

UNIVERSITY OF YAMANASHI

Faculty of Engineering

What will technology that is considerate of future generation be?



Handing over a better future for the next generation...
Training that is specialized for you to realize the dreams of society in the 21st century...

The requirements of engineering in the 21st century... Specifically, we believe "gentleness" is required of engineers and engineering in the future.

Engineering is deeply integrated into our daily lives and society.

In fact, it is not an overstatement to say that engineering can change our lives and the society in which we live.

Through breathtaking technical innovations, engineering in the 20th century has brought us great benefits by dramatically changing the way we live and how society operates.


The 21st century will be one in which engineering will become gentler on people and our natural environment because there will be even greater technical advancements. At the same time, engineers will be keenly aware of problems relating to our environment and energy sources.

Under the motto of **"technology training for future generations,"** the Faculty of Engineering at the University of Yamanashi strives to attain "gentle engineering" to ensure a better future for mankind.

We invite you, too, to come join us in achieving that goal for engineering in the 21st century.



UNIVERSITY
OF
YAMANASHI



University of Yamanashi

Faculty of Engineering

- Department of Mechanical Systems Engineering
- Department of Electrical and Electronic Engineering
- Department of Computer Science and Media Engineering
- Department of Civil and Environmental Engineering
- Department of Applied Chemistry
- Department of Biotechnology
- Department of Ecosocial System Engineering
- Clean Energy Special Education Program
- Enology and Viticulture Special Educational Program
- Center for Creative Technology

Faculty of Medicine

Faculty of Education and Human Sciences

Clean Energy Research Center

Graduate School

- Graduate School of Education
- Department of Research Interdisciplinary Graduate School of Medicine and Engineering
 - International Research Center for River Basin Environment
 - Center for Crystal Science and Technology
 - The Institute of Enology and Viticulture
- Department of Education Interdisciplinary Graduate School of Medicine and Engineering



Chairman of the Faculty of Engineering
Yasuhiko Nakagawa

Come and be a part of “engineering that is gentle on the Earth and Mankind” at the Faculty of Engineering at the University of Yamanashi in beautiful, lush Yamanashi Prefecture.

The Faculty of Engineering at the University of Yamanashi has set a goal of “technological education for future generations.” We at the University of Yamanashi educate engineers who will be at the core of their country’s future. Our goals are to give students an expanded liberal education and impart deep expert knowledge, provide them with abundant creativity and a superior ability for decision-making, as well as the capacity to discover problems from a global viewpoint and the ability to solve those problems. Classes are organized into small groups of 35 to 45 students to allow them to get detailed instruction from the basics to applied subjects.

Particularly, this department has organized a series of subjects to respond to students who express curiosity and a desire to learn, education programs, and career guidance counseling. Students can learn leading technologies in all areas of engineering that continue to make breathtaking advancements, such as mechanical engineering, electrical and electronic engineering, information engineering, civil engineering, applied engineering, biotechnology, and environmental engineering.

We invite you to learn “engineering that is gentle on the Earth and Mankind,” which we will need in the 21st century. You will enjoy learning leading edge technologies with us at the beautiful, lush campus of the University of Yamanashi, not far from Tokyo.

Voices of International Students



University of Yamanashi
Faculty of Engineering
Department of Computer Science and Media Engineering

LE VAN QUANG

More and more, computers play an essential part of our daily lives, and have become an irreplaceable part of society’s development. Therefore, I aim to become a computer engineer to

permanently improve computer features and performance. I am also interested in designing and enhancing systems that can be applied to robots. So in order to attain my goal, I decided to study in Japan.

After doing a lot of research and careful consideration, I chose the University of Yamanashi for its learning-program, well-equipped facility, and last but not least, it’s beautiful surroundings. I have been warmly welcomed here and have received a great deal of support from the teaching staff. I also have made many new friends, including foreign students like myself.

After graduate, I intend to continue studying at a higher level to attain my Master’s degree, and then seek employment at a hardware or a robot-developing company.



University of Yamanashi
Faculty of Engineering
Department of Biotechnology

EZZAT BT MOHD AZMAN

When I was in Malaysia, I was very interested in Biotechnology because it is a famous developing course and has a bright future. Biotechnology is a discipline that is based on biology, and will be particularly important in the areas of agriculture, food science and medicine.

Since I began studying in Japan, my life has changed a lot in a positive way. Although I am always busy with lectures, examinations, reports and labs, I am very happy here because I have a lot of friends and the lecturers are great.

Now I am finishing my final project titled “Streptomyces in the high temperature for food industries” . Streptomyces were isolated from Rishiri Island and Iriomote Island, Japan and incubated at 50°C. Isolated microorganisms, for example Streptomyces, Microbispora, Saccharamonospora etc., produced enzymes which are tolerant to high temperatures and will be very useful in the food industry.

After I graduate, I am planning to further my studies and become a lecturer in the future. I want to help my country as well as Japan to excel in the area of biotechnology.

Department of Mechanical Systems Engineering

<http://www.ms.yamanashi.ac.jp/>

**Stronger, faster, more comfortable
“Manufacturing” making living more abundant**



We at the Department of Mechanical Systems Engineering, have the educational philosophy of preparing students to understand the concerns of mankind, machines and information and provide students with the ability to design these to have an organic relationship. They will become engineers with manufacturing abilities that contribute to the prosperity of society, and the happiness and welfare of mankind.

Machine Design Course

This course teaches designing and manufacturing techniques that respond to the needs of society from the viewpoint of mechanical engineering. In addition to students gaining the basics of mechanical engineering, such as materials and structure, operations and vibrations, energy and its flow, and designing and manufacturing, our education programs will allow students to focus their attention on gaining the logic of engineering and the ability to communicate their ideas as an engineer. It is a high goal of our department to train engineers to have a wide field-of-view to encompass the co-existence of technology and nature through our educational programs. Those engineers will play vital roles in future societies.

* This course is accredited by JABEE (the Japan Accreditation Board for Engineering Education); students that successfully complete the course are automatically considered to have completed a JABEE training program.

Mechanical Information Course

Goals of this course are to have students acquire the foundations of mechanical engineering, and expert knowledge, and to train students to acquire the capacity to use that knowledge in manufacturing. This training program has increased weight in the areas of “materials and dynamics of machines,” which are the foundation of machine design, and “design and manufacturing,” which are central issues to machine design and manufacturing. The program focuses on the fields of the flow of information and controls which are indispensable in machine design and optimum operations. Students are trained to become engineers with the ability to manufacture, and with an understanding of the concerns of mankind, machines and information.

* This course supports training programs by JABEE (the Japan Accreditation Board for Engineering Education); course accreditation is pending.

Department of Electrical and Electronic Engineering

<http://www.es.yamanashi.ac.jp/>

New electronic devices and communication control that support society today, and change our future



Electronic devices and information systems that are all around us, such as cellphones and PCs are the result of research and develop by countless engineers and researchers using leading technologies relating to electrical and electronic engineering such as for electronic devices, signal transmission and information processing. Two courses are set for electrical and electronic engineering to cover a wide range of knowledge and skills.

Information Electronics Course

This course implements research and development techniques to develop a new electronic device and strives to apply those techniques to support a high-speed information society such as with semiconductors and superconductors. Students will learn electronic properties, semiconductor devices, and instrumentation with a foundation in electromagnetics, quantum mechanics, electrical and electronic circuits. Students will devote their attention to testing and practical training.

Information Communications Systems Course

Students will learn the basic principals for analyzing, processing, transmitting and control of signals, looking at various electrical phenomena as signals, and will learn the series of electrical and electronic technologies from both hardware and software aspects.

In graduation research, students can take part in research on moving robots and optical transmission and optical controls which are gaining attention, and in research on and applications of signal processing and transmission.

Department of Computer Science and Media Engineering

<http://www.cs.yamanashi.ac.jp/>

Opening up new possibilities for computers

Computer Science and Media Engineering is required not only to simply provide convenient tools, but it also has the important role of innovating social mechanisms and human thought. A goal of the Department of Computer Science and Media Engineering is to cultivate engineers that will take up the challenge of finding new possibilities for computers and will create and support the computer society of the future. This department is accredited by JABEE (the Japan Accreditation Board for Engineering Education).



Computer Science Course

Students will gain an understanding of fundamental technologies such as software and hardware relating to computers and networks, and information statistics and learn programming technology, and designing and manufacturing of basic software.

The curriculum for this course begins with students becoming computer literate and is designed to develop engineers that have the practical abilities that are required by companies after graduation.

Media Engineering Course

The world is changing from the age of IT to the age of ICT (information communication technology). We have entered an age when there is a need for people that understand communication technologies based on IT in order to realize a truly abundant information society.

In this course, students will focus on learning technologies relating to information media for communication between people and computers in addition to gaining an understanding of fundamental technologies relating to computers.

Department of Civil and Environmental Engineering

<http://www.cec.yamanashi.ac.jp/>

Creating environments that harmonize human activity and nature

In recent years, we have been facing many new local and global environmental problems. We have to establish a world that keeps human activity and nature in harmony. In the Department of Civil and Environmental Engineering, students learn and study about technologies for creating a better environment based on civil engineering and environmental engineering.



Civil Engineering Course

Civil engineering is an engineering discipline that deals with the planning, design, construction and maintenance of the physical and naturally built environment, including works such as bridges, roads, airports, tunnels, canals and dams. Students learn technologies relating to structural engineering, hydraulic engineering, geotechnical engineering, transportation engineering, and materials engineering. The basic knowledge relating to environmental engineering is also provided in this course. The goal of this course is to educate students as a civil engineer with knowledge of environmental engineering.

Environmental Engineering Course

This course focuses on the environmental aspect of civil engineering based on its fundamental knowledge. Students learn technologies required for harmonizing human activity and nature, including urban planning, landscape engineering, meteorology, water resources, waterworks, sewerage system, waste management, survey on pollutants, biological environmental purification and biological resource conservation. These technologies also support safe and comfortable life. The goal of this course is to educate students as an environmental engineer with knowledge of civil engineering.

Department of Applied Chemistry

<http://www.ab11.yamanashi.ac.jp/apchem/index.shtml>

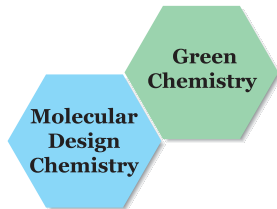
Searching for the frontiers of chemistry with a view to the 21st century

Applied chemistry covers all from the closest daily things in life to new and highly-functional materials in industries and it is the most important discipline for solving various problems and for contributing to the continuous human developments.

The department of applied chemistry has two main courses of "Green chemistry course" and "Molecular design chemistry course". The department works on developing methods of measurements in order to solve energy or environmental problems and methods of clarifying chemical phenomena. It also contributes to advanced technologies like chemistry-related nanotechnology, creating new or high-functional materials. These research achievements are embodied in sensors, catalysis, plastics and fuel cells and applied in our modern society.



Carbon dioxide laser-thinning apparatus used for preparation of nonwoven fabric that was made of endless microfibers.



Department of Ecosocial System Engineering

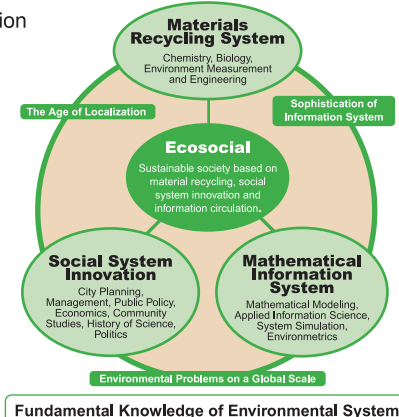
<http://www.js.yamanashi.ac.jp/>

Striving to develop a sustainable society

In order to create a sustainable society, it is necessary to reduce the impact on the global environment caused by the social actions of people and to develop a zero-emission society. Ecosocial System Engineering is a new discipline that crosses and integrates conventional disciplinary boundaries. Our educational and research goals are based on the three academic pillars: materials recycling, social system innovation and information circulation. Students are expected to acquire the ability to think logically in handling problems generated by human activities and to attain adequate knowledge to be a competent engineer who will help the creation of a sustainable society.



Chemistry field of natural science experimentation



Department of Biotechnology

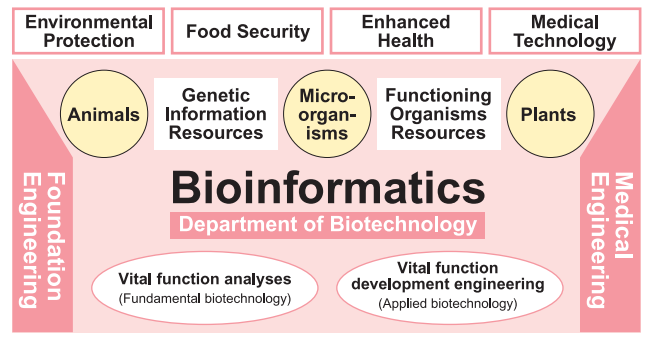
<http://www.ab11.yamanashi.ac.jp/ABF/BT/index.html>

Solving modern social problems with leading edge biotechnology

Biotechnology is a subject that clarifies the various mechanisms of life, and strives to apply that knowledge. Biotechnology applies the results obtained using life sciences and biotechnology as a foundation to a wide variety of fields as the global environment, energy, health and medicine, and is helpful in solving the various problems facing society in the 21st century.



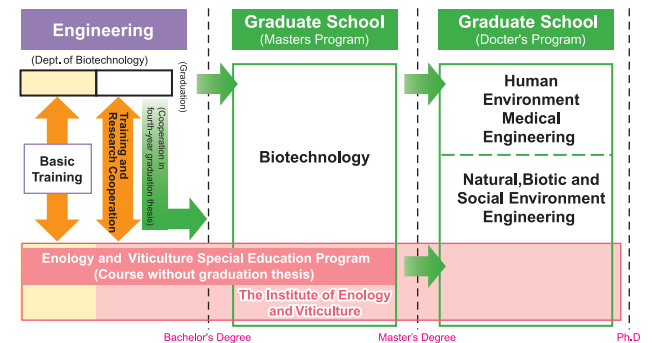
Biotechnology is divided into two main disciplines. One is "vital function analyses" that strives to solve fundamental problems to apply genetic codes and functions of microorganisms; and the other is "vital function development engineering" that strives to develop new effective organisms and effective functions, driving methods of biotechnology.



Special Education Programs

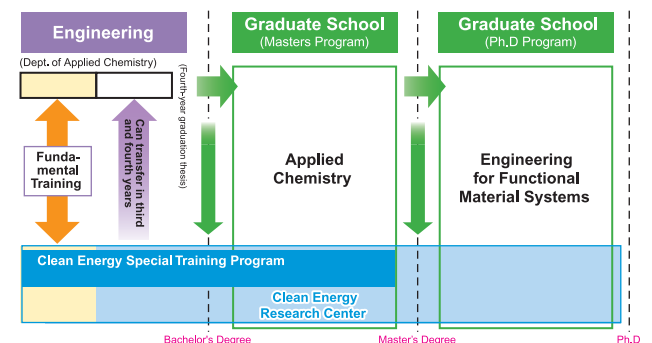
Enology and Viticulture Special Education Program

This course trains engineers and researchers enthusiastic about manufacturing wine so that they will have a high level of knowledge and technical expertise in the area of viticulture. In the six-year curriculum, students will receive a more practical education in internships to experience wine breweries in Yamanashi, and through special viticulture research.



Clean Energy Special Education Program

This center strives to train highly specialized, internationally-accepted workers and researchers to be leaders in research for future sources of clean energy. From the first year in this six-year curriculum, students are given opportunities to exchange with teachers and more advanced students in the clean energy research center, and researchers from the business world.



Department of Research Interdisciplinary Graduate School of Medicine and Engineering Associated Facilities

The Institute of Enology and Viticulture

<http://www.wine.yamanashi.ac.jp/index.html>



This is the only domestic research center that conducts multifaceted research on wine and grapes.



This center has a long history as a unique research institute, and is the only one in Japan that is dedicated to the research of wine and grapes used in making wine. This center has three research divisions, namely for laboratory of wine microbiology, biofunctional science, and fruit genetics.

The theme of research being conducted by Assoc. Prof. Okuda at lab of biofunctional science is related to a compounds called polyphenols which are found in wine. Red wine contains several hundred to several thousand varieties of polyphenols. They mutually undergo complex chemical reactions during the fermentation process, but those mechanisms remain largely unexplained. Polyphenols are considered to be effective in preventing heart disease and cancer, and they are considered to have a wide range of applications such as in the chemical industry in polymers. Polyphenols which have bitter or astringent in taste highly affect the flavor of wines. Research on polyphenols are greatly anticipated for that reason. This center is also involved in a wide range of training and research activities such as genetic research of grapes and wine microorganisms, research into mechanisms for disease-resistant of grapes, and improvements in quality of grapes and wines.

Center for Crystal Science and Technology

<http://www.inorg.yamanashi.ac.jp/ccst/home-j.html>



Research and Development of Innovative Materials

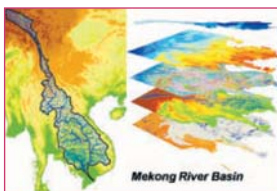
The center for crystal science and technology performs study on synthesis and development of new functional crystal materials and also contributes to local industry by conducting advanced technology concerning crystal growth.

The center is composed of the "research division for crystal bond engineering" and the "research division for crystal structure engineering". The research division for crystal bond engineering develops the materials with new functions by controlling atomic arrangement and bonding. The research division for crystal structure engineering develops the materials with new functions by controlling crystal structure and assembly texture of them.

There are still many undiscovered materials and unknown functions. Finding those materials and being the first in the world to succeed the growth of single crystals are like being on an adventure. Such enthusiastic challenges are continued in the center.

International Research Centre for River Basin Environment

<http://www.coe.yamanashi.ac.jp/>



For leading edge research to solve water problems and creating international network of experts

All over the world, there are wide-spread problems caused by water such as depletion of water resources, water damage, water environment deterioration and water-borne diseases. To solve these disasters and health problems, our research centre develops leading edge technologies in river basin hydrology, environmental dynamics, environmental management, regional planning, health risk and integrated field of them to help river basin management. The centre also aims to train human resources by unique ways, conducting research guidance for "International River Basin Environmental Science Special Program" in master course and "International Special Doctoral Program for Integrated River Basin Management" and activities for forming international network of water resource experts through Internet system and Overseas Support Centres.

Inter-department Shared Training and Research Facilities

Clean Energy Research Center

<http://www.clean.yamanashi.ac.jp>



Leading Research in Fuel Cells and Solar Cells

The Clean Energy Research Center performs research work on fuel cells and solar cells, which are expected to become clean sources of energy in the near future.

The Division of Fuel Cell Research carries out basic and applied research on fuel cells for their commercialization. A number of national projects have been carried out with related companies. In 2008, its sister center, the Fuel Cell Nanomaterials Center was established to promote the Hi-Per FC (High Performance Fuel Cells) project supported by the Japanese government.

The Division of Solar Cells and Environmental Science carries out research on interstellar reactions, which proceed via low temperature tunneling. This finding is potentially applicable to the low cost fabrication of large area amorphous silicon for solar cells. Novel analytical systems have also been developed to detect tiny amounts of environmental pollutants.

The Center participates in the education of undergraduate and graduate students through the above forefront research activities.

Engineering Facilities

Center for Creative Technology

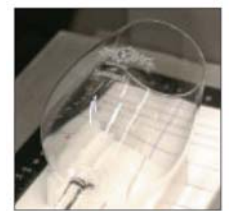
<http://www2.ms.yamanashi.ac.jp/monodukuri>



Experience the fun and enjoyment of manufacturing from machining to forging

This is a branch of manufacturing education at Yamanashi University. We support manufacturing apprenticeship classes that target students from mechanical engineering, electrical and electronic engineering, and applied chemistry, and support internal research from consigned work. In the apprenticeship classes, students will get experience from processes that use machining tools to micro-fabrication using the latest NC that applies CAD/CAM technologies, in addition to casting, forging and welding. This class is very popular among our students, and we even have several female students who eagerly ask questions about forging and welding. Separate to the viewpoint of manufacturing parts, students can experience manufacturing that requires designing, craftwork, and artistic ability using laser engravers or micro-laser modeling system.

Also, as a part of the manufacturing education, students undergo laboratory training in traditional Yamanashi craftwork to have the opportunity to manufacture something and learn about the handicrafts handed down locally. Currently, there are four courses being held for Koshu crystal and stone working, Koshu hand-carved seals, Koshu Amahata ink stone. By coming into contact with traditional crafts that have a long history, students will learn to appreciate the joy of manufacturing.



Wine glass engraved with pattern using a laser engraver

JABEE Training Programs

JABEE is an acronym for the Japan Accreditation Board for Engineering Education. This is an organization that examines whether university level training programs meet standards required by society. Students that graduate from these accredited programs are considered to possess the level of knowledge and ability required by society. When obtaining the qualification of "Engineer," which is recognized worldwide as a degree of engineering of the highest rank, they can enjoy the major benefit of being exempt from having to sit for the primary exam.

International Exchange Agreements

As of May, 2008

Faculty	Country	Institution	Agreement date
University of Yamanashi	Indonesia	The Faculty of Medicine, University Indonesia	1997.11. 5
	China	Sichuan University	1986. 5.29
		Tianjin Normal University	1991. 7.16
		China Medical University	1996. 3.11
		Institute of Chemistry, Chinese Academy of Sciences	2002. 3. 1
		Inner Mongolia Medical College	2002. 7. 2
	Institute of Water Resources and Resources and Hydropower Research	2002. 7.11	
	Thailand	The Asian Institute of Technology	2004. 3. 3
	U.S.A.	Eastern Kentucky University	1992. 7.31
		The University of Iowa	2001.10. 4
	U.K.	The University of Durham	2001. 2.20
Oxford Brookes University		2006. 7.10	
Australia	University of Technology, Sydney	1998. 6. 5	
Germany	Dresden University of Technology	2005. 3.30	
Faculty of Education and Human Sciences	Germany	Ludwigsburg University of Education	2002. 3.20
	France	Language Department, University of Jean Moulin, Lyon 3	2001. 9.27
		University of Jean Moulin, Lyon 3	2004. 3. 2
Faculty of Medicine	Thailand	Boromarajonani College of Nursing Nopparat Vajira	2000. 7.18
	Sweden	Karolinska Institute, Medical University of Stockholm	1999. 1.20
	Pakistan	The Foundation University Medical College	2005. 6. 7
	India	Nichi-In Centre for Regenerative Medicine	2007. 4. 9
Faculty of Engineering	Korea	Ceramic Processing Research Center, Hanyang University	1999.10.20
		College of Engineering, Chonbuk National University	2007. 3.19
		e-REST, Chonbuk National University	2007. 3.19
	China	Fiber Optic Sensing Technology Center, Wuhan University of Technology	2000. 8. 1
		Changchun Institute of Applied Chemistry, Chinese Academy of Sciences	2000.11.24
		College of Traffic and Transportation, Southwest Jiaotong	2005.11.21
	Malaysia	Northern Malaysia University College of Engineering	2006.12.11
Indonesia	Brawijaya University of Engineering	2007.10. 4	

Nauber of Students Studying Abroad

In 2007 and 2008

Country	University	Number of Students
U.S.A.	Eastern Kentucky University	3
Australia	University of Technology, Sydney	4
Germany	Technical University of Dresden	2

GRADUATE SCHOOL

Students that have the desire to deepen their research can advance in the Master's courses in the engineering or medical fields (majoring in medicine). The Department of Education Interdisciplinary Graduate School of Medicine and Engineering in the Graduate School is different from the conventional graduate school engineering research disciplines and medical related research disciplines. The Department of Education Interdisciplinary Graduate School of Medicine and Engineering in the Graduate School was created to "redevelop knowledge" focusing on engineering and medicine. This is a fusion of quite unknown areas of study of engineering and medicine that enables research to be conducted that will respond to the demands of new generations. Also, students can study at the Institute of Enology and Viticulture, the Center for Crystal Science and Technology, the Clean Energy Research Center and the International Research Center for River.

Graduation from Faculty of Engineering

Graduation from Faculty of Medicine

Graduation from Faculty of Education and Human Sciences

Department of Education Interdisciplinary Graduate School of Medicine and Engineering

Division of Engineering

Mechanical Systems Engineering

This is organized into the four courses of Energy Systems, Manufacturing Process and Materials, Integrated Systems, and Kansei Information Engineering.

Electrical and Electronic Engineering

This trains engineering that will respond to new generations by understanding leading edge technologies of electrical and electronic engineering and boundary region technologies while considering harmony of mankind and the earth's environments.

Computer Science and Media Engineering

Students are trained in the leading areas of information media engineering and computer science while joining in Japan/China bridge SE training programs.

Civil and Environmental Engineering

To build bridges, river embankments, roads and railroads, we cultivate in our students the ability to conduct research to gain specialized knowledge and train people that will create the social infrastructures of tomorrow that will provide harmony between mankind, nature, man-made articles and human activities.

Applied Chemistry

We train engineers with a high level of specialized knowledge through distinctive, leading-edge academic research such as for the creation of new materials and high-function materials, and the development of clean energy sources.

Biotechnology

This major is composed of courses from Vital Function Development Engineering and comprehensive chemistry of wine. We train students to be prepared with a high level of knowledge relating to biological functions, food and wine, and leading edge technologies.

Human Oriented Engineering

Merging a variety of fields such as mechanical, electrical and civil engineering with medical engineering, we aim the total system in which every person can live in safe, comfortably and healthy.

Sustainable Society Studies

We cultivate workers with a high level of professional skills to contribute to developing a sustainable society, as a training and research organization that fuses different fields of natural science, and humanities and social sciences.

Combined Type of Integrated System Development Training Programs

This program cultivates integrating engineers that will develop products that integrate machines, electricity and information. By cooperating to develop actual products, students will gain the ability to communicate and the ability for practical product development.

Number of Foreign Students (2004-2008)

Term	Mext							Foreign Government							Private							Total			
	Undergraduate			Graduate Students				Total	Undergraduate			Graduate Students				Total	Undergraduate			Graduate Students				Total	
	Regular	Irregular	Total	Regular	Irregular	Total	Regular		Irregular	Total	Regular	Irregular	Total	Regular	Irregular		Total	Regular	Irregular	Total					
2004	1		1	13	5	18	19	18		18				18	33	16	49	60	12	72	121	158			
2005	2		2	17	3	20	22	20		20				20	48	14	62	63	5	68	130	172			
2006	1		1	19	2	21	22	25		25	1		1	26	48	19	67	70	3	73	140	188			
2007	2		2	19		19	21	28		28	1		1	29	49	22	71	71	7	78	149	199			
2008	3		3	17		17	20	28		28	3		3	31	43	16	59	65	3	68	127	178			

As of May 1. Every Year

Number of Foreign Students by nationalities

As of May 1, 2008

Nationality	Graduate Student			Undergraduate Student			Research Student			Occasional Student and etc.			Total			Total
	Mext	Foreign Government	Private	Mext	Foreign Government	Private	Mext	Foreign Government	Private	Mext	Foreign Government	Private	Mext	Foreign Government	Private	
China	9		40	2		34			8			1	11	0	83	94
Malaysia		3	2	1	27								1	30	2	33
Vietnam			3			5							0	0	8	8
Korea	1		3		1	2							1	1	5	7
Thailand	1		3										1	0	3	4
Indonesia			4										0	0	4	4
Australia												4	0	0	4	4
Nepal	1		2										1	0	2	3
Taiwan			2			1							0	0	3	3
Mongolia			2			1							0	0	3	3
Britain			1									2	0	0	3	3
Bangladesh	1		1										1	0	1	2
Germany			1										1	0	2	2
France													2	0	2	2
Afghanistan	1												1	0	0	1
Iraq	1												1	0	0	1
Ethiopia	1												1	0	0	1
Pakistan	1												1	0	0	1
Ukraine			1										0	0	1	1
U.S.A.													1	0	1	1
Total	17	3	65	3	28	43	0	0	8	0	0	11	20	31	127	178

Engineering (Master's Course)

Division of Medicine

Medical Science

We accept graduates of mainly from engineering, the natural sciences, nursing, humanities and social sciences, take care that they learn the fundamentals of medicine. We cultivate the following kinds of people. Also, the door is open after finishing this major for students to advance onto a Ph.D course in the fusion of medicine and engineering, or in the field of medicine, or to continue doing research.

- (1) Researchers involved in biotechnology research
- (2) Engineers with high levels of knowledge of health care policy
- (3) Engineers with high levels of knowledge in counseling for medical organizations
- (4) Engineers with high levels of knowledge in gene counseling and gene information handling in clinics and healthcare facilities
- (5) Coordinators in leading edge high level medical treatment such as medical technology for reproductive treatment, gene treatment, and organ transplants
- (6) Specialists for mental problems at training sites and high-level specialists in healthcare training
- (7) High-level specialists for sports medicine
- (8) Specialists in logic in medical research and medical treatments
- (9) High-level specialist engineers in other medical situations

Division of Nursing

Nursing Science

Department of Education Interdisciplinary Graduate School of Medicine and Engineering (Doctor's Course)

Division of Engineering

Engineering for Functional Material Systems

We train engineers that can guide leading edge technology developments of materials, devices and systems, striving for the development of clean energy sources, and electronic materials development, and will be internationally active.

Information and Mechanical System Engineering

We train engineers and researchers that can study software that develops production systems and information systems, and information communication networks with a wide field of view, and design, develop and carry out those endeavors, and lead projects in cooperation with foreign engineers.

Natural, Biotic and Social Environment Engineering

We allow students to gain specialized knowledge of designing, building, managing and maintaining social infrastructure facilities and associated facilities and train specialized workers that can estimate and evaluate with a view to solving problems.

Division of Medicine and Engineering Science

Human Environment Medical Engineering

We accept candidates not only after completing the Master's course in engineering, or graduates of the medical department, but also candidates from onsite trainers and graduates of Master's programs in the Graduate School of Education to training students to be prepared with a wide field of view, and the ability to practically solve problems.

- (1) Personnel involved in future biotechnology research and foresight medical research of health
- (2) Physicians, researchers and engineers that will have deep insight into life and the environment, and will have a wide field of view
- (3) Personnel that can promote the development of healthy foods and tissue regeneration technologies
- (4) Personnel that can contribute to implementing government handling of hazardous chemical substances
- (5) Information communication engineers, researchers and physicians that understand human information processing mechanism
- (6) Personnel that can be active in new medical instrument industries
- (7) Teachers that can handle today's major teaching problems such as refusal to go to school, bullying and classroom disruptions, and have knowledge of psychiatry and pediatrics.

Nursing and Health Science

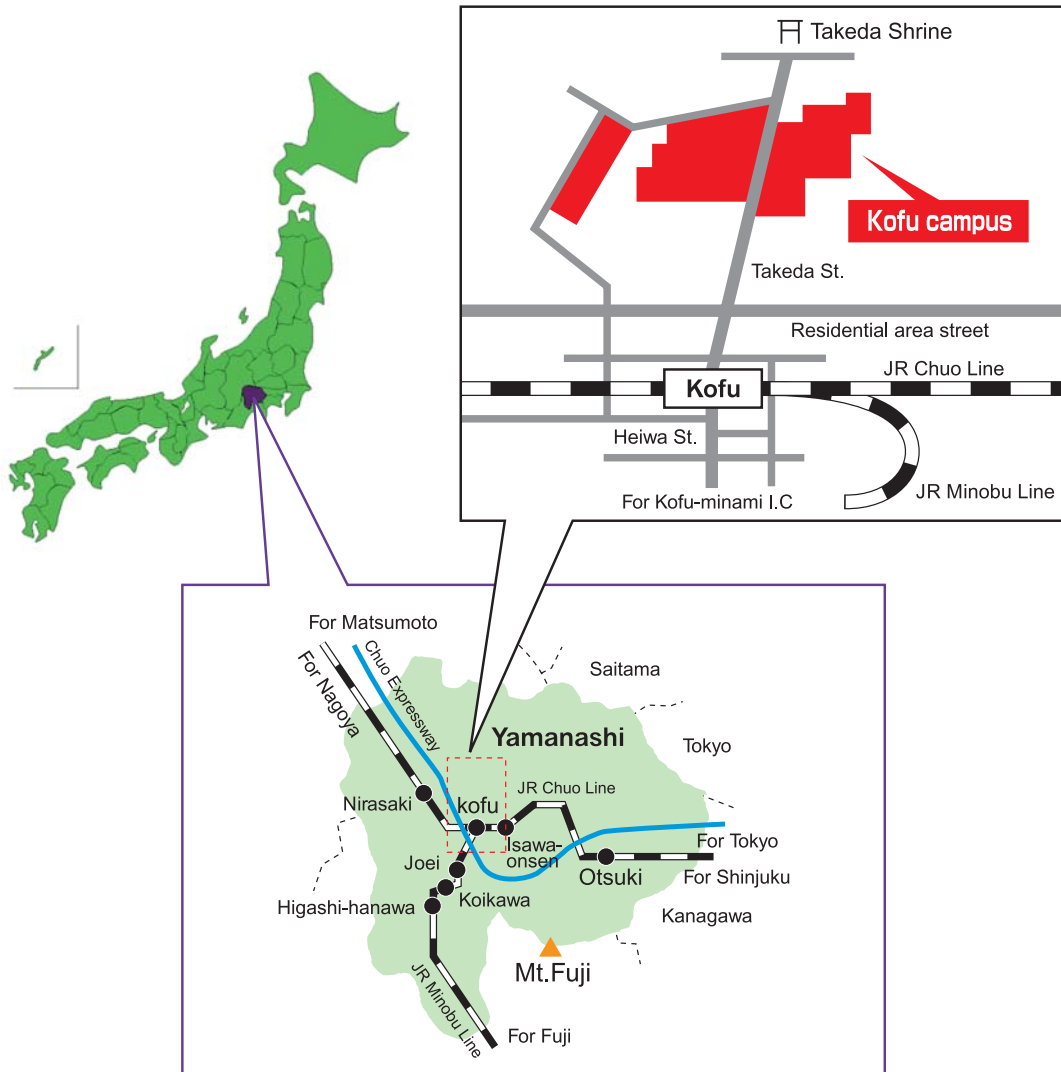
Division of Medicine

Advanced Medical Science

Medical Science of Bioregulation

Access to University of Yamanashi

Kofu Campus (Faculty of Engineering / Faculty of Education and Human Sciences)



- JR Chuo Line: get off at Kofu Station; walk 20 minutes from the north exit.
- JR Chuo Line: get off at Kofu Station; 5 minutes by bus (for Takeda Shrine/Sekisujji) from the north exit; get off at University of Yamanashi.
- ◆ Narita Airport → Tokyo [Narita Express 56 minutes]
- Time using JR: Tokyo (Shinjuku) → Kofu [Approx. 1 hour, 27 minutes (Special Express)]
Shizuoka → Kofu [Approx. 2 hours, 10 minutes (Special Express)]
Matsumoto → Kofu [Approx. 1 hour (Special Express)]
Nagoya → Kofu [Approx. 3 hours, 10 minutes (Shinkansen, Special Express)]
- Time using Expressway Bus: Tokyo (Shinjuku) → Kofu [Approx. 2 hours, 10 minutes]
Nagoya → Kofu [Approx. 4 hours]



National University corporation

University of Yamanashi Faculty of Engineering

References (Department of Engineering Director for Support)
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