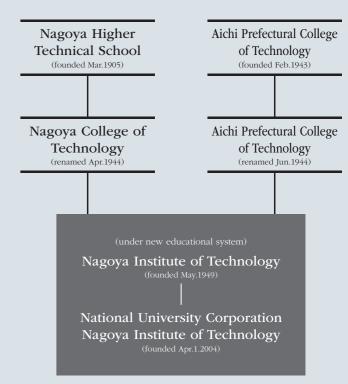


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# ACADEMIC CALENDAR

ACADEMIC YEAR 2012 (April 1, 2012  $\sim$  March 31, 2013)

1st Semester April 1 ~ September 30

Entrance Ceremony April 6

2nd Semester October 1 ~ March 31

Commencement March 23

#### HOLIDAYS AND VACATIONS

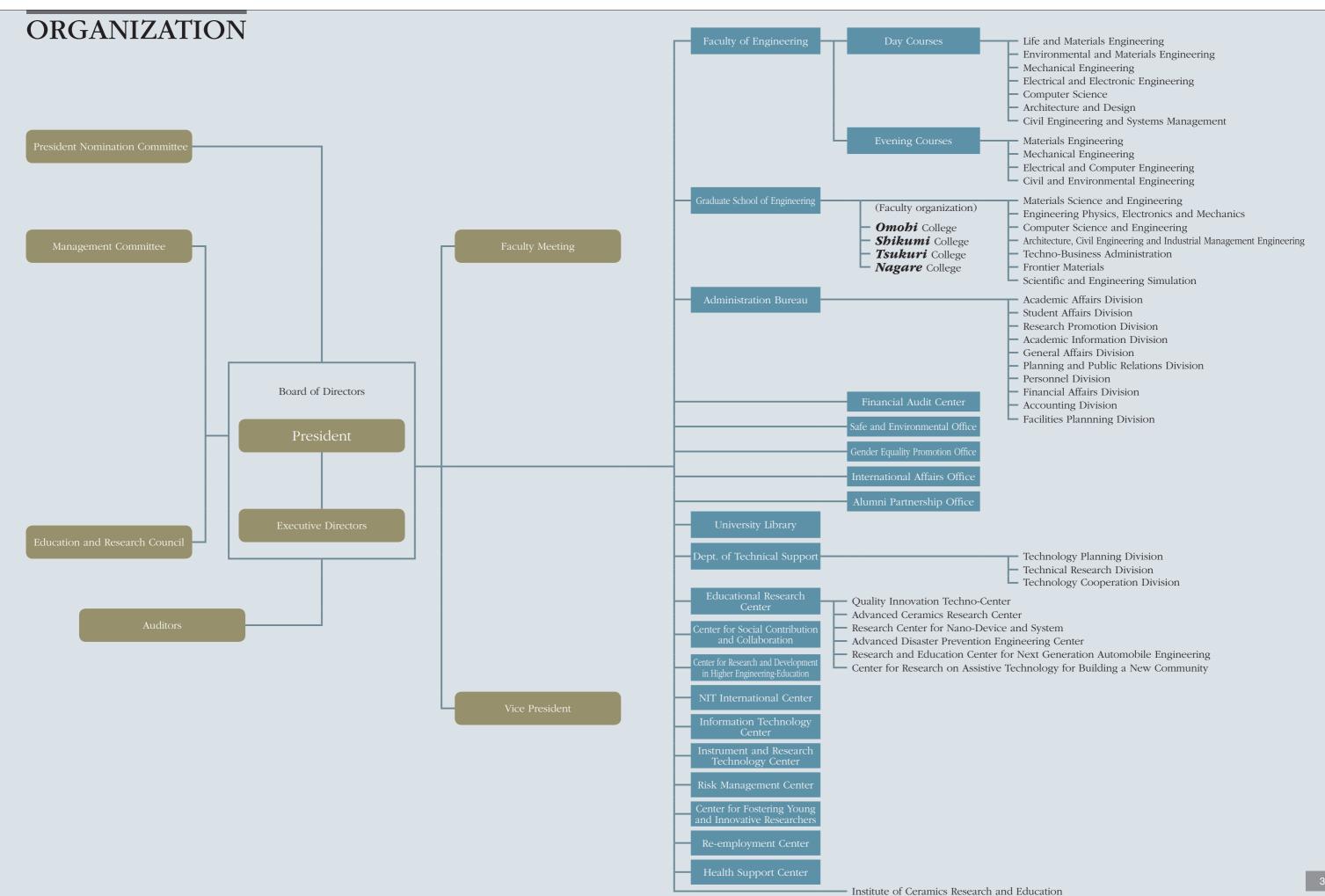
Saturdays and Sundays

National Holidays 15 days

Nagoya Institute of Technology Anniversary November 1

Summer Vacation August 7  $\sim$  September 30

Winter Vacation December 24 ∼ January 6



# CHARTER OF NAGOYA INSTITUTE OF TECHNOLOGY

#### **Fundamental Mission**

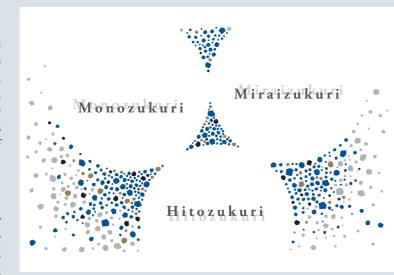
Nagoya Institute of Technology (NITech) was founded as the first national institution of higher education in central Japan in order to develop the region as Japan's center of industry. Maintaining a respect for this historic mission and acting as one of the leading engineering institutes in Japan, NITech shall therefore make its fundamental mission as follows: developing revolutionary science and technologies, fostering rich human resources, and contributing to peace and social welfare of the future by acting as a source to consistently produce and develop new industries and culture.

#### Monozukuri

NITech shall respect practical and creative research activities based on the independent ideas of its members, encourage global academic cooperation, and endeavor to create new values while believing in the unlimited possibilities of engineering beyond the constraints of conventional frameworks of engineering.

#### Hitozukuri

NITech shall devote itself to foster leading human resources whose unique qualities and international minds possess the ability to develop a new science and technologies based on engineering and



change the world by exploring, creating, challenging, and taking action.

#### Miraizukuri

NITech, as an open institute with a public mandate, shall emphasize harmony and cooperation with local and international societies, and strive to make continuous efforts to realize a peaceful and prosperous society for the future.

Enacted on the 1st of January, 2012

# **ADMINISTRATIVE OFFICERS**



President TAKAHASHI

President
Executive Vice-President
Executive Vice-President
Executive Director
Auditor
Auditor
Vice-President
Vice-President
Vice-President
Vice-President

Director, University Library

TAKAHASHI Minoru KINOSHITA Takatoshi MASUDA Hideki MAEDA Chihiro HORI Tatsuyuki MATSUDA Shigeki UKAI Hiroyuki NAKAMURA Takashi ERYU Osamu OBATA Makoto MATSUO Hiroshi

# NUMBER OF STAFF MEMBERS

#### **Directors**

j	Presiden	t	]	Executive	e		Auditor			Total	
Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1		1	3		3	2		2	6	0	6

#### Academic Staff (Full-time)

A ~~	]	Professo	r	Assoc	ciate Prof	fessor	Assis	tant Prof	essor	Total				
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total		
~24										0	0	0		
25~34				2		2	24	3	27	26	3	29		
35~44	4		4	72	4	76	30	3	33	106	7	113		
45~54	72	3	75	48	5	53	3		3	123	8	131		
55~64	53	3	56	9		9	1		1	63	3	66		
65										0	0	0		
Total	129	6	135	131	9	140	58	6	64	318	21	339		

#### Staff (Full-time)

Admi	nistrative	e Staff	Тес	chnical S	taff	M	edical Sta	aff		Total	
Male	Female	Total	Male	Female	Total	Male	Female Total		Male	Female	Total
69	50	119	44	13	57		1	1	113	64	177

<sup>\*</sup> Exclude fixed-term or re-employment contract holder

# **DEPARTMENTS**

#### Faculty of Engineering

	0 0	
	Departments	Programs
	Life and Materials Engineering	Molecular Chemistry Biological Chemistry Biomaterials
	Environmental and Materials Engineering	Ceramics Materials Function
	Mechanical Engineering	Applied Physics Mechanical System Energy System
Day Courses	Electrical and Electronic Engineering	Electronics Energy Design Communications
Day Courses	Computer Science	Computer Network Artificial Intelligence Multimedia and HCI
	Architecture and Design	Architecture Design
	Civil Engineering and Systems Management	Civil and Environmental Engineering
	Civil Engineering and Systems Management	Systems Management and Engineering
	Materials Engineering	
Evening Courses	Mechanical Engineering	
Evening Courses	Electrical and Computer Engineering	
	Civil and Environmental Engineering	

#### **Graduate School of Engineering**

Departments	Fields
Materials Science and Engineering	Organic Materials Inorganic Materials Chemical Process  Materials Function and Design Life Function
Engineering Physics, Electronics and Mechanics	Electronics Fine Measurements Mechanics Energy
Computer Science and Engineering	Mathematics and Mathematical Science Computational Intelligence Computing and Communications Systems and Control Multimedia and Human Computer Interaction
Architecture, Civil Engineering and Industrial	Human Space Civil Engineering
Management Engineering	Environmental Engineering and Disaster Prevention Management Engineering
Techno-Business Administration	Technology and Industry Management Core Technologies
Frontier Materials	Environmental Ceramic Materials Advanced Energy Materials Molecular Life Science and Nanotechnology
Scientific and Engineering Simulation	Computational Applied Sciences Computer Science and System Engineering Simulation in Civil Engineering and Architectural Systems

# Outline of Faculty of Engineering (Day Course)

#### Department of Life and Materials Engineering

This department is concerned with diversity of materials and their reactions by both chemical and biochemical approaches. The goal of the life and materials engineering discipline is to train researchers and technical experts with extensive knowledge and innovative thinking in the field. We offer three programs:

(1) Molecular Chemistry Program

This program provides with educational grounds and advanced researches on syntheses, structural characterization, reactions, and functions of diversity of materials including natural products and organic and inorganic materials.

(2) Biological Chemistry Program

This program provides with educational grounds and advanced researches on the structure-function relations of biological materials essential for living organisms and on the development of new functionality-based systems through reactions in vivo and functionality assessment.

(3) Biomaterials Program

This program provides with educational grounds and advanced researches on the functions and the mechanisms for material production in the living system and on the development of novel polymer materials and health-related products applicable in the industrial and medical fields.

#### Department of Environmental and Materials Engineering

In recent years, peoples are becoming more and more concerned with environmental issues such as "re-cycling" as well as "being environmentally clean". Today, the means to solve a lot of environmental problems are closely related to technology, including materials science and engineering. Our department has been established for the purpose of the education of materials science in harmony with global environment, and also the development of environment-friendly materials which we call as "e-materials". Our research fields cover the whole range of materials science, from analytical techniques in atomic scale to innovative processing techniques that are suitable for mass production.

We have developed two professional education programs, Ceramics Program and Materials Function Program. In association with our graduate school, regional industries and communities, we strongly expect our programs will turn out great many promising engineers and scientists.

#### Department of Mechanical Engineering

The Department of Mechanical Engineering offers a wide-ranging curriculum in the field including Thermal Science and Combustion, Fluid Mechanics, Solid Mechanics, Manufacturing and Material Processing, Mechatronics, Biomechanics, Computational Science and Applied Physics. The Department provides the following three undergraduate programs to foster engineers and researchers with a firm basis in scientific and technological knowledge for mechanical engineering: (1) Applied Physics Program, (2) Mechanical System Program, and (3) Energy System Program. At the end of the first academic year, students choose one of these three programs. The Department offers educational flexibility for students who wish to target specific disciplines. Students can take credits in other disciplines that complement their individual interests under some limitations. More than sixty percent of all undergraduate students proceed to the graduate school.

#### Department of Electrical and Electronic Engineering

The Department offers three distinct programs: Electronics Program, Energy Design Program, and Communications Program. All students are required to select one of the three programs at the beginning of the second year. Each Program provides students with unique curriculum necessary for an electrical

and electronic engineer to meet the current and future challenges of a professional career. All students will obtain a common mathematical and physical foundation, including linear algebra, differential equations, electrical circuits, and electromagnetics. In addition to classroom experience, the curriculum is planned also to provide laboratory experience in electrical and electronic circuits, control systems, electron devices, material physics, electromagnetics, communications, signal processing, and so forth. The education program is accredited by Japan Accreditation Board for Engineering Education (JABEE).

#### Department of Computer Science

The Department of Computer Science offers a wide and attractive curriculum of computer science and information technologies. Information technologies have become kernel technologies of almost all industries and have formed a central infrastructure of our world. We provide three programs: Computer Network, Artificial Intelligence, and Multimedia & Human Computer Interaction (HCI).

Each program consists of professional subjects in the forms of lecture classes, training exercises and experiments. Before going on to the professional subjects, students learn basic subjects of the field such as programming, computer hardware and software, algorithms, information theory and mathematics. After completing our undergraduate courses, students are encouraged to continue further education and research at the graduate school.

#### Department of Architecture and Design

Our history dates back to 1905, when the Department of Architecture was established as one of the first institutes of architecture education in Japan. For over one hundred years since then, we have produced many prominent architects and engineers. In 2004, the design program was inaugurated and the department evolved into a hub for more comprehensive design education, covering not only urban design and architecture but also a wide range of products that facilitate and enhance our daily life. We are committed to providing quality education ranging from core engineering to humanities in order to promote students' abilities to create outstanding architectural achievements and epoch-making products which are both functional and beautiful.

#### Department of Civil Engineering and Systems Management

Our department offers a choice of two curricular programs, Civil and Environmental Engineering Program and Systems Management Engineering Program.

The aim of the both programs is to educate engineers who are able to solve various kinds of social problems.

Civil and Environmental Engineering Program provides excellent learning and research facilities in the fields of urban and transportation planning, geotechnical engineering and analysis, seismic evaluation of structure, concrete material and structure, disaster prevention of river and coastal area, conservation of ecology, which includes planning, designing, construction maintenance and operation technologies of social infrastructures. It also aims to educate student to be an engineer who can contribute to the formation of more environmental harmonic urban area with strong resistance against natural disasters. The graduates from the program can find jobs in wide ranges including national and provincial governments, railway companies, general construction companies, etc.

Systems Management Engineering Program provides the education in management technologies and solving management problems. Based on methodologies for resources (staff, equipment, money, information and time, etc.), quality and technology management, graduates from the program have been promised to be actively involved in various social and industrial sectors as creative engineers solving problems.

# Outline of Graduate School of Engineering

#### Department of Materials Science and Engineering

In the 21st century, increasingly important is achieving a good balance between global environmental protection on the one hand, and on the other hand continuing advancement in technology and science for the better life. The Department of Materials Science and Engineering focuses on development of novel materials with the goal of increased functionality and both improved properties and characteristics. Our efforts span a wide range of chemical and physical fields including organic, inorganic, metallic, macromolecular, and bio-related. Correspondingly, the Department has five major divisions: Organic Materials; Inorganic Materials; Materials Function and Design; Chemical Process; and Life Function. This Department is a proving ground for efficient scientists and skilled engineers. The graduate and postgraduate students of the Department learn the essences of materials and their diverse applications to take active roles in various industrial fields.

#### Department of Engineering Physics, Electronics and Mechanics

The Department of Engineering Physics, Electronics and Mechanics consists of four divisions; Mechanics, Energy, Fine Measurement, and Electronics. The former three are linked to Department of Mechanical Engineering of the undergraduate school. Their education and research activities cover the whole fields of mechanical engineering, including measurements, analyses and simulations in physics. The last one is linked to Electronics Program of Department of Electrical and Electronic Engineering of the undergraduate school. Its education and research fields spread over device technology and material science in electronics. Postgraduate students in this department learn a broad area from the basic and applied physics to their application to the most advanced mechanical and electronic engineering fields.

#### Department of Computer Science and Engineering

The Department of Computer Science and Engineering combines advanced knowledge and techniques from a wide range of fields including mathematics, information technology, computer science, artificial intelligence, artificial life, software engineering, hardware engineering, system control engineering, and speech and image processing. The department has five areas of specialty: Mathematics and Mathematical Science, Computational Intelligence, Computing and Communications, Systems and Control, Multimedia and Human Computer Interaction. In these five areas, we offer an education that allows students to follow their own interests within a flexible framework. While learning, students also get opportunities to get involved in state of the art research. The department also works closely with industry requirements to develop human resources who can contribute to all of society.

#### Department of Architecture, Civil Engineering and Industrial Management Engineering

The main objective of our department is to pursue better space and infrastructures for human life and industries in view of architecture, civil engineering and industrial management. Our approach includes a wide variety of methods such as policy making, planning, structural design, infrastructure maintenance, environmental engineering, construction materials, architecture, production management, logistics etc. The frontier of our working field is ever expanding. We also welcome students with multi-disciplinary backgrounds.

Our department currently consists of the following 4 core divisions. "Human Space", "Civil Engineering", "Environmental Engineering and Disaster Prevention" and "Management".

#### Department of Techno-Business Administration

This is the first master course of Management of Technology (MOT) in Japan established in 2003, and has been providing students with a thorough understanding of important issues: Entrepreneurship, Intellectual property, Relationship between market and technology, Regional industrial policies, and Academy-industry-government cooperation for research and development. The course is designed through the consultation with a wide variety of experts from academia and industry, and is suitable for any scientists, engineers, or managers who have an academic background in engineering or relevant practical experiences in industry. The course offers two programs: One-year master program for those in employment who wish to advance their career, and Two-year program for new graduates who hope to improve their skills from the perspective of Technology Management.

#### Department of Frontier Materials

A new paradigm in the 21<sup>st</sup> Century is settled to answer to the energy and resources problems, environmental issues and medical issues. Our Department specifically focuses on the development of environment-friendly, high-performance frontier materials in the wide range of chemical and physical fields relating to chemical conversion, energy conversion, nanotechnology, and life science. The graduate students have research training for advanced theories and technologies in one specialized field selected among Environmental Ceramic Materials, Advanced Energy Materials, and Molecular Life Science and Nanotechnology.

#### Department of Scientific and Engineering Simulation

The mission of the Department of Scientific and Engineering Simulation is to study challenging fundamental problems in science and engineering by high performance computers, to develop consolidated system embodying physical and semantic contents of information, to apply to more complex engineering and environmental problems, and also to develop highly advanced software technology. The Department consists of the following three Fields: Field of Computational Applied Sciences, Field of Computer Science and System Engineering, and Field of Simulation in Civil Engineering and Architectural Systems. Students are to learn theoretical backgrounds, to acquire software skills and to work closely with staff members from different fields of the Department.



# NUMBER OF STUDENTS

## Faculty of Engineering (Day Courses)

(as of May 1, 2012)

	Enrol	lment						C	urren	t Enro	ollmei	nt					
Departments	Angual	Total	1	st Yea	ır	21	nd Ye	ar	3:	rd Yea	ır	4	th Yea	ır		Total	
	Annual	Iotai	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Life and Materials Engineering	154	620	115 (0)	51 (0)	166 (0)	124 (2)	43 (4)	167 (6)	116 (1)	42 (0)	158 (1)	144 (1)	36 (2)	180 (3)	499 (4)	172 (6)	671 (10)
Environmental and Materials Engineering	94	380	87 (2)	8 (0)	95 (2)	94 (1)	5 (1)	99 (2)	99 (2)	3 (0)	102 (2)	104 (1)	9 (2)	113 (3)	384 (6)	25 (3)	409 (9)
Mechanical Engineering	184	740	168 (7)	22 (1)	190 (8)	172 (7)	24 (0)	196 (7)	189 (9)	22 (1)	211 (10)	232 (9)	21 (1)	253 (10)	761 (32)	89 (3)	850 (35)
Electrical and Electronic Engineering	139	560	147 (5)	7 (0)	154 (5)	147 (3)	1 (0)	148 (3)	139 (3)	3 (0)	142 (3)	177 (6)	5 (1)	182 (7)	610 (17)	16 (1)	626 (18)
Computer Science	164	660	153 (2)	19 (0)	172 (2)	154 (2)	16 (1)	170 (3)	154 (1)	10 (0)	164 (1)	198 (2)	16 (2)	214 (4)	659 (7)	61 (3)	720 (10)
Architecture and Design	80	320	54 (2)	30 (0)	84 (2)	65 (1)	20 (3)	85 (4)	54 (1)	25 (0)	79 (1)	82 (3)	25 (0)	107 (3)	255 (7)	100 (3)	355 (10)
Civil Engineering and Systems Management	90	360	84 (0)	11 (2)	95 (2)	87 (1)	13 (3)	100 (4)	79 (2)	14 (0)	93 (2)	103 (5)	14 (2)	117 (7)	353 (8)	52 (7)	405 (15)
Engineering Interdisciplinary Program	5		3 (0)	1 (0)	4 (0)	1 (0)	1 (0)	2 (0)	3 (0)		3 (0)	3 (0)	1 (0)	4 (0)	10 (0)	3 (0)	13 (0)
Mechanical Engineering												1 (0)		1 (0)	1 (0)	0 (0)	1 (0)
Total	910 [10]	3,640 [20]	811 (18)	149 (3)	960 (21)	844 (17)	123 (12)	967 (29)	833 (19)	119 (1)	952 (20)	1,044 (27)	127 (10)	1,171 (37)	3,532 (81)	518 (26)	4,050 (107)

Note: ( ) indicates international students.

[ ] indicates students incorporated into 3rd Year.

Reorganized on Apr 1, 2004

#### Faculty of Engineering (Evening Courses)

(as of May 1, 2012)

	Enrol	lment							(	Curre	ent E	nroll	ment							
Departments	A1		1:	st Ye	ar	2r	ıd Ye	ar	3r	d Ye	ar	4t	h Ye	ar	5t	h Ye	ar		Total	
	Annual	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Materials Engineering	5	25	5	1	6	6		6	4		4	3	3	6	14	3	17	32	7	39
Mechanical Engineering	5	25	5	1	6	6		6	5		5	5		5	25		25	46	1	47
Electrical and Computer Engineering	5	25	5		5	6		6	5		5	5	1	6	34		34	55	1	56
Civil and Environmental Engineering	5	25	7		7	4		4	4	2	6	5		5	17	2	19	37	4	41
Applied Chemistry															1		1	1	0	1
Mechanical Engineering																		0	0	0
Electrical and Computer Engineering																1	1	0	1	1
Architecture and Civil Engineering															1		1	1	0	1
Total	20	100	22	2	24	22	0	22	18	2	20	18	4	22	92	6	98	172	14	186

Note: Department name was changed on Apr 1, 2004

## Graduate School of Engineering (Master's Courses)

(as of May 1, 2012)

	Enrol	lment							C	urre	nt En	roll	ment							
Departments	Annual	т-4-1			1st Y	ear					2nd Y	ear					Tot	al		
	Alliluai	Total	Male		Female		Tot	al	Ma	le	Fema	ale	Tot	al	Ma	le	Fem	ale	Tot	tal
Materials Science and Engineering	100	200	87	(1)	23	(2)	110	(3)	97	(1)	21	(1)	118	(2)	184	(2)	44	(3)	228	(5)
Engineering Physics, Electronics and Mechanics	100	200	99	(7)	11	(0)	110	(7)	107	(6)	2	(0)	109	(6)	206	(13)	13	(0)	219	(13)
Computer Science and Engineering	120	240	127	(7)	7	(1)	134	(8)	138	(5)	5	(3)	143	(8)	265	(12)	12	(4)	277	(16)
Architecture, Civil Engineering and Industrial Management Engineering	75	150	60	(2)	20	(5)	80	(7)	72	(5)	13	(2)	85	(7)	132	(7)	33	(7)	165	(14)
Techno-Business Administration	33[16]	50[16]	30	(2)	2	(0)	32	(2)	22	(3)	2	(0)	24	(3)	52	(5)	4	(0)	56	(5)
Frontier Materials	78	156	76	(2)	8	(0)	84	(2)	76	(2)	12	(1)	88	(3)	152	(4)	20	(1)	172	(5)
Scientific and Engineering Simulation	80	160	84	(4)	12	(5)	96	(9)	76	(4)	8	(2)	84	(6)	160	(8)	20	(7)	180	(15)
Total	586 [16]	1,156 [16]	563	(25)	83	(13)	646	(38)	588	(26)	63	(9)	651	(35)	1,151	(51)	146	(22)	1,297	(73)

Note: ( ) indicates international students.

[ ] indicates the short-term special course students.

Reorganized on Apr 1, 2008

#### Graduate School of Engineering (Doctor's Courses)

(as of May 1, 2012)

	Enrol	lment										Cu	rren	nt E	nrollm	ent						
Departments	Annyal	Total			1st Ye	eai				2	nd Y	<i>Yead</i>	er		3	Brd Ye	ır			Tota	1	
	Annual	Total	Ma	le	Fema	le	Tot	tal	Ma	le	Fen	ale	To	tal	Male	Female	Total	Ma	ale	Femal	e To	otal
Materials Science and Engineering	5	15	3	(0)			3	(0)	11	(3)	2	(2)	13	(5)	6 (2)	3 (2	9 (4	20	(5)	5 (	(i) 25	(9)
Engineering Physics, Electronics and Mechanics	5	15	7	(2)			7	(2)	6	(4)	2	(2)	8	(6)	11 (3)	2 (1	13 (4	24	(9)	4 (	3) 28	(12)
Computer Science and Engineering	5	15	14	(4)	1 (	(1)	15	(5)	11	(1)			11	(1)	21 (10)	1 (1	22 (11)	46	(15)	2 (	2) 48	(17)
Architecture, Civil Engineering and Industrial Management Engineering	4	12	5	(2)	4 (	(1)	9	(3)	8	(2)	3	(2)	11	(4)	20 (4)	11 (4	31 (8)	33	(8)	18 (	7) 51	(15)
Frontier Materials	12	36	13	(5)	3 (	(1)	16	(6)	14	(4)	1	(0)	15	(4)	18 (6)	4 (2	22 (8)	45	(15)	8 (	3) 53	(18)
Scientific and Engineering Simulation	8	24	4	(1)	1 (	(1)	5	(2)	11	(4)	1	(0)	12	(4)	12 (3)	4 (2	16 (5)	27	(8)	6 (	3) 33	(11)
Environmental Technology and Urban Planning															5 (0)	1 (0	6 (0)	5	(0)	1 (	)) 6	(0)
Total	39	117	46	(14)	9 (	(4)	55	(18)	61	(18)	9	(6)	70	(24)	93 (28)	26 (12	119 (40)	200	(60)	44 (2:	2) 244	(82)

Note: ( ) indicates international students.

Reorganized on Apr 1, 2008

# NUMBER OF INTERNATIONAL STUDENTS

(as of May 1, 2012)

Classification		Graduat	e School								y 1, 2012)
Saussaudanion	Master's	Courses		Courses	Underg	raduate	Research	Students		Total	
Countries & Regions	Govt. Supported	Self Supported	Total								
Afghanistan	4	3	5						9	3	12
Algeria				1					0	1	1
Bangladesh	1			2					1	2	3
Brazil	3				1				4	0	4
Cambodia					1				1	0	1
China	5	44	10	32		34		35	15	145	160
China(Taiwan)		1				1		2	0	4	4
Egypt								1	0	1	1
Ethiopia			1						1	0	1
Finland								2	0	2	2
France				1				3	0	4	4
India	1	1	2	5	1				4	6	10
Indonesia		1	1	2					1	3	4
Iraq			1						1	0	1
Republic of Korea		3		2	10	16		2	10	23	33
Malaysia				5		17			0	22	22
Mongolia						1	1		1	1	2
Myanmar			1				1		2	0	2
Nepal				1					0	1	1
Pakistan			1						1	0	1
Philippines			1	1					1	1	2
Saudi Arabia		1							0	1	1
Slovakia					1				1	0	1
Spain			1					1	1	1	2
Srilanka					2				2	0	2
Syria			1			1			1	1	2
Thailand								1	0	1	1
Tunijia			1						1	0	1
Turkey				2				1	0	3	3
Turkmenistan	1								1	0	1
United Kingdom								1	0	1	1
Vietnam		4		2		21		1	0	28	28
Total	15	58	26	56	16	91	2	50	59	255	314
10111	7	3	8	32	10	07	5	2	3:	14	511

Note: Govt. Supported ; Japanese Government Scholarship Students Self Supported ; Foreign Government Sponsored Students and Privately Financed Students

# Overseas Office

#### NITech Liaison Office in Beijing

Nagoya Institute of Technology Beijing Office was established in the campus of Beijing University of Chemical Technology (BUCT) in June 2011 under the Memorandum of Understanding the Establishment of the Liaison Offices with BUCT. This office is determined to play a central role in China. As our main base



to facilitate can support at researches

in China, this office releases information of NITech and serves to facilitate academic or educational exchanges. Furthermore, this office can support students who hope to study abroad and also give support for joint researches between researchers from China and NITech.

# INTERNATIONAL ACADEMIC EXCHANGE AGREEMENTS CONCLUDED

Number of University Level Partnerships	52
Number of Department Level Partnerships	11
Number of Countiries & Regions	24

- ☆ About Student Excahnge Indicators:
  - exchange of students WITH tuition waiver programexchange of students WITHOUT tuition waiver program

(as of May 1, 2012)

Countries & Regions			Department		Program			
		Universities/Institutes (Departments/Libraries at NIT)		Date Concluded	☆ Student	Faculty	Joint	Sharing Sci.
			Department		Exchange	Exchange	Research	Material
	Afghanistan Bangladesh	Kabul University		2005.11.22 1999. 8.31	0	0	0	0
	Dangiadesii	Bangladesh University of Engineering & Technology Shaanxi University of Science & Technology		1999. 8.51	0	0	0	
		Tsinghua University		1994.10.10		0	0	Ö
		Xi'an Jiaotong University		1996.11.18		0	Ö	0
		Zhejiang University		1997. 2.28	0	Ö	0	Ŏ
		Beijing Institute of Technology		1997.10.13	0	0	0	0
		Beijing University of Chemical Technology		2005. 2.23	•	0	0	0
		The Institute of Carbon Fibers and Composites, Beijing University	0	2007.11.21		0	0	0
		of Chemical Technology (Advanced Ceramics Research Center)						
	China	Tongji University Guangzhou Institute of Energy Conversion, Chinese Academy		2006. 6. 6	•	0	0	0
	Cillia	of Sciences (GIEC, CAS)	0	2010.11.19	0	0	0	0
		Institute of Semiconductors, Chinese Academy of Sciences		2007. 5.18		0	0	0
		Fudan University		2007.12.30	0	0	0	0
		Sun Yat-sen University		2008. 5. 9	•	0	0	0
		Sichuan Academy of Social Sciences		2008.11. 5	0	0	0	0
		College of Materials, Xiamen University (Dept. of Frontier Materials)	0	2009. 1.29	0	0	0	0
		Dalian Neusoft Institute of Information		2010. 4.12	•	0	0	0
		Library of Changchun University (Library)	0	1995. 1.17		0		0
Asia		Library of Jilin University (Library)	0	1995. 1.16		0		0
		Anna University		1996. 9. 5		0	0	0
	India	Indian Institute of Technology, Bombay  Central Glass and Ceramic Research Institute		2002. 6.19	•	0	0	0
	muia	University of Delhi		2007. 6.29		0	0	
		National Institute of Technology, Tiruchirapalli		2007. 0.29		0	0	0
	Indonesia	Udayana University		2003.10.14		0	0	0
	madiredu	Hanyang University		2003. 3.10		0	0	0
		School of Electrical Engineering and Computer Science,				_ Ŭ		
	Republic of Korea	Seoul National University	0	2005. 9.20		0	0	0
		(Computer Sci. and Eng., Graduate School of Eng.)		2010 0 20	•	0	0	0
		Myongji University Universiti Teknologi MARA		2010. 9.30 2005. 7. 8		0	0	0
	Malaysia	Universiti Teknologi Malaysia		2006. 6.29		0	0	
	Sultanate of Oman	Sultan Qaboos University		2003. 3. 5		0	0	0
	oditariate of Official	Thammasat University		2004. 3.11		0	0	0
	Thailand	Thai-Nichi Institute of Technology		2007.10.30	•	0	0	Ö
		Chulalongkorn University		2008.11.14	•	Ō	0	Ō
	Taiwan	National Taipei University of Technology		2005. 8.16	•	0	0	0
		Institute of Materials Science		2008. 2.21		0	0	0
	Vietnam	(Vietnamese Academy of Science and Technology)						_
o .	4 . 1	Hanoi University of Science and Technology		2008. 9.18		0	0	0
Oceania	Australia	University of Technology, Sydney		1997. 8. 8		0	0	0
	Bulgaria	St. Cyril and St. Methodius University of Veliko Tarnovo (Computer Sci. and Eng.)	0	2008. 4.23		0	0	0
	Finland	Aalto University		2003. 1.31	•	0	0	0
		École Nationale Supérieure de Céramique Industrielle &		2003. 2.18		0		0
		Université de Limoges		-	_	_		_
	France	École Nationale Supérieure de Chimie de Lille		2003. 2.19	•	0	0	0
		École Françaiss d'Électronique et d'Informatique (EFREI)		2006.10. 3		0	0	0
		École Spéciale des Travaux Publics, du Bâtiment et de L'Industrie (ESTEP)		2009. 3.11	•	0	0	0
		École d'ingénieurs généralistes (ESIGELEC)		2010. 3. 8	•	0	0	0
		University of Poitiers		2010.10. 5	•	Ō	0	Ō
		Faculty of Electrical Engineering and Information Technology,	_			_	_	
	Germany	Chemnitz University of Technology (Computer Sci. and Eng., Graduate School of Eng.)	0	2006.10.23		0	0	0
Europe	,	Friedrich-Alexander University Erlangen-Nuremberg		2011. 3.11	•	0	0	0
		Milano University		2004. 3.30	0	0	0	0
	Italy	Department of Computer Science & Engineering, University of			_	_		_
	<u> </u>	Padua (Computer Sci. and Eng.)	0	2011. 1.17	0	0	0	0
	Poland	Faculty of Computing Science and Management Poznan University of Technology (Computer Sci. and Eng., Graduate School of Eng.)	0	2006.12.29		0	0	0
	Romania	"Alexandru Ioan Cuza" University of Iasi		1999. 8.10	0	0	0	0
	Russia	Mendeleyev University of Chemical Technology of Russia		1991. 5.16	Ō	Ō	0	Ō
	Spain	Universidad Politecnica De Valencia		2000.11.14	•	Ō	Ö	Ō
		Imperial College London		1991. 6. 3	0	0	0	0
		The University of Leeds		1991. 6. 4	0	0	0	0
	United Kingdom	The Institute of Particle Science and Engineering,	0	2007.11. 6		0	0	0
		The University of Shoffield						_
		The University of Sheffield University of Arkansas – Fort Smith		2005. 7. 8 2007. 5.16	0	0	0	0
Nonth		University of Arkansas – Fort Smith  Clemson University		2007. 5.16	0	0	0	0
North America	U.S.A	Northwestern University		2008. 4.23	0	0	0	0
		University of Florida		2010. 7.28	0	0	0	0
South	D . 1							
America	Brazil	University of Brazilia		1999. 1. 7	•	0	0	0

# **LIBRARY**

As the information center of NITech, the NITech library serves the students, faculty, and staff of NITech by collecting, cataloging, conserving books and other materials, and providing smooth access to them for research, study and education. There are various rooms available zoned into separate quiet and vibrant areas.



#### Floor Plan

4th floor	Serials (Technology)		
411 11001	Refresh Corner		
	Serials (Natural Science, Technology, Industry)		
3rd floor	Study Booths, Seminar Room		
310 11001	Current Serials, NITech Document Room		
	International Exchange Room		
	Books (Technology, Industry, The arts, Language)		
	Serials (Social Sciences, Natural Science)		
2-10	PC/AV Corner, Multimedia Reading Room		
2nd floor	Reading Area, Seminar Room D		
	Regional Collaboration Corner, PC Corner		
	Exhibition Corner, Stacks, Refresh Corner		
	Books (Natural Science, Technology, Philosophy,		
1st floor	History, Social Sciences, Literature, Industry),		
1st Hoor	Counter, Electronic Resources, Brawsing Corner		
	Information Corner, Stacks		
Basement	Closed Stacks		

# Library Hours open

Semester Hours	Monday – Friday	8:45 - 21:45
semester nours	Sat. – Sun, Nat. Holidays	8:45 – 16:45
Vacation Hours	Monday – Friday	8:45 - 16:45

#### **Holding Materials**

(as of March 31, 2012)

Print	Japanese	Foreign	Total
Books	256,604	209,426	466,030
Journals	2,443	3,322	5,765

Electric	Japanese	Foreign	Total
Books	431	16,564	16,995
Journals	255	9,026	9,281

#### Library Use 2011

Open Days	317 Days
Users	257,481 Persons
Book Lending	39,273 Volumes
Copying Documents	2,618 Cases





#### NITech Repository Use

(as of May 1, 2012)

Items Archived	2,213
Item Views	75,728
Item Downloads	180,261

#### NITech Repository system (http://repo.lib.nitech.ac.jp)

You can sarch and read the scholary literature (doctral dissertation, academic papers etc.) prodused at the Nagoya Institute of Technology using the NITech Repository System.

## EDUCATIONAL RESEARCH CENTER

#### **Quality Innovation Techno-Center**

Quality Innovation Techno-Center was established by a ministerial ordinance in April, 2002 in order to give advanced practical education of quality innovation not only students but people with regular jobs and to carry out research and development on education system of quality innovation. The main objective of this center is to attempt to have young people develop their dreams, ambitions, adventurous and challenging spirits toward Quality Innovation of 21st century by offering the place and environment for technical education based on practice intra-extramurally. The following are examples of our activities: Intramural education to enrich further the practical education at the workshop to students and graduate students, education for extramural business workers, technical lectures for junior high and high school students.

#### Advanced Ceramics Research Center

Our mission is the research of fundamental materials science and the development of advanced materials for the solution of environmental, resource and energy problems in the 21 century. Ceramics Research Laboratory (CRL) was established in 1973 and moved to Tajimi-city in 1977. This East-Gifu area has a long history on a pottery product industry. The CRL had been supporting the industrial research of many companies in this local area so far. In 2012 the CRL was reorganized as the Advanced Ceramics Research Center (ACRC) for the purpose to develop intelligent material based on ceramics. Since then it has contributed to material science as well as academic education for research engineers in worldwide scale. Recently, some national projects and collaboration with other organization and companies have led to excellent academic and technological work in the field of ceramics and related materials.

#### Research Center for Nano-Device and System (RCNDS)

The Research Center for Nano-Device and System (RCNDS) was established on April 1, 2003, after the project for ten years was completed on March 31, 2003 in the previous "Research Center for Micro-Structure Devices". The purpose of the center is to conduct research on physical properties of materials with micro-structure (nano-structure) and their application to electronic and photonic devices, taking over research works "Heteroepitaxial Crystal of Micro-Structures", "Basic Characterization" and "Device Fabrication and Its characterization" studied in the previous research center.

#### Advanced Disaster Prevention Engineering Center

Prediction, mitigation and control of huge natural disasters like earthquake, tsunami and typhoon will be the final goal of ADPEC. By clarifying the process and the mechanism of the natural disasters and developing various kinds of technologies against the huge disasters, we aim to establish a leading research center of disaster prevention and mitigation in the world.

Meanwhile we will make every effort to provide the service of prevention and mitigation of huge disasters based on the viewpoint of useful and easily-acceptable technology development. We always keep in mind that the technology we developed should be able to make real contribution to the construction of a harmonic society strong against the natural disaster.

#### Research and Education Center for Next Generation Automobile Engineering

Research and Education Center for Next Generation Automobile Engineering was established to conduct research on next generation automobile related field, which integrally solves energy problem and environmental problem, to build up next generation automobile engineering associated with industries, as well as to provide education regarding next generation automobile engineering.

As one of its functions, this research center carries out research and development on Producing Technology Division, Power Control Division and Power Electronics Division. Another activity is to create education programs utilizing "Factory Manager's Training workshop", "3D-CAD Engineer School", and resources from R & D Division of this center.

#### Center for Research on Assistive Technology for Building a New Community

The Center aims for the continuous and comprehensive research on assistive technology for building a new community in the 21th century of Japan known as "society of the aged" – a new community in which people of all generations can cooperate with each other and live happily- through the union of engineering, humanities and social sciences.

Activities: One of the aims of the Center is to contribute to the continuous and comprehensive research on assistive technology for building a new community in the 21th century of Japan known as "society of the aged".

One of the aims of the Center is to evaluate the quality of assistive technology from the standpoint of building a new community.

#### Center for Social Contribution and Collaboration

In order to promote and strengthen our industry-academia-government collaboration strategy, this center has been organized into two divisions: the Planning and Administrative Division and the Intellectual Property Utilization Division. The latter division has functions such as technology transfer support and practical liaison

activities

As a core organization for promoting NITech's industry-academia-government collaboration project, we are going to enhance the function of our one-stop service, and facilitate coordination with industry.

#### (1) Planning and Administrative Division

The objective of this division is to plan and administrate the promotion and enhancement of the industry-academia-government collaboration strategy.

Main activities

One-stop service

• Plan and design of the Center's long-term and medium-term programs

• Receive and contract the external funds (joint research, etc.), and conclude confidentiality agreement

Public relations and office work for the Center

#### (2) Intellectual Property Utilization Division

The objective of this division is to promote joint research, assistance for venture companies, management and utilization of intellectual property.

Main activities

• Promotion of consultancy service for science and technology

• Promotion of industry-academia-government collaboration, e.g. working as a liaison

• Promotion of research works conducted with competitive funds

• Promotion of joint research in collaboration with private companies

• Extension classes and seminars according to community needs

• Assistance for the creation of intellectual property

• Evaluation, utilization, and management of intellectual property

Assistance for technology transfer

• Assistance for the development of university-based start-up ventures based on research

• Promotion of unique R&D projects

• Assistance for joint research plans anchored mainly by graduate students and young researchers

• Dissemination of information about technological trends in advanced economies and industrial arenas

#### Center for Research and Development in Higher Engineering-Education

The Center for Research and Development in Higher Engineering-Education was established on April 2005 to support the engineering-education system of NITech (Nagoya Institute of Technology). The Center consists of 3 Offices as follows; "Admission Research Office", "Educational Research and Development Office", "Career Education Office".

#### Nagoya Institute of Technology International Center

The Nagoya Institute of Technology International Center was established on April 1st, 2005, for the purpose of fostering talented students who will be able to contribute to international society and promoting global cooperation with universities in foreign countries.

The Center consists of two sections: Human Development Office and Partnerships Office.

#### (1) Human Development Office

This section aims to foster talented students who will be able to make contributions to the international society. Its main functions are:

- To provide international students with a wide range of educational activities/programs, such as Japanese language courses and study tours.
- To enhance the exchange of students between NITech and foreign universities.
- To establish the alumni association as to develop the human network of former NITech international students.

#### (2) Partnership Office

This section aims at promoting international cooperation between NITech and universities/research institutions abroad. Its main functions are:

• To formulate international strategies based on investigation and analysis.

• To promote international academic interactions through effective partnerships with universities/research institutions, including conclusion of academic agreement.

• To expand and enhance NITech's presence in the international arena.

#### **Information Technology Center**

The Information Technology Center opened in April 2006. This organization provides information infrastructure for Nagoya Institute of Technology. The center consists of three sections:

(1) Database administration (2) Course management systems (3) Network management and network security. We are also developing a new system for the administrative offices and education services based on IT technology. We carry out education and research in the areas of computer networks, information media, and

computer and network security.

#### Instrument and Research Technology Center (IRC)

The main missions of the Instrument and Research Technology Center are (1) managements of large-scale instruments for research and (2) promotion of cooperative use of the instruments. The staffs carry out (1) researches for advanced instrumental analyses and (2) support of educations and researches in campus and/or industry. The staffs also provide scientific and technical consultation for instrumental analyses.

#### • Main instruments (2012/4)

TEM (transmission electron microscope), SEM (scanning electron microscope), SPM (scanning probe microscope), EPMA (electron probe microanalyzer), XRD (x-ray diffractometer), AES (Auger electron spectroscope), XPS (x-ray photoelectron spectroscope), ESCA (electron spectroscopy for chemical analysis), SIMS (secondary ion mass spectrometer), FIB (focused ion beam system), NMR (nuclear magnetic resonance spectrometer), Solid-state NMR, MASS (mass spectrometer), TA (thermal analysis system), ESR (electron spin resonance spectrometer), FT-IR (Fourier transform infrared spectrometer), ICP-AES (inductively coupled plasma atomic emission spectrometer), SQUID (superconducting quantum interference device magnetometer), Helium Liquefaction, γ-ray MCA (multi-channel analyzer), etc.

#### Risk Management Center

In the event of an emergency or natural disaster, the Risk Management Center of NITech is prepared to act promptly to maintain the essential functions of the university, to protect the lives of students, faculty, staff, and to preserve the property and honor of NITech.

The Risk Management Center handles emergencies, and implements any crisis management actions required during times of normal operations. It consists of two sections: the Disaster Prevention Section, and the Legal Risk Section.

(1) The main functions of the Disaster Prevention Section are to:

Prepare disaster prevention procedures and plan countermeasures

Maintain the health and safety of NITech students, faculty, and staff

Educate NITech students, faculty, and staff concerning disaster prevention

Take countermeasures and contain damage in the event of an emergency.

(2) The main functions of the Legal Risk Section are to:

Establish measures to prevent the occurrence of legal incidents

Take countermeasures if a legal incident occurs and prevent its recurrence

Provide media relations during emergencies.

#### Center for Fostering Young and Innovative Researchers

The center was established on June 2009 to train excellent young researchers with the ability to conduct world's highest level research, to lead research and educational activities in interdisciplinary fields of NITech, and to contribute to stimulating innovative researches. For this purpose, the center provides a tenure track system, in which the researchers can receive under various supports and may be offered tenure position through the strict and fair review.

#### Health Support Center

This center deals with not only health support of all the members in the university, but also early diagnosis and treatment, prevention of relapse and onset prevention. Under the School Health and Safety Law together with Labour Safety and Health Law, we organize a health checkup for all workers and students. Anyone can have a personal consultation with medical doctors(psychiatrist, internal physician), clinical psychologist, or nurses. First aid is also available.

#### Institute of Ceramics Research and Education

Institute of Ceramics Research and Education (ICRE) has been established to contribute on sustainable society by integrating education research based on ceramics science and engineering. The mission of ICRE is to promote the world-level research in the field of ceramics science and foster young researchers with internationalism.

Department of Ceramics Education

• Foster young researchers to possess the world-level research activity and international vision and to create technological innovation

#### Department of Advanced Ceramics Research

• Promote ceramics research which contribute to solve various issues on environment, energy and resource

# **FACILITIES ON CAMPUS**

#### **University Hall**

University Hall includes a banquet room, cafeteria, barbershop, travel counter, and coopshop (selling books, stationery, electronics, appliances, general merchandise, etc.). There are also meeting rooms for the use of students.

	3rd floor	Meeting room Girl's Common room Counselor's Café etc.			
I	2nd floor	Meeting room Cafeteria Coop shop (selling books, stationery, electronics, appliances, and general merchandise, etc.) Barbershop Travel Counter etc.			
I	1st floor	Career Information room banquet room Convenience store Sumikko Cafeteria Blume etc.			

#### NITech Mart

NITech Mart includes a Convenience Store [Hajikko] at the first floor, and Lounge Café at the second floor. ATM machine is installed in [Hajikko]. Lounge Café can be used for dining area and also communication space.

2nd floor	Lounge Café
1st floor	Convenience store [Hajikko] ATM

#### Kisokomakogen Seminar House

These seminar facilities were built to facilitate training and good health among the students and employees of NITech. It is located at the foot of Kisokomagatake (木曽駒が岳) in Nagano prefecture, It is a scenic sightseeing spot where people can look up Mt. Ontake at the front. These facilities can be used for extracurricular activities, research activities, training, and social events.

1st floor	Meeting & Training room Japanese style room Kitchen Bed rooms Caretaker's room etc	2.
Ground floor	Bath room Washroom etc.	

#### **International House**

The purpose of International House is to promote international exchange in education, research field, and also to provide accommodations for students and researchers with places to live.

Foreign students may move in April and October, period of stay is within 6 months. Students can have meetings or parties in the lobby or Japanese style room upon request.

Family wing (two-story)	Family rooms 2
Couple wing (three-story)	Couple rooms 6
Single wing (five-story)	Single rooms 54 Laundry rooms 5
Administrative building (single-story)	Office Tutor's room Storage Japanese style room for recreation Common hall Library

# **NITech FACILITIES**

	Facilities	Building	Area	Address	
		m <sup>2</sup>	m <sup>2</sup>		
	Engineering Department and General Education School Buildings	101,502			
	Administration Office	3,299			
	University Library	5,577			
	EDUCATIONAL RESEARCH CENTER	1,679			
	Quality Innovation Techno-Center	(986)			
	Research Center for Nano-Device and System	(530)			
	Research and Education Center for Next Generation Automobile Engineering	(97)			
S	Center for Research on Assistive Technology for Building a New Community	(66)			
Campus	Center for Social Contribution and Collaboration	3,748			
Car	NIT International Center	239	138,664	Gokiso-cho, Showa-ku, Nagoya 466-8555	
Gokiso	Information Technology Center	1,230	250,501		
Gol	Instrument and Research Technology Center	1,075			
	Health Support Center	509			
	Auditorium	1,551			
	Gymnasiums	2,479			
	Facilities for Extracurricular Activities	1,729			
	University Hall	4,478			
	International House	2,155			
	NIT Club (Guest House)	264			
	Kouyukaikan	589			
	NITech Mart	303			
	Others	2,513			
	Total	134,919	138,664		
isa Campas	Chikusa Athletic Field	412	34,439	2.512.1 Wheeliloon Obiles In Name	
usa Ca	Student Dormitories (Kowa-ryo)	2,933	7,336	2-512-1, Kitachikusa, Chikusa-ku, Nagoya 464-0083	
Chik	Total	3,345	41,775	100 0000	
Ac	lvanced Ceramics Research Center	2,759	20,943	10-6-29, Asahigaoka, Tajimi 507-0071	
TA	JIMI EKIMAE-area	[1,195]			
	Advanced Ceramics Research Center	(750)		3-101-1 Hon-machi, Tajimi, 507-0033	
Open Laboratory and others		(445)			
Gamagori Yacht-House		170	[200]	1-4-1, Kaiyou-cho, Gamagori, 443-0014	
Shonaikawa Boat-House		376	635	358-3, Nishinagare, Daitoro-cho, Nakagawa- ku, Nagoya 454-0944	
Shidami Extracurricular-Activity Facilities		246	[87] 7,683	2678, Minamihara, Nakashidami, Moriyama- ku, Nagoya 463-0002	
Kisokomakogen Seminar House		378	[4,628]	129-10, Mizusawa, Shinkai, Kisomachi, Kisogun, Nagano 397-0002	
Н	ızama House	2,669	2,981	27, Hazama-cho, Showa-ku, Nagoya 466-0062	
	Total	[1,195] 144,862	[4,915] 212,681		

# CAMPUS MAP

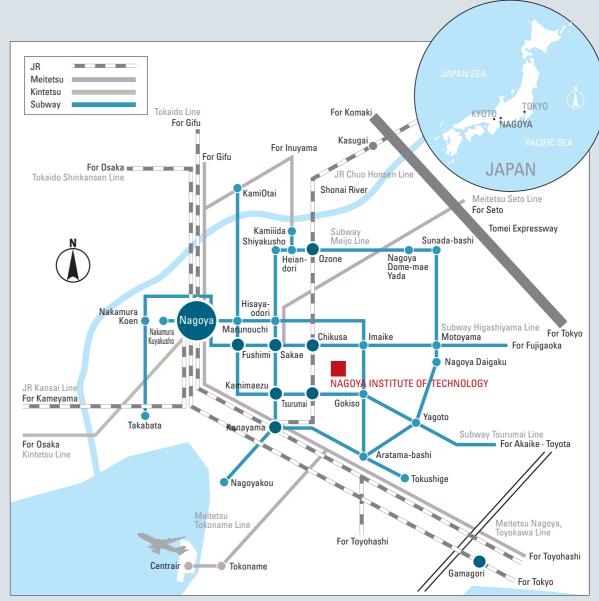
# Chikusa-ku 22 21 20 East Gate North Gate North Gate 10 54 (g) 6 18 Showa-ku 11 13 Counts Count



- (a) Auditorium
- (b) Health Support Center
- (c) University Library
- (d) Administration Bureau
- (e) Administration Bureau (Dept. of Student Affairs)
- (f) NIT Club (Guest House)
- (g) University Hall
- (h) International House
- (i) Gymnasium
- (j) Facilities for Extra-curricular Activities

\* The number from ① to ⑤ shows the number of building.

# **LOCATION**





#### Means of Transportation

JR	Nagoya Tsurumai	
Subway	Nagoya (Higashiyama Line) (Tsurumai Line) Tsurumai	
Air route	Centrair (Meitetsu Tokoname Line) (JR Chuo Honsen Line) Tsurumai	



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