The University of Tokyo (National)
School of Engineering

◆ **Program name**
International program, Civil Engineering

◆ **Degrees:**
Master degree in Civil Engineering

◆ **Credit and years needed for graduation:**
30 credits and writing theses: 2 years

◆ **Address:**
7 Chome-3-1 Hongō
Bunkyō-ku, Tōkyō 113-0033 JAPAN

Features of University http://www.u-tokyo.ac.jp/en/

The University of Tokyo, as a national university corporation supported by the Japanese people, is committed to fulfilling its public responsibility through academic research and by fostering new talent, thus providing a reliable compass to the future. It goes without saying that the problems we face today and in our daily lives exist within the context of our mutual relations with other countries. The education and research activities of the University of Tokyo cannot be sustained without the involvement of the rest of the world, and we hope that the benefits of that research will be widely enjoyed by humanity at large. As society faces up to the challenges of today, so the University of Tokyo will bear its share of the burden through the creation of new academic value and the construction of diverse education and research programs. We will continue to concentrate our labors on reinforcing the academic foundations that make this challenge possible, and with this in mind, the University of Tokyo spreads its academic wings not just to the present and the future, but to the past as well. A determined effort to realize the future possibilities of knowledge, combined with a historically-tempered awareness of the accumulation of wisdom is the essential prerequisite for the creation of human knowledge. It is by focusing not just on scholarship for acclaim today, but by ensuring the sustenance and continued development of diverse disciplines that we can enrich the foundations of knowledge and nurture new sources of creativity.

For more details about the Data of UT, organization, educational activities, read the following URL

- http://www.u-tokyo.ac.jp/en/about/about.html

Features of Graduate School http://www.u-tokyo.ac.jp/en/academics/grad_engineering.html

One of the academic goals of the Graduate School of Engineering is the cultivation of talented individuals equipped with a systematic knowledge of science and technology, and an engineering mindset, capable of responsibly conducting research, development, planning, design, production, management, and policy formulation, in relation to engineering and its application. These engineering abilities are extremely necessary for Sri Lanka. A deeper purpose is to contribute to the sustainability and development of society through pioneering new frontiers in research and actively participating in research that may lead to new technological innovations.

The Graduate School of Engineering has 18 departments featuring principal engineering technology spanning a wide range of fields. The objective of graduate school education is the acquisition of a more advanced degree of engineering knowledge and research ability. In particular, future research and development is carried out 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 on 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.

The importance of the fields of Informatics and Life Sciences is continuing to increase, and problems that cannot be resolved within the traditional framework of engineering, such as those of environmental studies, are increasingly becoming the target of research. In order to respond to this age of borderless fields of study, more flexible forms of research structure are becoming necessary.

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.

For more details about Graduate School of Engineering, read the following URL.

- http://www.t.u-tokyo.ac.jp/soee/index.html

Features of the Program

Since launching the program in 1982, the department has provided a high-level education and research environment in the design of infrastructure technology, planning, disaster mitigation, and environmental management through the medium of English. We promote this program in order to produce talented individuals who are capable of managing and leading international infrastructure development projects throughout the world.

Based on this proven 30 year track record and know-how in recruiting outstanding students and supporting an alumni network, the objective of the program is to establish a unique top level of civil engineers. It achieves this aim by encouraging close collaboration between Japanese and International students and preparing its graduating students to become future international leaders in the field of infrastructure technology. The program is also designed to ensure that civil engineering, which is a foundation for the life of the community, addresses both preparation for unexpected natural disasters and the goal of low environmental impact.

The program combines knowledge of high technology and the latest science with elements of the humanities, a synthesis which promotes the ability for policy making and project management. Thus, students acquire not only academic knowledge and research skills but also the interpersonal awareness and skills which play an important role in the international environment. We strive to enable students to become policy makers, project managers and academics who contribute fully to society. In order to achieve this objective, we create an environment which stimulates students to fully realize their individual potential.

The department also provides Japanese Language Class. This class is largely concerned with developing basic skills in speaking and listening in Japanese (and also reading and writing to a certain extent) the class is offered for about ten hours per week and total of 150 hours in the first semester.

Necessary Curriculum to Obtain the Degrees

http://www.oice.t.u-tokyo.ac.jp/e_lectures/pdf/English%20lecture_2021.pdf

- Wind Engineering and Structures
- Advanced Hydrology
- Advanced Transportation Engineering
- Infrastructure Management
- Urban Disaster Mitigation Engineering
- Nonlinear Mechanics of Reinforced Concrete
- Computational Earthquake Engineering
- Nonlinear Analysis in Civil Engineering
- Projects in Developing Countries
- Frontier of Civil Engineering II

- International English for Civil Engineers I
- International English for Civil Engineers II
- Japanese for Civil Engineers
- Flood Disaster Simulation
- Geographic Information Systems
- Earthquake and Geo-disaster Mitigation Engineering
- Remote sensing Eh
- Photogrammetry and Pattern Recognition E
- Advanced Geotechnical Engineering E
- Principles of Geotechnical Engineering E
- River Engineering E
- Advanced Coastal Engineering E
- Sediment transport in hydrosphere E
- Hydrospheric Science Project E
- Transportation and urban design studio E
- Wind Power Engineering E
- Coastal Hydrodynamics
- Case Studies of International Projects
- Economics and Finance for Infrastructure Engineering
- Innovations in Civil Engineering
- Designing infrastructure projects in developing countries
- Structural Dynamics
- Advanced Structural Dynamics
- Special Lecture on Analytical Chemistry for Cementitious Materials Characterisation

List of faculty members capable of guiding JDS Fellows

http://www.civil.t.u-tokyo.ac.jp/latest/faculty-member-list.pdf

Infrastructure Technology and Design (A)

Junichi KOSEKI Professor
Reiko KUWANO Professor
Kenji WATANABE Associate Professor
Takashi KIYOTA Associate Professor

Infrastructure Technology and Design (B)

Takeshi ISHIHARA Professor
Tetsuya ISHIDA Professor
Toshiharu KISHI Professor
Tomonori NAGAYAMA Associate Professor
Kohei NAGAI Associate Professor
Tsukasa MIZUTANI Associate Professor
Atsushi YAMAGUCHI Project Associate Professor
Di SU Project Associate Professor
Yuya TAKAHASHI Assistant Professor
Yuya SAKA IAssociate Professor
Go IGARASHI Project Assistant Professor

Hydromechanics and Environment

Yoshimitsu TAJIMA Professor
Koji IKEUCHI Professor
Takeyoshi CHIBANA Associate Professor
Takenori SHIMOZONO Associate Professor
Yohei SAWADA Associate Professor
Kei YOSHIMURA Professor
Dai YAMAZAKI Associate Professor
Akiyuki KAWASAKI Project Professor
Kazuo OKI Project Professor
Hyungjun KIM Project Associate Professor
Masashi KIGUCHI Project Associate Professor
Fuminori KATO Professor
Yohei SAWADA Associate Professor
Takao YOSHITAKE Project Associate Professor

Infrastructure Development and Management
Kazumasa OZAWA Project Professor
Yu MAEMURA Assistant Professor
Muneo HORI Project Professor
Pang-jo CHUN Project Associate Professor
Masahide HORITA Professor

Design and Landscape
Yu NAKAI Professor

Transportation Engineering and Planning
Eiji HATO Professor
Takamasa IRYO Professor
Takashi OGUCHI Professor
Shoichi SUZUKI Associate Professor

Spatial Information
Takashi FUSE Professor
Yoshihide SEKIMOTO Associate Professor
Wataru TAKEUCHI Professor
Tsuyoshi ICHIMURA Professor
Lalith WIJERATHNE Associate Professor
Kohei FUJITA Associate Professor

International Project
Hironori KATO Professor
Shunsaku KOMATSUZAKI Associate Professor

Earthquake and Disaster Mitigation Engineering
Kimiro MEGURO Professor
Muneyoshi NUMADA Associate Professor

The list only includes faculty members who assume supervision responsibility for international students.

Academic Schedule

AY 2021 Schedule of the Graduate School of Engineering 「Reference」

▶ https://www.t.u-tokyo.ac.jp/shared/for_utstdnt/data/setcmm_20170616184130875881583 8_893095.pdf

Please visit for 2021 schedule

Facilities

Housing Office: http://www.u-tokyo.ac.jp/en/administration/housing-office/index.html

The University of Tokyo offers accommodations for international students as part of our efforts to promote international exchanges in the education and research fields.
Two types of accommodation are available for international students at the university:
Residences operated by the University and apartments and flats rented by private businesses.
Residences operated by the University are available at lower rents than private accommodation, and are furnished to the minimum level needed for students on arrival.
Each residence is highly motivated to promote international exchanges and pursue activities to encourage communication among residents.

Message for Applicants

In Sri Lanka, the department of civil engineering at the University of Tokyo will conduct reliable research that considers the planning and dissemination of technology developments which incorporates the factors of urban and transport planning and operations. In particular, "Traffic Engineering Group" in the Institute of Industrial Science focuses on developing better solution in the human activities in urbanized area and surrounding environment.
The research topics are mainly related to surface street and highway traffic operations, management and control in addition to the road network or geometric design and planning. Novel transport related technologies such as

advanced information or data utilization, connected and automated vehicles, intermodal fusion of transport systems including MaaS concept and so forth are also possible research topics. These technological solution should be also combined with the knowledge of policy studies, legal issues, social or psychological aspects, economy and business, environmental impacts, and so forth. Not only technologies but also much comprehensive perspectives are required to overcome the transport related issues such as congestion, safety, and environmental impacts, social or business related issues.

It is preferable that applicants try to enwiden their perspective as well as to ensure their basic knowledge and skill on mathematics, statistics and physics before joining the graduate school program.