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*.

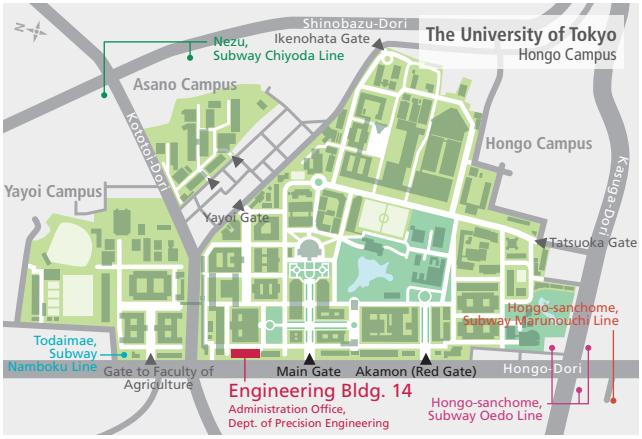
Application procedure for MEXT (Monbukagakusho) scholarship applicants

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/soee/admission/



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Department of Precision Engineering

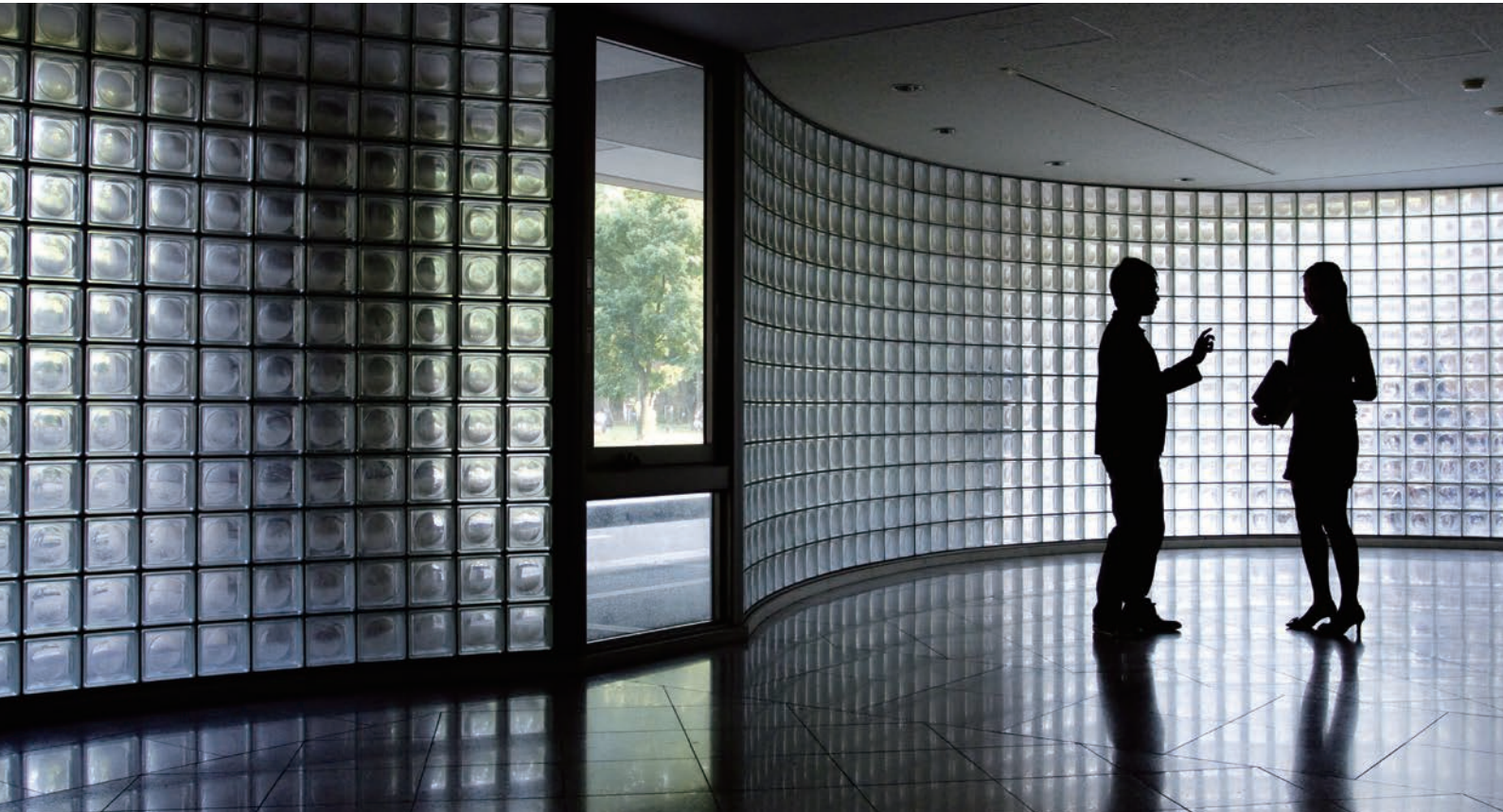
School of Engineering, The University of Tokyo

2019

Dept. of Precision Engineering
The University of Tokyo

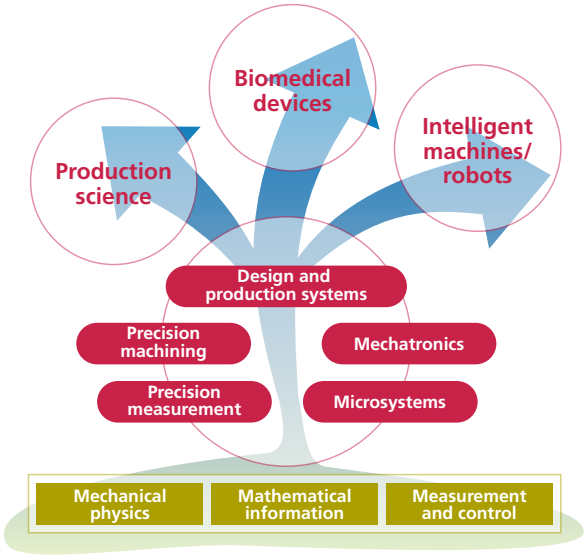
Be precise, be flexible

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.



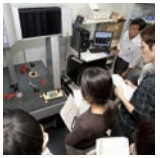
Research fields:

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*
Neuroengineering	*Y. Jimbo*
Theory of measurement and analysis of biomedical signals	*K. Kotani*
Cognitive science in engineering	*W. Wen*
Fabrication technology and Sensing technology	
Advances in micromachining	*M. Kunieda*
Additive manufacturing science	*T. Niino*
Ultra-precision machining	*H. Mimura*
Jointing manufacturing	*Y. Kajihara*
Optical measurement	*S. Takahashi*
Microsystems	
Applied microfluidic systems	*T. Fujii*
MEMS/NEMS process	*B. Kim*
Nano-micro mechanical systems	*Kawakatsu, Takahashi, Kajihara, Michihata*
Robotics and mechatronics	
Electromechanical control systems	*A. Yamamoto*
Mechatronics for human and engineered environments	*H. Hosaka*
Cooperative artificial systems	*H. Asama*
Dynamic agent	*J. Ota*
Advanced robotics	*A. Yamashita*
Special lecture on intelligent construction system	*Asama, Nagatani, Yamashita*
Design and production systems	
Society and design methodology	*Y. Umeda*
Sustainable design methodology	*Y. Kishita*
Engineering foundation for synthesis of artifacts I–II	*Ota, Umeda*
Geometric modeling	*H. Suzuki*
Geometry data processing	*Y. Ohtake*
Special lecture on i-Construction Systems for infrastructure projects	*A. Yamashita*
Design thinking	*T. Niino*
Practice and project based learning	
Special lecture on decommissioning and dismantling	
Practice in international workshop on precision engineering	
Advanced practice of precision engineering	
Advanced lectures on precision engineering I–V	
Precision engineering production factory tour	

Practice in international workshop on precision engineering:
Practice classes acknowledge credits for international educational activities.



Experimental facilities in the Hongo Campus.

Faculty members

Hongo, Department of Precision Engineering, Eng. Bldg. 14, Hongo Campus.

RCAST, Research Center for Advanced Science and Technology, Komaba Research Campus.

IIS, Institute of Industrial Science, Komaba Research Campus.

RACE, Research into Artifacts, Center for Engineering, Hongo Campus.

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