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/

Administration Office

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

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Phone: +81(0)-3-5841-6445   Fax: +81(0)-3-5841-8556
Website: http://www.pe.t.u-tokyo.ac.jp

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.
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Application procedure for MEXT (Monbukagakusho) scholarship applicants
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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/

Be precise, be flexible
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Biomedical precision engineering
Medical precision engineering
Neurosensing
Theory of measurement and analysis of biomedical signals
Cognitive science in engineering

Microelectronics and precision engineering
Advances in micromanufacturing
Additive manufacturing science
Ultra-precision manufacturing
Joint manufacturing
Optical measurement

Microsystems
Applied microelectromechanical systems
MEMS/MEMS process
Nano-micro mechanical systems

Innovation and systems
Electromechanical control systems
Mechatronics for human and engineered environments
Cooperative systems
Dynamic agent
Advanced robotics
Special lecture on intelligent construction system

Design and production systems
Society and design methodology
Engineering foundation for synthesis of artifacts I–II
Geometric modeling
Geometry data processing
Special lecture on Construction Systems for infrastructure projects

Scientific and technological foundations
Special lecture on decommissioning and dismantling

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.

Mission
Curriculum
Faculty members

INNO, Toshiki
Professor, RACE

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Professor, Horng

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Professor, Horng

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YOSHIMOTO, Shunuke
Lecturer, Horng

Robotics, Biomechatronics, Electric sensing
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E-mail: yoshimoto@robots.t.u-tokyo.ac.jp
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.

### Biomedical devices

- **Microfluidics**
  - T. Fujii
  - Applied microfluidic systems
  - MEMS/NEMS process

- **Nanomicro mechanical systems**
  - Kawai, Tatsuhiko, Kiyotaki, Michihiko

### Intelligent machines/Robots

- **Computer control systems**
  - Robotics, Field robotics
  - Kishita, Yusuke

### Mechatronics

- **Design and manufacturing systems**
  - Electro-mechanical control systems
  - Mechatronics for human and engineered environments

- **Computational systems**
  - Dynamic system
  - Advanced robotics

### Mechatronics

- **Special lecture on intelligent construction system**
  - Asama, Nagataki, Yamashita

### Design and production systems

- **Sustainable design methodology**
  - Infrastructure and mechatronics

- **Geometric modeling**
  - Geometry data processing

- **Special lecture on Construction Systems for infrastructure projects**
  - Yamashita, A.
  - Design thinking

### Special faculty based learning

- **Special lecture on decommisioning and dismantling**
  - Practice in international workshop on precision engineering

- **Advanced practice of precision engineering**
  - Advanced lectures on precision engineering I

### Honor Science

- **Smart concrete**
  - Advanced Science and Technology, RCAST

### Professor, Hongo

- **ASAMA, Hajime**
  - Professors, Horng
  - Research into Artifacts, Center for Engineering, Hongo Campus

- **NIINO, Toshiaki**
  - Professors, Horng
  - 3D printing, Modelled-integrated system, Mechatronics

- **SUZUKI, Hiroshige**
  - Professors, Horng
  - Digital engineering, CAD, CG, Geometric modeling

- **YAMAMOTO, Akio**
  - Professors, RCAST
  - Micro/nano systems, Nanosensing

- **YOSHIMOTO, Shunsuke**
  - Professors, RCAST
  - Robotics, Computer vision, Image processing

- **SUZUKI, Hiromasa**
  - Professors, RCAST
  - Applied robotics, Field robotics

- **KISHTA, Yusuke**
  - Professors, Horng
  - Advanced practice of precision engineering

- **KOTANI, Kiyoshi**
  - Professors, RCAST
  - Innovative method, Life cycle engineering, EcoDesign

- **KUNIEDA, Masanori**
  - Professors, Horng
  - Non-traditional machining, Micromachining, Die and mould technologies

- **MIMURA, Hidekazu**
  - Professors, Horng
  - Applied medical information systems, Artificial intelligence

- **YAMASHITA, Atsushi**
  - Professors, Horng
  - Biomedical systems, Biomedical engineering, Neuroengineering

- **NIINO, Toshiaki**
  - Professors, Horng
  - 3D printing, Modelled-integrated system, Mechatronics

- **SUZUKI, Hiromasa**
  - Professors, Horng
  - Digital engineering, CAD, CG, Geometric modeling

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  - Professors, RCAST
  - Micro/nano systems, Nanosensing

- **YOSHIMOTO, Shunsuke**
  - Professors, RCAST
  - Robotics, Computer vision, Image processing

### Associate Professor, Hongo

- **KISHITA, Yusuke**
  - Associate Professor, Horng
  - Advanced practice of precision engineering

- **KOTANI, Kiyoshi**
  - Associate Professor, RCAST
  - Innovative method, Life cycle engineering, EcoDesign

- **KUNIEDA, Masanori**
  - Associate Professor, Horng
  - Non-traditional machining, Micromachining, Die and mould technologies

- **MIMURA, Hidekazu**
  - Associate Professor, Horng
  - Applied medical information systems, Artificial intelligence