List of Faculties Tokyo Institute of Technology International Graduate Program (A) Commencing in September 2022

A-1 International Graduate Program in Science for Innovative Leaders (PSIL)

(1) Dept. of Mathematics

Ac	ademic Supervisor	Research Field	Remarks	Graduate Major
Professor	ENDO, Hisaaki	Topology		•Mathematics
Professor	GOMI, Kiyonori	Algebraic Topology, Mathematical Physics		•Mathematics
Professor	HONDA, Nobuhiro	Complex Geometry		•Mathematics
Professor	KAGEI,Yoshiyuki	Partial Differential Equations		•Mathematics
Professor	KATO, Fumiharu	Algebraic Geometry, Arithmetic Geometry		•Mathematics
Professor	NAITO, Satoshi	Representation Theory		•Mathematics
Professor	NINOMIYA, Syoiti	Computational Finance, Mathematical Finance, Probability Theory		•Mathematics
Professor	NISHIBATA, Shinya	Theory of Partial Differential Equations		•Mathematics
Professor	TAGUCHI, Yuichiro	Number Theory		•Mathematics
Professor	TONEGAWA, Yoshihiro	Partial Differential Equations, Geometric Measure Theory		•Mathematics
Professor	UMEHARA, Masaaki	Differential Geometry		•Mathematics
Professor	YAMADA, Kotaro	Differential Geometry		•Mathematics
Associate Professor	FUJIKAWA, Ege	Complex Analysis		•Mathematics
Associate Professor	HATTORI, Toshiaki	Geometry		•Mathematics
Associate Professor	KALMAN, Tamas	Topology		•Mathematics
Associate Professor	KELLY, Shane	Algebraic Geometry, Homotopy Theory		•Mathematics
Associate Professor	MA, Shohei	Algebraic Geometry		•Mathematics
Associate Professor	MIURA, Hideyuki	Theory of Partial Differential Equations		•Mathematics
Associate Professor	MIURA, Tatsuya	Partial Differential Equations		•Mathematics
Associate Professor	NOSAKA, Takefumi	Topology		•Mathematics
Associate Professor	ONODERA, Michiaki	Partial Differential Equations		•Mathematics

Academic Supervisor		Research Field	Remarks	Graduate Major
Associate Professor	SUZUKI, Masatoshi	Analytic Number Theory		•Mathematics
Associate Professor	SUZUKI, Sakie	Knot Theory, Quantum Topology		•Mathematics
Associate Professor	YATAGAWA, Yuri	Arithmetic Geometry		•Mathematics
Associate Professor (Lecturer)	TSUCHIOKA, Shunsuke	Quantum Algebra, Representation Theory		•Mathematics

(2) Dept. of Physics

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	FUJISAWA, Toshimasa	Electron dynamics in semiconductor nanostructures		•Physics
Professor	ITO, Katsushi	Particle Physics (Theory)		•Physics
Professor	JIDO, Daisuke	Nuclear Hadron Physics (Theory)		•Physics
Professor	JINNOUCHI, Osamu	High Energy Particle Physics (Experiment)		•Physics
Professor	KOZUMA, Mikio	Quantum optics, Laser cooling, Bose Einstein condensation		•Physics
Professor	KUZE, Masahiro	Particle Physics (Experiment)		•Physics
Professor	MURAKAMI, Shuichi	Theoretical Condensed Matter Physics, spintronics, geometrical phases		•Physics
Professor	NAKAMURA, Takashi	Nuclear Physics (Experiment)		•Physics
Professor	NOTOMI, Masaya	Nanophotonics, Photonic crystals, Metamaterials		•Physics
Professor	OKUMA, Satoshi	Low Temperature Physics, Superconductivity		•Physics
Professor	SASAMOTO, Tomohiro	Statistical physics		•Physics
Professor	SATOH, Takuya	Ultrafast dynamics, optical condensed matter physics		•Physics
Professor	YAMAGUCHI, Masahide	Cosmology, particle physics, gravitation (Theory)		•Physics
Specially Appointed Professor	HIGEMOTO, Wataru	Strongly correlated electron systems, Muon science	JAEA	•Physics
Visiting Professor	DOTANI, Tadayasu	X-ray Astronomy (Experiment)	JAXA	•Physics
Visiting Professor	MATSUHARA, Hideo	Infrared Astronomy (Experiment)	JAXA	•Physics
Associate Professor	AIKAWA, Kiyotaka	Atomic and molecular physics, Quantum optics, Laser cooling		•Physics
Associate Professor	FUJIOKA, Hiroyuki	Nuclear and Hadron Physics (Experiment)		•Physics
Associate Professor	HIRAHARA, Toru	Surface Physics, Nano /spin-Science		•Physics

Ac	ademic Supervisor	Research Field	Remarks	Graduate Major
Associate Professor	IMAMURA, Yosuke	Particle Physics (Theory)		•Physics
Associate Professor	ISHIZUKA, Hiroaki	Theoretical condensed matter physics, transport phenomena, magnetism		•Physics
Associate Professor	KOGA, Akihisa	Strongly correlated electron systems		·Physics
Associate Professor	MATSUSHITA, Michio	Optical spectroscopy of single proteins		·Physics
Associate Professor	NISHIDA, Yusuke	Theoretical Quantum Physics, Ultracold Atoms		•Physics
Associate Professor	SEKIZAWA, Kazuyuki	Nuclear Physics (Theory)		•Physics
Associate Professor	SOMIYA, Kentaro	Gravitational Wave Detector		•Physics
Associate Professor	SUYAMA, Teruaki	Cosmology, gravitational waves (Theory)		•Physics
Associate Professor	UCHIDA, Masaki	Topological and correlated materials, Molecular beam epitaxy, Quantum transport phenomena		·Physics
Associate Professor	YATSU, Yoichi	Astrophysics (Experiment)		·Physics
Associate Professor (Lecturer)	KAWAMURA, Toru	Plasma Physics, Atomic Processes in Plasmas		•Physics

(3) Dept. of Chemistry

GOTO, Kei			
,	Organic Chemistry		•Chemistry
ISHIUCHI, Shun-ichi	Physical Chemistry, Laser Spectroscopy		•Chemistry
KAWAGUCHI, Hiroyuki	Coordination Chemistry		•Chemistry
KAWANO, Masaki	Coordination Chemistry, Chemical Crystallography, Supramolecular Chemistry		•Chemistry
NOGAMI, Kenji	Geochemistry, Volcanology		•Chemistry
OHSHIMA, Yasuhiro	Physical Chemistry, Laser Science		•Chemistry •Energy Science and Engineering
TOYOTA, Shinji	Physical Organic Chemistry		•Chemistry
YASHIMA, Masatomo	Materials Science, Crystallography, Solid State Chemistry & Physics, Solid State Ionics, Crystal Structure Analysis, New Inorganic Materials		•Energy Science and Engineering •Chemistry
FUKUHARA, Gaku	Analytical Chemistry, Supramolecular Chemistry		•Chemistry
KITAJIMA, Masashi	Physical Chemistry		•Chemistry
KUDO, Fumitaka	Bioorganic Chemistry		•Chemistry
MAEDA, Kazuhiko	Inorganic Materials Chemistry, Photocatalysis		•Energy Science and Engineering •Chemistry
NISHINO, Tomoaki	Surface Chemistry		•Chemistry
OHMORI, Ken	Organic Chemistry		•Chemistry
	KAWAGUCHI, Hiroyuki KAWANO, Masaki NOGAMI, Kenji OHSHIMA, Yasuhiro TOYOTA, Shinji YASHIMA, Masatomo FUKUHARA, Gaku KITAJIMA, Masashi KUDO, Fumitaka MAEDA, Kazuhiko NISHINO, Tomoaki	KAWAGUCHI, Hiroyuki Coordination Chemistry Coordination Chemistry, Chemical Crystallography, Supramolecular Chemistry NOGAMI, Kenji Geochemistry, Volcanology OHSHIMA, Yasuhiro Physical Chemistry, Laser Science TOYOTA, Shinji Physical Organic Chemistry Materials Science, Crystallography, Solid State Chemistry & Physics, Solid State Ionics, Crystal Structure Analysis, New Inorganic Materials FUKUHARA, Gaku Analytical Chemistry, Supramolecular Chemistry KITAJIMA, Masashi Physical Chemistry KUDO, Fumitaka Bioorganic Chemistry MAEDA, Kazuhiko Inorganic Materials Chemistry, Photocatalysis NISHINO, Tomoaki Surface Chemistry	KAWAGUCHI, Hiroyuki Coordination Chemistry Coordination Chemistry, Chemical Crystallography, Supramolecular Chemistry NOGAMI, Kenji Geochemistry, Volcanology OHSHIMA, Yasuhiro Physical Chemistry, Laser Science TOYOTA, Shinji Physical Organic Chemistry Materials Science, Crystallography, Solid State Chemistry & Physics, Solid State Ionics, Crystal Structure Analysis, New Inorganic Materials FUKUHARA, Gaku Analytical Chemistry, Supramolecular Chemistry KITAJIMA, Masashi Physical Chemistry KUDO, Fumitaka Bioorganic Chemistry MAEDA, Kazuhiko Inorganic Materials Chemistry, Photocatalysis NISHINO, Tomoaki Surface Chemistry

Ad	cademic Supervisor	Research Field	Remarks	Graduate Major
Associate Professor	OKIMOTO, Yoichi	Optical Spectroscopy of Solids		•Energy Science and Engineering •Chemistry
Associate Professor	ONO, Kosuke	Organic Chemistry, Supramolecular Chemistry		•Chemistry
Associate Professor	TAKAYA, Jun	Organic Chemistry		•Chemistry
Associate Professor	UEKUSA, Hidehiro	Chemical Crystallography, Organic Crystal Chemistry		•Chemistry
Associate Professor	YAMAZAKI, Masakazu	Physical Chemistry, Atomic and Molecular Physics		•Chemistry
Associate Professor (Lecturer)	TERADA, Akihiko	Volcanology		•Chemistry

(4) Dept. of Earth and Planetary Sciences

Academic Supervisor		Research Field	Remarks	Graduate Major
Professor	HERNLUND, John	Geophysical Modeling	Earth-LifeScience Institute	Earth-Life Science Earth and Planetary Sciences
Professor	NAKAJIMA, Junichi	Seismology		•Earth and Planetary Sciences
Professor	NAKAMOTO, Taishi	Astrophysics, Planetary Formation		•Earth and Planetary Sciences
Professor	SATO, Bunei	Observational Astronomy, Exoplanets		•Earth and Planetary Sciences
Professor	SEKINE, Yasuhito	Earth and Planetary Environment Evolution, Astorobiology	Earth-LifeScience Institute	•Earth-Life Science •Earth and Planetary Sciences
Professor	UENO, Yuichiro	Geology, Biogeochemistry		•Earth and Planetary Sciences
Professor	YOKOYAMA, Tetsuya	Geochemistry, Cosmochemistry		•Earth and Planetary Sciences
Associate Professor	GENDA, Hidenori	Comparative Planetology, Aqua Planetology	Earth-LifeScience Institute	Earth-Life Science Earth and Planetary Sciences
Associate Professor	ISHIKAWA, Akira	Geology, Solid Earth Geochemistry		•Earth and Planetary Sciences
Associate Professor	KANDA, Wataru	Physical Volcanology, Geomagnetism	Volcanic Fluid Research Center	•Earth and Planetary Sciences
Associate Professor	OHTA, Kenji	Study of the Earth's Deep Interior, High- Pressure Mineral Physics		•Earth and Planetary Sciences
Associate Professor	OKUZUMI, Satoshi	Astrophysics, Planetary Formation		•Earth and Planetary Sciences