

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/>

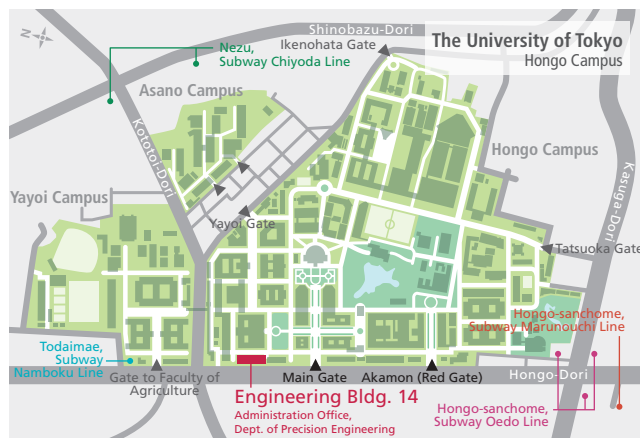
Admissions Information, School of Engineering:

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

Department of Precision Engineering

School of Engineering, The University of Tokyo

2018



Administration Office

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

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

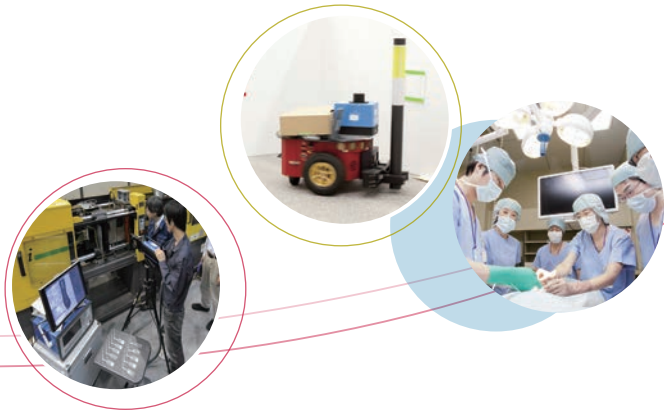
Phone: +81(0)-3-5841-6445 Fax: +81(0)-3-5841-8556

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



Dept. of Precision Engineering
The University of Tokyo

Be precise, be flexible

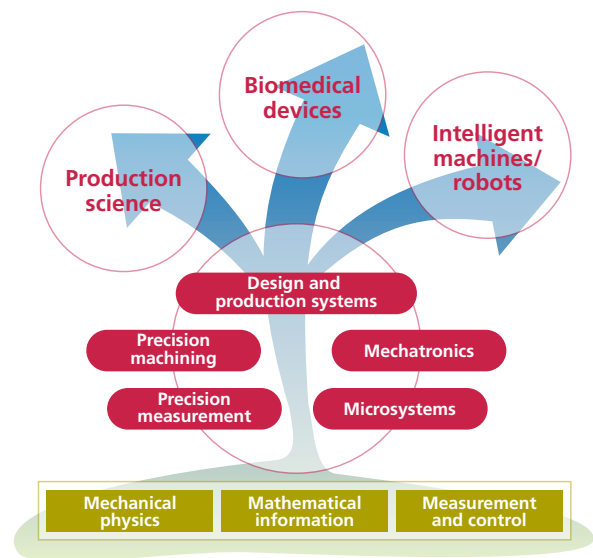


The Department of Precision Engineering, The University of Tokyo has a long and remarkable history since 1886. Leading cutting-edge education and research related to precision engineering are carried out, while international academics consisting of students and researchers are brought together and honed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

| Sensing technology | |
|---|---|
| Optical measurement | S. Takahashi |
| Coordinate metrology | K. Takamasu |
| Biomedical precision engineering | |
| Medical precision engineering | I. Sakuma |
| Neuroengineering | Y. Jimbo |
| Theory of measurement and analysis of biomedical signals | K. Kotani |
| Fabrication technology | |
| Polymer processing | H. Yokoi |
| Advances in micromachining | M. Kunieda |
| Additive manufacturing science | T. Niino |
| Ultra-precision machining | H. Mimura |
| Joining manufacturing | Y. Kajihara |
| Microsystems | |
| Applied microfluidic systems | T. Fujii |
| MEMS/NEMS process | B. Kim |
| Nano-micro mechanical systems | K. Takamasu, H. Kawakatsu, S. Takahashi |
| 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 | |
| Design and production systems | |
| Service engineering | T. Hara |
| Society and design methodology | Y. Umeda |
| Sustainable design methodology | Y. Kishita |
| Engineering foundation for synthesis of artifacts I-II | T. Hara |
| Geometric modeling | H. Suzuki |
| Geometry data processing | Y. Ohtake |
| 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 | |

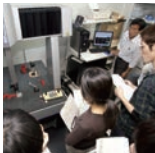


Practice in international workshop on precision engineering:

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, Kashiwa Campus.



ASAMA, Hajime

Professor, Hongo

Service robotics, Smart space, Mobiligence, Body representation in brain

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

E-mail: asama@robot.t.u-tokyo.ac.jp



FUJII, Teruo

Professor, IIS

Applied microfluidic systems

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

E-mail: tfujii@iis.u-tokyo.ac.jp



HARA, Tatsunori

Associate Professor, RACE

Service engineering, Product service systems, Manufacturing system engineering

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

E-mail: hara_tatsu@race.u-tokyo.ac.jp



HIGURASHI, Eiji

Associate Professor, Hongo

Optical integration, Optical packaging, Optical microsystems

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

E-mail: eiji@su.t.u-tokyo.ac.jp



JIMBO, Yasuhiko

Professor, Hongo

Biomedical engineering, Biological information processing, Neuroengineering

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

E-mail: jimbo@neuron.t.u-tokyo.ac.jp



KAJIHARA, Yusuke

Associate Professor, IIS

Joining manufacturing, THz microscopy

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

E-mail: kajihara@iis.u-tokyo.ac.jp



KAWAKATSU, Hideki

Professor, IIS

Scanning probe microscopy, Nanomechanics

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

E-mail: kawakatu@iis.u-tokyo.ac.jp



KIM, Beomjoon

Professor, IIS

Micro components and system, Bio-MEMS

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

E-mail: bjoonkim@iis.u-tokyo.ac.jp



KISHITA, Yusuke

Lecturer, Hongo

Scenario design, Sustainable design, Social system

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

E-mail: kishita@pe.t.u-tokyo.ac.jp



KOTANI, Kiyoshi

Associate Professor, RCAST

Biomedical signal processing, Nonlinear dynamics, Human interface

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

E-mail: kotani@neuron.t.u-tokyo.ac.jp



KUNIEDA, Masanori

Professor, Hongo

Non-traditional machining, Micromachining, Die and mold technologies

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

E-mail: kunieda@edm.t.u-tokyo.ac.jp



MIMURA, Hidekazu

Associate Professor, Hongo

Ultraprecision machining, X-ray optics

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

E-mail: mimura@edm.t.u-tokyo.ac.jp



NAGATANI, Keiji

Associate Professor, Hongo

Robotics, Field robotics

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

E-mail: keiji@robot.t.u-tokyo.ac.jp



NIINO, Toshiki

Professor, IIS

3D printing, Molded interconnect device, Mechatronics

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

E-mail: niino@iis.u-tokyo.ac.jp



OHTAKE, Yutaka

Associate Professor, Hongo

Geometry processing, Computer graphics

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

E-mail: yu-ohtake@den.t.u-tokyo.ac.jp



OTA, Jun

Professor, RACE

Robotics, Embodied-brain systems science, Service engineering

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

E-mail: ota@race.u-tokyo.ac.jp



SAKUMA, Ichiro

Professor, Hongo

Biomedical engineering, Computer aided surgery, Biomedical instrumentation

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

E-mail: sakuma@bmpe.t.u-tokyo.ac.jp



SUGA, Tadatomo

Professor, Hongo

System integration and packaging, Interconnect ecodeign

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

E-mail: suga@pe.t.u-tokyo.ac.jp



SUZUKI, Hiromasa

Professor, Hongo

Digital engineering, CAD, CG, Geometric modeling

Website: <https://sites.google.com/site/fdenghome/>

E-mail: suzuki@den.t.u-tokyo.ac.jp



TAKAHASHI, Satoru

Professor, RCAST

Photon based advanced manufacturing science, Cell-in-micro-factory

Website: <http://www.photon.rcast.u-tokyo.ac.jp/english/index.html>

E-mail: takahashi@nanolab.t.u-tokyo.ac.jp



TAKAMASU, Kiyoshi

Professor, Hongo

Precision measurement, Nanometrology

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

E-mail: takamasu@pe.t.u-tokyo.ac.jp



TAMURA, Yusuke

Associate Professor, Hongo

Robotics, Human interface

Website: <http://www.tamlab.jp/>

E-mail: tamura@robot.t.u-tokyo.ac.jp



UMEDA, Yasushi

Professor, Hongo

Design theory, Life cycle engineering, Sustainability science

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

E-mail: umeda@pe.t.u-tokyo.ac.jp



YAMAMOTO, Akio

Professor, Hongo

Mechatronics, Actuator, Haptic/Tactile interface

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

E-mail: akio@aml.t.u-tokyo.ac.jp



YAMASHITA, Atsushi

Associate Professor, Hongo

Robotics, Computer vision, Image processing

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

E-mail: yamashita@robot.t.u-tokyo.ac.jp



YOKOI, Hidetoshi

Professor, IIS

Polymer processing, Visualization, In-process measurement

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

E-mail: hiyokoi@iis.u-tokyo.ac.jp