6	66(18)	1.7	64(18)	1.6	45(7)	1.1
Architecture	40	50(14)	1.3	63(19)	1.6	74(27)	1.9	66(25)	1.7
Total	200	370(38)	1.9	346(50)	1.7	356(55)	1.8	313(47)	1.6

() Female Students

Number of Applicants and Enrollees transferring into 4th Grade

(As of May 1, 2015)

Departments	2012		2013		2014		2015	
	Applicants	Enrollees	Applicants	Enrollees	Applicants	Enrollees	Applicants	Enrollees
Mechanical Eng.								
Electrical and Computer Eng.	3	1			6	1		
Electronic Control Eng.			1				1	1
Civil Eng.								
Architecture	1	1	4				5(2)	1(1)
Total	4	2	5		6	1	6(2)	2(1)

() Female Students

Number of Applicants and Enrollees into Advanced Course

(As of May 1, 2015)

Departments	2012		2013		2014		2015	
	Applicants	Enrollees	Applicants	Enrollees	Applicants	Enrollees	Applicants	Enrollees
Electronic System Eng. Advanced Course	39(2)	16(2)	58(2)	22	37(1)	19(1)	43	13
Architecture and Civil Eng. Advanced Course	36(10)	22(8)	30(1)	19	30(4)	17(3)	12	2
Total	75(12)	38(10)	88(3)	41	67(5)	36(4)	55	15

() Female Students

Future Course of Graduates

Year	Departments	Number of Graduates	Employed	Advanced to Universities	Other
2011	Mechanical Eng.	37(3)	14(2)	22(1)	1
	Electrical and Computer Eng.	44(8)	25(5)	18(2)	1(1)
	Electronic Control Eng.	44(4)	24(2)	16(2)	4
	Civil Eng.	33(7)	16(3)	15(3)	2(1)
	Architecture	39(15)	13(5)	24(8)	2(2)
	Total	197(37)	92(17)	95(16)	10(4)
2012	Mechanical Eng.	40(1)	25	14(1)	1
	Electrical and Computer Eng.	39(2)	18	19(2)	2
	Electronic Control Eng.	37	14	20	3
	Civil Eng.	44(5)	29(5)	15	
	Architecture	43(11)	24(9)	18(2)	1
	Total	203(19)	110(14)	86(5)	7
2013	Mechanical Eng.	38(1)	22(1)	16	
	Electrical and Computer Eng.	34(6)	19(5)	13(1)	2
	Electronic Control Eng.	47(3)	28(3)	18	1
	Civil Eng.	40(15)	31(13)	8(2)	1
	Architecture	38(10)	18(7)	20(3)	
	Total	197(35)	118(29)	75(6)	4
2014	Mechanical Eng.	39(1)	24	15(1)	
	Electrical and Computer Eng.	41(2)	24(1)	15	2(1)
	Electronic Control Eng.	42(3)	18(3)	24	
	Civil Eng.	32(6)	25(6)	7	
	Architecture	27(6)	22(6)	5	
	Total	181(18)	113(16)	66(1)	2(1)

() Female Students

Graduates' Entrance into Advanced Course and Universities

University	2012	2013	2014	2015
Hokkaido Univ.	2	1		
Muroran Institute of Technology			1	
Tohoku Univ.	1	2	1	
Univ. of Tsukuba	3	1		3
Utsunomiya Univ.	1(1)			
Saitama Univ.				1
Chiba Univ.	2	3	5	2
Tokyo Univ.	1		1	
Tokyo Institute of Technology	1		2	
Tokyo Univ. of Agriculture and Insitute	1		1	1
Yokohama National Univ.	1	1		1
Niigata Univ.		1		
Nagaoka Univ. of Technology	4	2		5
Kanazawa Univ.	2	2		
Fukui Univ.	1			
Shinshu Univ.	1		1	
Gifu Univ.	6(1)	1	6	12
Nagoya Univ.	4	1	1	2
Nagoya Institute of Technology	5	5	3	4
Toyohashi Univ. of Technology	13	14	8(2)	12
Mie Univ.	2	2	3	2
Kyoto Univ.		1		
Kyoto Institute of Technology	1	1		2
Osaka Univ.	1	3(1)	4	2
Kobe Univ.		1	1	1
Nara Women Univ.	1	1	1	
Okayama Univ.			1	
Hiroshima Univ.		1		
Yamaguchi Univ.				1
Kyushu Univ.				1
Kyushu Institute of Technology			1(1)	
Kagoshima Univ.			1	
Kyoto Pref. Univ.	1			
Osaka Pref. Univ.	1			
Kanagawa Univ.	1			
Chubu. Univ.		1(1)		
Kanazawa Institute of Technology	1			
Osaka University of Arts		1		
Kobe Design Univ.	1			
Fukuoka Institute of Technology	1			
NIT, Gifu College	38(1)	41	36	14
NIT, Fukui College		1		
Total	98(3)	88(2)	78(3)	66

() Graduates of the Previous year

Future Course of Graduates

Number of the Advanced Course Graduates who entered Graduate Schools

Graduate school	Year	2012	2013	2014	2015
Tokyo Institute of Technology (Graduate School)		1			1
Univ. of Tsukuba (Graduate School)		1	1		2
Yokohama National Univ. (Graduate School)					2
Nagaoka Univ. of Technology (Graduate School)				2	
Gifu Univ. (Graduate School)		1			
Nagoya Univ. (Graduate School)		2	1	1	2
Nagoya Institute of Technology (Graduate School)		1	1		
Toyohashi Univ. of Technology (Graduate School)					2
Mie Univ. (Graduate School)		1		2	1
Kyoto Univ. (Graduate School)		2			
Kyoto Institute of Technology (Graduate School)				1	
Osaka Univ. (Graduate School)		1			1
Japan Advanced Institute of Science and Technology		1	1		
Nara Institute of Science and Technology		2	2		
Hiroshima Univ. (Graduate School)					1
Institute of Advanced Media Arts and Sciences				1	
Total		13	6	7	12

() Graduates of the Previous year

Employment

Year	Departments	Students Seeking a job A	Jobs offered B	Ratio B/A	location of employment		place of employment		
					Gifu	Others	Companies	Official	Public Corporation
2012	Mechanical Eng.	25	423	16.9	6	19	25		
	Electrical and Computer Eng.	18	423	23.5	2	16	18		
	Electronic Control Eng.	14	413	29.5	1	13	14		
	Civil Eng.	29(5)	154	5.3	3	26(5)	27(5)	2	
	Architecture	24(9)	253	10.5	6(3)	18(6)	24(9)		
Total	110(14)	1666	15.1	18(3)	92(11)	108(14)	2		
2013	Mechanical Eng.	22(1)	442	20.1	5	17(1)	21(1)	1	
	Electrical and Computer Eng.	19(5)	519	27.3	2(1)	17(4)	19(5)		
	Electronic Control Eng.	28(3)	469	16.8	6	22(3)	27(3)	1	
	Civil Eng.	31(13)	163	5.3	5(2)	26(11)	17(5)	14(8)	
	Architecture	18(7)	188	10.4	4(2)	14(5)	18(7)		
Total	118(29)	1781	15.1	22(5)	96(24)	102(21)	16(8)		
2014	Mechanical Eng.	24	561	23.4	1	23	24		
	Electrical and Computer Eng.	24(1)	548	22.8	2	22(1)	24(1)		
	Electronic Control Eng.	18(3)	509	28.3	1(1)	17(2)	18(3)		
	Civil Eng.	25(6)	226	9.0	2	23(6)	14(4)	11(2)	
	Architecture	22(6)	240	10.9	4(1)	18(5)	22(6)		
Total	113(16)	2084	18.4	10(2)	103(14)	102(14)	11(2)		

() Female Students

Advanced Course

Year	Departments	Graduates	Students Seeking a job A	Students Continuing Education	Others	Jobs offered B	Ratio B/A	location of employment		place of employment		
								Gifu	Others	Companies	Official	Public Corporation
2013	Electronic System Eng. Advanced Course	17(2)	15(2)	2		291	19.4	6(1)	9(1)	15(2)		
	Architecture Civil Eng. Advanced Course	20(7)	15(7)	5		120	8.0	5(3)	10(4)	8(4)	7(3)	
	Total	37(9)	30(9)	7		411	13.7	11(4)		23(6)	7(3)	
2014	Electronic System Eng. Advanced Course	22	17	5		358	21.1	5	12	17		
	Architecture Civil Eng. Advanced Course	15(1)	8(1)	7		164	20.5	1	7(1)	4(1)	4	
	Total	37(1)	25(1)	12		522	20.9	6	19(1)	21(1)	4	

() Female Students

Finance

Operating Costs such as Income and Expenditure Grant

(Unit: ¥1,000)

Revenue		Expenditure	
Grants for Operation Costs	45,131	106,764	Education and Research Expenses
Tuition Revenue	251,042	12,993	Support Education and Research Expenses
Admission Fee Income	19,060	15,547	General and Administrative Expenses
Testing Fee Income	6,093	193,634	Common Expenses
Miscellaneous Income	7,612		
Total	328,938	328,938	Total

Adoption Subsidy Situation etc.

(Unit: ¥1,000)

Classification	Year	2011	2012	2013	2014
Subsidy Budget for Construction of Facilities		0	595,522	121,415	-
Project Cost Delivery Facility Expenses		9,429	36,372	13,965	26,460
Grants-in-Aid for Promotion of Science and Technology Cooperation Among Industry, Academia and Government Business Areas		10,999	9,899	-	-
Grants-in-Aid for Equipment Maintenance		0	131,459	0	-
Human Resource Development Business for Nuclear Power Subsidy		234	185	254	26
Human Resource Development Business for Manufacturing Subsidy		2,954	-	-	-
Grants for Promoting University Reform		-	-	-	27,846
Total		23,616	773,437	135,634	54,332

Grants-in-Aid for Scientific Research

(Unit: ¥1,000)

Classification	Year	2011		2012		2013		2014	
		Number	Funds	Number	Funds	Number	Funds	Number	Funds
Grant-in-Aid for Scientific Research (B)		0		0		0		0	
Grant-in-Aid for Scientific Research (C)		13	17,200 5,160	14	16,500 4,950	16	15,100 4,530	16	16,600 4,980
Grant-in-Aid for Exploratory Research		2	2,200 660	1	500 150	0		1	2,400 720
Grant-in-Aid for Young Scientists (B)		8	11,300 3,390	7	4,600 1,380	4	5,000 1,500	4	4,200 1,260
Grant-in-Aid for Publication of Scientific Research Results		1	500 0	0		0		0	
Encourage Research		1	600 0	2	1,000	0		1	200
Grant-in-Aid for starting Scientific Research				1	1,300 390	1	1,300 390	0	
Total		25	31,800 9,210	25	23,900 6,870	21	21,400 6,420	22	23,400 6,960

Direct expense (upper), Overhead expense (lower)

External Fundings

(Unit: ¥1,000)

Classification	Year	2011		2012		2013		2014	
		Number	Funds	Number	Funds	Number	Funds	Number	Funds
Research Funding Such as Industry academia Collaboration	Funded Research	6	6,659	8	4,763	4	4,404	3	6,691
	Funded Projects							1	2,500
	Contract Testing	0	0	0	0	0	0	0	0
	Joint Research	20	10,311	14	5,244	9	4,307	10	4,249
Subtotal	26	16,970	22	10,007	13	8,711	14	13,440	
Donations	42	20,564	607	32,968	655	30,685	41	21,265	
Other Subsidys					1	3,000	2	6,000	
Total	68	37,534	629	42,975	669	42,396	57	40,705	

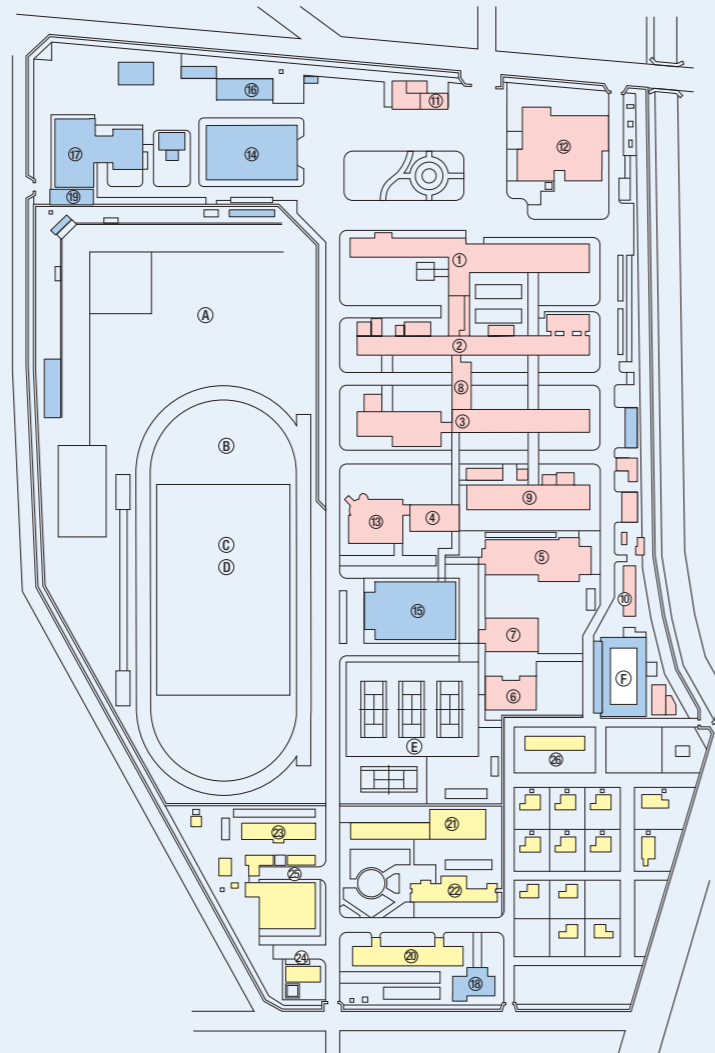
Land and Buildings

Lands

Classification	Area	Notes
School houses	50,975 m ²	Baseball Ground, Soccer Rugby Ground, 400-Meter Track, Tennis Court (4), Swimming Pool (25meters×6 courses), etc.
Grounds	37,870	
Dormitory	10,414	
Personnel Housing	7,677	
Total	106,936	

Buildings

Classification	structure	Total Floor Space
Lecture and Research	Main Building I	RC3 3,996
	Main Building II	RC3 3,576
	Main Building III	RC3 3,594
	Main Building IV	RC3 660
	Main Building V	RC4 2,428
	Main Building VI	RC4 1,155
	Advanced Course Building	RC4 1,160
	General Education Building	RC3 620
	Techno Center	S1 1,002
	Hydrodynamic Laboratory	S1 253
	Room for Physical Education	RC1 43
	Preparation Room for Civil Engineering Experiments	S1 186
	Preparation Room for Electric Experiments	S1 63
	Room for Architecture Experiments	S1 99
	Guard Mens'Room & Garage	RC1 191
	Library	RC2 1,965
	Welfare Hall "IBUKI"	RC2 834
	boiler Room etc.	2,004
	Subtotal	23,829
	Physical Education Facilities	Gymnasium I
Gymnasium II		RC1+S 885
Training Hall		W1 336
Ando Memorial Hall		S1-RC1 789
Site of Training Camp "RYOUNSO"		W1 235
Site of Training Camp "2nd RYOUNSO"		RC1+S 126
Warehouse etc.		821
Subtotal		4,478
Dormitory	Dormitory A	1,341
	Dormitory B & C	1,543
	Dormitory D	1,388
	1st Girls' Dormitory	647
	Administration Office & 2nd Girls' Dormitory	303
	Dining Hall & Bath House etc.	846
	Subtotal	6,068
Personnel Housing	1,454	
Total	35,829	



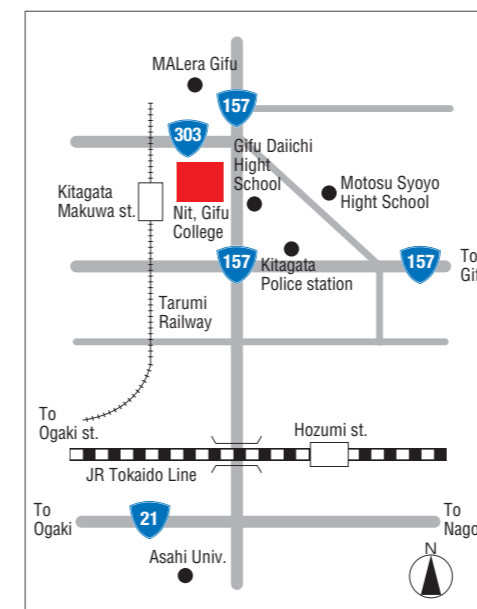
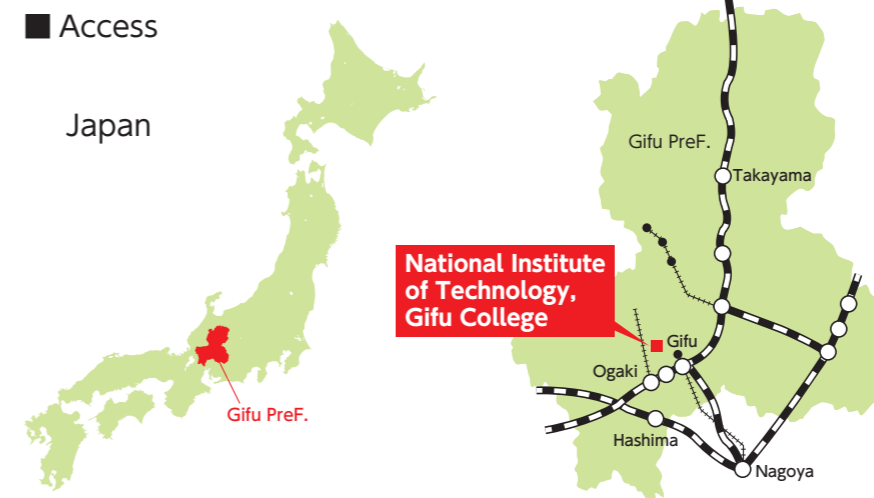
- ① Main Building I
- ② Main Building II
- ③ Main Building III
- ④ Main Building IV
- ⑤ Main Building V
- ⑥ Main Building VI
- ⑦ Advanced Course Building
- ⑧ General Education Building
- ⑨ Techno Center
- ⑩ Hydrodynamic Laboratory
- ⑪ Guard Mens'Room & Garage
- ⑫ Library
- ⑬ Welfare Hall "IBUKI"
- ⑭ Gymnasium I
- ⑮ Gymnasium II
- ⑯ Training Hall
- ⑰ Ando Memorial Hall
- ⑱ Site of Training Camp "RYOUNSO"
- ⑲ Site of Training Camp "2nd RYOUNSO"
- ⑳ Dormitory A
- ㉑ Dormitory B & C
- ㉒ Dormitory D
- ㉓ 1st Girls' Dormitory
- ㉔ Administration Office & 2nd Girls' Dormitory
- ㉕ Dining Hall & Bath House etc.
- ㉖ Personnel Housing
- Ⓐ Baseball Ground
- Ⓑ 400-Meter Track
- Ⓒ Soccer Ground
- Ⓓ Rugby Ground
- Ⓔ Tennis Court
- Ⓕ Swimming Pool

- Department of Mechanical Engineering
- Department of Electrical and Computer Engineering
- Department of Electronic Control Engineering
- Department of Civil Engineering
- Department of Architecture
- General Education (Humanities・Natural Sciences)

Advanced Course

- Course of Electronic System Engineering
- Course of Architecture and Civil Engineering

Access



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- ① Transfer from JR Ogaki Station to Tarumi Railways bound for Tarumi. Get off at Kitagata-makuwa Station. Walk 1.2km from the station to the north-east (12minutes) to the school.
- ② Transfer from JR Gifu Station (or Meitetsu Gifu Station) to Meitetsu Gifu Bus Terminal and get on the bus bound for Malera-Gifu. After getting off at the end of the line, walk 1.2km southward.
- ③ Transfer from JR Gifu Station (or Meitetsu Gifu Station) to Meitetsu Gifu Bus Terminal and get on the bus bound for Riverside Mall. Get off at Kamimakuwa bus stop, and walk 1.5km northward.
- ④ Get on the bus for Ono Bus Center at the nearest bus stop to JR Hozumi Station. Get off at Itonuki-Bunchosha/Malera-Minamiguchi bus stop and walk 0.7km southward.
- ⑤ Transfer from JR Gifu Station (or Meitetsu Gifu Station) to Meitetsu Gifu Bus Terminal and get on the bus bound for Gifu-Kosen stop (only in the morning and going-home time on weekdays).
- ⑥ Get on the bus for Ono Bus Center at the nearest bus stop to Gifu Kita High School. Get off at Kamimakuwa bus stop, and walk 1.5km northward (only in the morning and going-home time on weekdays).

