

Admission

Application procedure for regular applicants

For regular applicants, the Department of Precision Engineering offers two types of selection both for the master's and PhD programs, which are *regular selection* based on written exams and *document-based selection*.

Applicants for these selections must obtain and submit the application form to the *Graduate School of Engineering Office*.

Application procedure for MEXT (Monbukagakusho) scholarship applicants

The applications from *MEXT scholarship* applicants are directly handled by the *Graduate School of Engineering Office*, not by the *Department of Precision Engineering*.

For further information:

Admissions Information, Department of Precision Engineering:

<http://www.pe.t.u-tokyo.ac.jp/en/admission/>

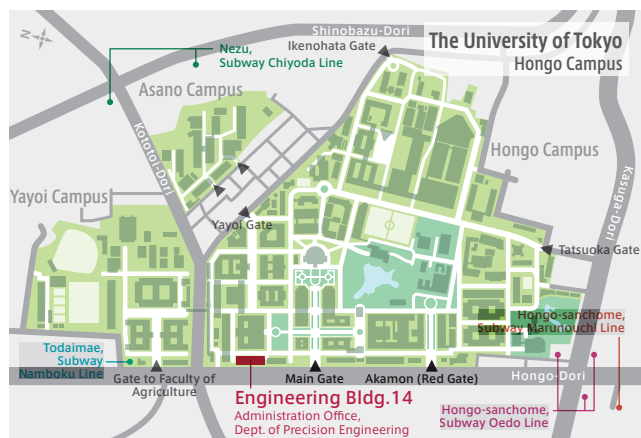
Admissions Information, School of Engineering:

<https://www.t.u-tokyo.ac.jp/en/soe/admission>

Department of Precision Engineering

School of Engineering, The University of Tokyo

2023



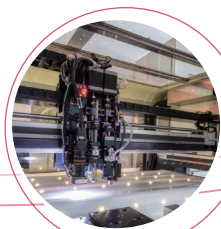
Administration Office Department of Precision Engineering, School of Engineering, The University of Tokyo

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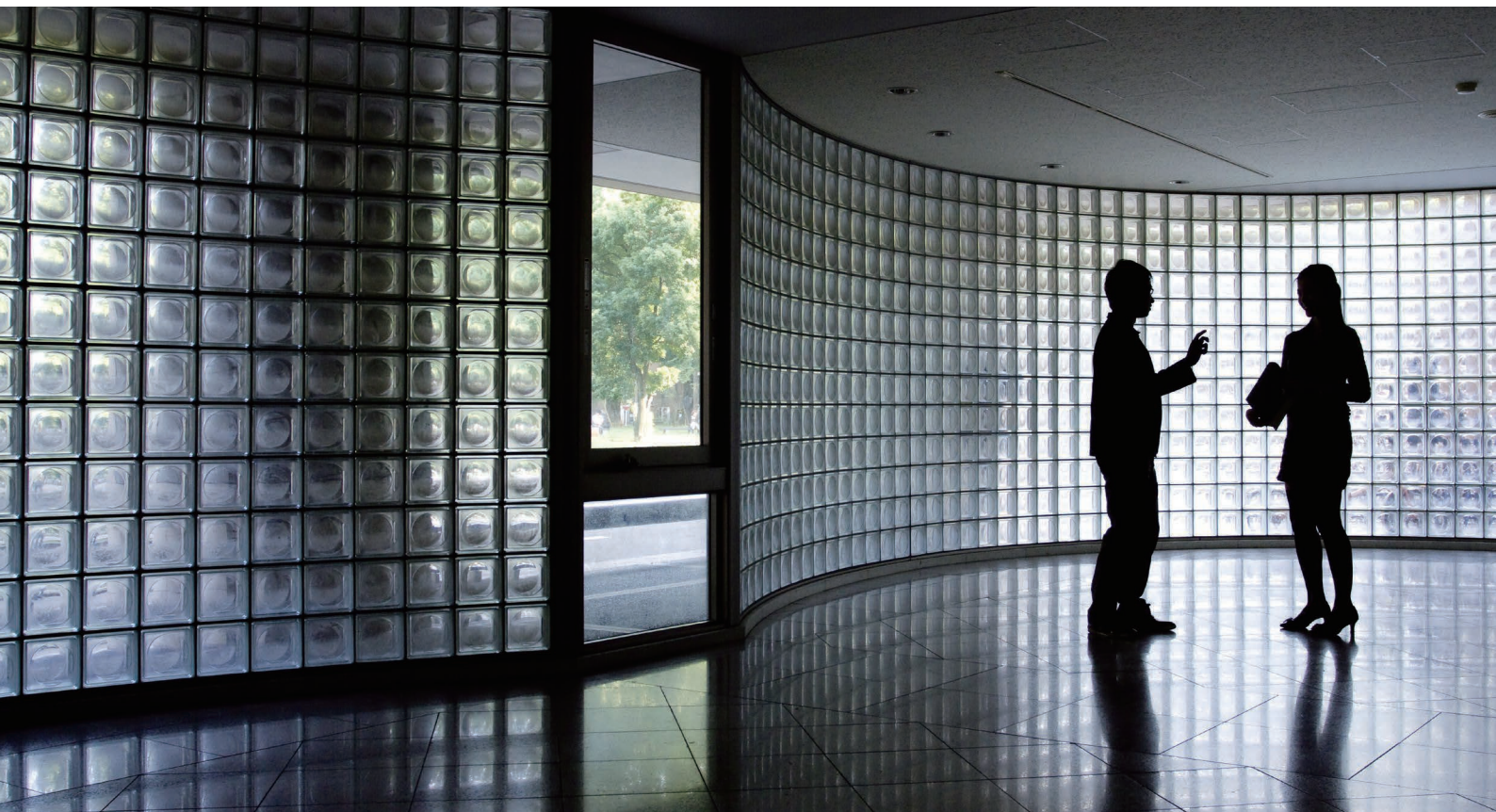


Dept. of Precision Engineering
The University of Tokyo

Be precise, be flexible

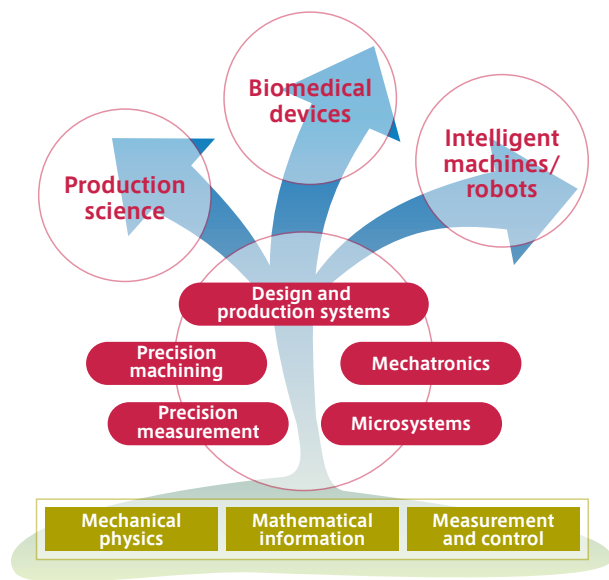


The Department of Precision Engineering, The University of Tokyo has a long and remarkable history since 1886. Leading cutting-edge education and research related to precision engineering are carried out, while international academics consisting of students and researchers are brought together and honed to create an expanding network of sought-after experts.



Mission

Precision Engineering discusses methodologies on the approach to targets rather than the physical objects themselves. The department handles an extensive range of advanced technology from information devices to manufacturing technology and services in order to create a sustainable society based on harmony between man, resources, and the environment. Founded on the basic disciplines of mechanical physics, mathematical information, and measurement and control, the department promotes education and research on production science and the synthesis of products and services, as well as intelligent and robotic systems and biomedical devices.



Research fields:

- 1) The development of fundamental technology for production science, such as precision measurement, precision machining, microsystems, biomedical devices, mechatronics, and design and production systems.
- 2) Research into methodologies on the synthesis of intelligent machines, information and knowledge systematization for products, services, and their production processes.
- 3) Application of the above to manufacturing, biomedical fields, and service systems.

Curriculum

Biomedical precision engineering

Medical precision engineering	I. Sakuma
Theory of measurement and analysis of biomedical signals	K. Kotani
Computer assisted surgery and therapy	E. Kobayashi
Rehabilitation engineering	A. Yozu

Fabrication technology and Sensing technology

Additive manufacturing science	T. Niino
Ultra-precision machining	H. Mimura
Joining manufacturing	Y. Kajihara
Optical measurement	S. Takahashi
Precision dimensional metrology	M. Michihata

Microsystems

Applied microfluidic systems	S. Kim
MEMS/NEMS process	B. Kim
Advanced IoT devices packaging and integration	T. Itoh
Advanced flexible electronic device integration technology	S. Takamatsu
Nano-micro mechanical systems	Kawakatsu, Takahashi, Kajihara, Michihata

Robotics and mechatronics

Mechatronics for human and engineered environments	Yamamoto, Yamashita, An, Yoshimoto
Dynamic agent	J. Ota
Vibration of elastic continuum	T. Morita
Special lecture on intelligent construction system	Asama, Nagatani, Yamashita

Design and production systems

Society and design methodology	Y. Umeda
Sustainable design methodology	Y. Kishita
Service Engineering	T. Hara
Engineering foundation for synthesis of artifacts I	Kondo, Ota, Umeda
Engineering foundation for synthesis of artifacts II	Ota, Umeda
Geometry data processing	Y. Ohtake
Special lecture on i-Construction Systems for infrastructure projects	A. Yamashita
DLX Design thinking	T. Niino

Global communication

Scientific writing and presentation skills	H. Kawakatsu
Practice in international workshop on precision engineering	

Practice and project based learning

Advanced lectures on precision engineering I-V
Advanced practice of precision engineering
Precision engineering production factory tour
Special lecture on decommissioning and dismantling
Special seminar on i-Construction systems for infrastructure projects



Faculty members



ASAMA, Hajime

Professor, Hongo

Service robotics, Embodied-brain system, Cognitive ergonomics

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4. IIS, Institute of Industrial Science, Komaba Research Campus.