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Why UTokyo?

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Explore Our Campuses - Hongo

An Intelligent Building in Hongo: Daiwa Ubiquitous Computing Research Building

Characterized by its unique exterior of cedar planks designed to resemble fish scales, the Daiwa Ubiquitous Computing Research Building is a state-of-the-art "intelligent building" that opened in May 2014. The building was donated by Daiwa House Industry Co. and serves as an educational and research center for ubiquitous computing at the University's Interfaculty Initiative for Information Studies. It features a large array of sensors which monitor wind speed, radiation, particulate matter, temperature, humidity and many other factors, recording data which is uploaded to a network and can be used for a variety of purposes in the so-called "Internet of Things." Designed by renowned architect and University of Tokyo Professor Kengo Kuma, this high-tech facility also features a mud wall on the side facing Kaitokukan's garden made by Hida-Takayama plaster craftsman Shuhei Hasado, and a Japanese confectionery café operated by Iron Chef Japanese Jun Kuroki. Adjacent to the café is an outdoor plaza, which lends to the building a sense of openness.



Daiwa Ubiquitous Computing Research Building

Multi-Disciplinary Research requirements



















Anyone interested in addressing environmental problems in the 21st century needs to be prepared to cross disciplinary boundaries every now and then, says Professor Abbas El-Zein. His own research, which focuses on environmental geomechanics and environmental risk, draws on the disciplines of computational mathematics, environmental science and engineering, among others.

"Environmental problems in the 21st century are complex and multifaceted.

"For example, if we want to understand how groundwater becomes contaminated, we need to consider how water moves in the subsurface, which involves hydrology and soil mechanics. We also need to look at how chemical substances become dissolved in soil water or filtered by soil grains, which takes us into soil physics, chemistry and thermodynamics.

"On the other hand, if we want to know how to prevent groundwater contamination, we might build an engineering system to prevent contaminants entering the groundwater, or we might find that a better solution is to come up with policies that prevent the use of those contaminants in the first place, or that ensure they don't pose a threat to the groundwater. This requires some understanding of the social, economic and legal context within which technology operates. Without such an understanding, the solutions we come up with might not be quite the right ones.

"Approaching problems in this cross-disciplinary way is part of the excitement. It's complex, of course - but, on the bright side, there's not a moment of boredom! It makes your mind richer, and it makes you humbler as you get a glimpse of the wonder and complexity of what others are doing."

World Rank	Institution*	By location		National Rank	Total Score	Score on Alumni ▼
		All				
1	Harvard University			1	100.0	100.0
2	Stanford University			2	76.5	44.5
3	University of Cambridge			1	70.9	81.4
4	Massachusetts Institute of Technology (MIT)			3	70.4	68.7
5	University of California, Berkeley			4	69.1	64.4
6	Princeton University			5	61.1	54.4
7	University of Oxford			2	60.1	50.8
8	Columbia University			6	58.8	62.8
9	California Institute of Technology			7	57.3	50.5
10	University of Chicago			8	53.9	59.2
11	Yale University			9	52.8	47.1
12	University of California, Los Angeles			10	52.5	29.2
13	University of Washington			11	50.3	20.9
14	Cornell University			12	49.6	43.1
15	University of California, San Diego			13	49.5	19.0
16	University College London			3	47.1	27.8
17	University of Pennsylvania			14	46.0	31.3
18	Johns Hopkins University			15	45.7	37.3
19	Swiss Federal Institute of Technology Zurich			1	44.1	29.2
20	Washington University in St. Louis			16	43.3	22.7
21	University of California, San Francisco			17	42.4	0.0
22	Northwestern University			18	41.9	15.2
23	University of Toronto			1	41.6	19.7
24	The University of Tokyo			1	41.5	38.3



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The University of Tokyo

General Information

Introduction

Students Profile

Program

English Name: The University of Tokyo

Region: Eastern Asia

Country: Japan

Found Year: 1877
















Address: Tokyo Daigaku, 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8654, Japan

Website: <http://www.u-tokyo.ac.jp>

Performance in Academic Ranking of World Universities



2017 League Table of the top 200 Universities in Asia

Rank	University	Country
1	The University of Tokyo	jp 
2	Fudan University	cn 
3	Shanghai Jiao Tong University	cn 
4	National Taiwan University	tw 
5	Kyoto University	jp 
6	Peking University	cn 
7	National University of Singapore	sg 
8	Keio University	jp 
9	Tsinghua University	cn 
10	The University of Hong Kong	hk 
11	The Chinese University of Hong Kong	hk 
12	University of Delhi	in 
13	Seoul National University	kr 
14	Nanyang Technological University	sg 
15	Osaka University	jp 

autonomously in the Doctoral program, with an aim to also acquire leadership ability. The practice of graduate school education differs by department; however, schooling by means of the development of special fields of study has become increasingly important in the Master's program. Research at the Graduate School of Engineering is not just restricted to the "hard" studies centered on experimentation. Instead, diversity in the range of research fields is increasing with research concerning information, artificial intelligence and CAD/CAM; research relating to the environment, disaster prevention, energy and urban social systems; and research into the interdisciplinary fields of life science and medicine which focus on the human. Research is conducted while maintaining a cooperative relationship with other fields of engineering, resulting in the pioneering and application of various new fields. Recently, society's deep concern regarding environmental problems has come to be reflected in research, with issues relating to society and the environment continuing to be stressed in every field of engineering.

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Message of the Dean

The Department of Mechanical Engineering conducts research and provides education based on the four fundamental disciplines of mechanics, namely, mechanical dynamics, material mechanics, hydrodynamics and thermodynamics. These disciplines cover a wide range of applications including the environment, energy, biomedical design and production, and system engineering. Graduate students apply the skills and knowledge accumulated during their undergraduate studies through course and thesis work covering various research themes prepared from cutting edge science related to applied industrial technology. The Department of Mechanical Engineering offers the best opportunities for research and education in the mechanical engineering fields that form the foundation of modern society. Our goal is to develop and refine the student's expertise as researchers and engineers so that they can develop science and technology to help create safe, dependable, healthy and rich lives for civilization around the world.

For details on the research areas and themes our faculty members are currently pursuing, please visit the website of the Department of Mechanical Engineering of the Tokyo University Graduate School of Engineering at: <http://www2.mech.t.u-tokyo.ac.jp/eng/people/>

If you have any specific questions or inquiries, please feel free to contact: dean@mech.t.u-tokyo.ac.jp

The Department of Mechanical Engineering provides well-organized curricula to educate high level researchers and engineers. The education program for undergraduate students includes fundamental lectures of mechanical engineering; kinetics and dynamics, fluid mechanics, thermo dynamics, material mechanics, design and production engineering, as well as a lot of group working programs with machine making and test experiments. The graduate courses for master and doctoral students provide advanced lectures of mechanical engineering and thesis research programs. Active research activities cover wide-range interdisciplinary engineering fields like micro/nano mechanical, environmental, energy-oriented, biomechanical, advanced design and production engineering. Conducting these curricula and research programs supervised by approximately 40 faculties including the members of Institute of Industrial Science, the Departments of Mechanical Engineering and Engineering Synthesis will continuously produce many talented researchers and engineers, and then lead the progress of technology in mechanical engineering, contributing to the sustainable growth of the society.

Short history of the Department of Mechanical Engineering



Since the Department of Mechanical Engineering was established in 1879, many graduates have made contributions to the mechanical engineering field. During the period of economic growth after World War II, the Three Departments of Mechanical Engineering played a major role in producing engineers to give birth and support key Japanese industries such as railroad, automobile, shipbuilding, airplane, heavy equipment, electric and steel. Afterwards, the education and research fields evolved as industries spread and became more diversified. For example, researches in bioengineering, environmental engineering and distributed energy systems have been developed by the needs of the times, and fields like molecular thermal engineering and molecular dynamics have shifted their emphasis from macro to micro in order to clarify various phenomena. The scale of target machines has also been diversified ranging from micro mechanical system to large-scale infrastructures. We are always trying to keep up with the advancements in these research areas so as to have them reflected in our curricula. The master courses are intended to produce engineers who will play active roles in industries and the objective of the doctor courses is to produce people capable of utilizing their talents in advanced special research and development as engineers. As for education and research, we work in cooperation with the Institute of Industrial Science. The Department of Mechanical Engineering and Department of Industrial Mechanical Engineering were integrated in April 2009 to create the Department of Mechanical Engineering.

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The University of Tokyo
Department of Mechanical Engineering

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656, JAPAN
Tel: +81-3-5841-6300 Fax: +81-3-3818-0835

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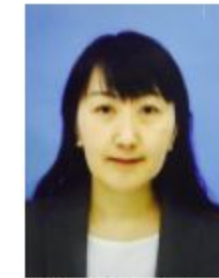
IME Graduate Program Office

Room No.131A, 1st Floor, Engineering Building No.8
 School of Engineering The University of Tokyo
 7-3-1 Hongo, Bunkyo-ku,
 Tokyo113-8656 Japan

Phone: +81-3-5841-8805
 E-mail: admin@ime.t.u-tokyo.ac.jp
 Office hour: Monday and Friday (10:00 - 17:00),
 Tuesday to Thursday (9:00 - 17:00)



Ms. Yukimi Umeda



Ms. Rika Sakai

Scholarships to Study at The University of Tokyo

東京大学 THE UNIVERSITY OF TOKYO

2018 Academic Year Begins in September 2018

On-line Application Period: From September 1st to October 31st, 2017



- Mechanical Engineering
- Electrical Engineering and Information Systems
- Materials Engineering
- Aerospace and Astronautics
- Chemical System Engineering
- Nuclear Engineering
- Interdisciplinary

International Multidisciplinary Engineering Graduate Program

Contact Office: Phone: +81-3-5841-8805 E-mail: admin@ime.t.u-tokyo.ac.jp



Association of
International Engineering Students at UTokyo

The Graduate School of Engineering is the largest Graduate School at the University of Tokyo with almost a third of the overseas students studying at the University. Full and continuous support for overseas students is important, as is the further internationalization of Japanese students. At the Graduate School of Engineering, the concept of further internationalization in education and research, and specific policies based on it, are continuously scrutinized, and great effort is devoted to the enrichment of overseas student education and the expansion of international research exchange.

Research Cooperation with Industries

The University of Tokyo is committed to ensuring the transfer of our research outcomes to society, and industry cooperation is one of the most effective means of achieving this. Nearly 200 Japanese and foreign companies partner with us and fund almost 100 collaborative research projects, a mainstay of our research and one that provides a significant portion of research income. To ensure effective research and positive outcomes, collaborative research is first evaluated through the Proprius21 process, ensuring common understanding of research goals, establishing metrics and milestones for measuring progress, and determining ownership of results and intellectual property.

The mission of the Division of University Corporate Relations (DUCR) is to increase accessibility to University of Tokyo research and, in order to build a foundation of mutual cooperation, to offer proactive support to both domestic and foreign industry.

Information on each department is posted on the Graduate School of Engineering website (<http://www.t.u-tokyo.ac.jp/soee/department/index.html>). For further details on admission procedures, contact the Academic Affairs Graduate Team, Academic Affairs International Student Team or the Office of International Cooperation and Exchange as listed below.

7-3-1 Hongo, Bunkyo-ku, Tokyo 113-8656

Graduate School Team, Administrative Division (for engineering students)

tel +81-3-5841-6038 daigakuin AT t-adm.t.u-tokyo.ac.jp

Office of International Students

tel +81-3-5841-6071 ryugakusei AT t-adm.t.u-tokyo.ac.jp

Office of International Cooperation and Exchange

tel +81-3-5841-6032 t-oice AT t-adm.t.u-tokyo.ac.jp

For more information on each Department, contact:

Department of Civil Engineering: fso AT civil.t.u-tokyo.ac.jp

Department of Urban Engineering: fso AT ue.t.u-tokyo.ac.jp

Department of Mechanical Engineering: kyoumu AT office.mech.t.u-tokyo.ac.jp

Department of Technology Management for Innovation

Japan is in the midst of social and industrial structural reforms. We need forward-thinking people with leadership and a broad education of advanced science and technology, as well as knowledge in business education and economics. Our department educates core leaders able to demonstrate strategic imagination—in other words, people with big aspirations and a strong sense of responsibility and ethics who can create new industrial innovation and a sustainable industrial society from many different perspectives utilizing science and technology. We welcome students who want to learn about science and business in a new and exciting way, as well as working adults who want new goals and want to become integral in supporting industry and policy.

◆ Required Japanese Level

Please visit us at our website for more information. <http://tmi.t.u-tokyo.ac.jp/english/>

◆ Application Distribution/Application Period

Please visit us at our website for more information. <http://tmi.t.u-tokyo.ac.jp/english/>

Department of Mechanical Engineering

The Department of Mechanical Engineering carries out academic research into the five specialized fields of Solid Mechanics/Materials, Heat and Fluids, Dynamics and Control of Machinery, Design and Production and Biotechnology. The results of this education and research are applied to resolve important issues facing modern society in areas such as the environment and energy, medicine and welfare, industrial systems and technology creation. By means of a systematic educational curriculum and research activities that span a broad range of fields from leading-edge science to applied industrial technology, the department nurtures excellent researchers and engineers who possess a comprehensive perspective on technology and human society and the ability to independently discover and resolve issues.

◆ Required Japanese Level

The ability to understand mechanical engineering terminology as well as lectures and practicums in Japanese is required.

Japanese is not particularly necessary for the Doctoral program (however, students should possess a basic level sufficient for daily life).

Department of Advanced Interdisciplinary Studies: kenkyou AT office.rcast.u-tokyo.ac.jp

Department of Nuclear Engineering and Management: nyushijimu AT n.t.u-tokyo.ac.jp

Department of Bioengineering: office AT bioeng.t.u-tokyo.ac.jp

Department of Technology Management for Innovation: nyushi AT tmi.t.u-tokyo.ac.jp

Department of Advanced Interdisciplinary Studies

Students in the Department of Advanced Interdisciplinary Studies will learn and research about budding and advanced foundational/applied research on cutting-edge scientific and technological fields, as well as research on this research itself ("Research on Research"). One feature of graduate schools is adult re-entry into education. Through graduate school-level research and education, we aim to produce not just independent and creative researchers in the field of advanced science and technology, but leading and global researchers who can look at things with a broad perspective, managers and advanced interdisciplinary policymakers. Since 2010 we have offered a consistent curriculum including environmental, energy and accessibility technology programs.

◆ Required Japanese Level

Please visit us at our website for more information. <http://www.rcast.u-tokyo.ac.jp/en/>

◆ Application Distribution/Application Period

Please visit us at our website for more information. <http://www.rcast.u-tokyo.ac.jp/en/>

Graduate School of Engineering	Next Generation of Offshore Wind Turbine System	2013.04 - 2017.03	ClassNK	150
	Environmental Materials Engineering	2012.10 - 2017.09	Nippon Steel & Sumitomo Metal, JFE Steel, Kobe Steel, Nisshin Steel	195
	Environment-harmonized Energy Development Laboratory (JX NOEX)	2013.04 - 2018.03	JX Nippon Oil & Gas Exploration Corporation	100
	Chair for Global Consumer Intelligence	2014.04 - 2019.03	Recruit Holdings Co., Ltd. , Culture Convenience Club Co., Ltd., Panasonic Corporation, Industrial Growth Platform, Inc. (IGPI), Wellness Co., Ltd., KPI Solutions Co., Ltd., DWANGO Co., Ltd., LAWSON, INC., FIELDS CORPORATION, INTAGE HOLDINGS Inc., transcosmos inc.	258
	Water Cycle Data Integrator	2014.06 - 2017.05	Nippon Koei Co., Ltd.	89.5
	Construction and Production Management	2017.04 - 2022.03	Obayashi Corporation, Kajima Corporation, Shimizu Corporation, Taisei Corporation, Takenaka Corporation	250
	Creation of Varied Uses for the Next Generation of IoT	2017.04 - 2022.03	William Henry Gates III	1.5 million USD

Research Income

Research income to the University comes from both the public and private sectors. Of the total amount of Grants-in-Aid for Scientific Research (*KAKENHI*) received from the government, over half is used to support fundamental research, and 17% goes to support young researchers.

		Number	Amount (million yen)
Private sector research collaboration		1,806	7,746
Grants-in-Aid for Scientific Research (<i>KAKENHI</i>)		5,191	23,202
Contracted research	Government competitive research funds	777	17,500
	Government non-competitive research funds	613	16,903
	Non-government research funds	292	810
Donations		14,365	9,909
Total		17,853	52,868