

List of Graduate Courses Available to Undergraduate-level International Exchange Students <For 1Q, 2Q of the 2023-2024 Academic Year>

Eligibility for Acceptance

- Students must be final year undergraduates or at an equivalent level.
- Students must meet the specific criteria for each course defined by the instructor and indicated in the final column of the table.
- Students must be enrolled on an appropriate exchange program that allows access to these courses.

As of March 2023

NOTE: TAKING ANY GRADUATE-LEVEL COURSE (400-LEVEL OR HIGHER) THAT IS NOT ON THIS LIST IS NOT PERMITTED UNDER ANY CIRCUMSTANCE. EVEN IF THE COURSE INSTRUCTOR INDIVIDUALLY APPROVES YOUR ENROLLMENT, YOUR REGISTRATION FOR SUCH A COURSE WILL BE REJECTED.

Major / Course Category	No.	Course Name	Lecturer	Quarter	Eligibility criteria or prerequisite knowledge, etc.
Graduate major in Mathematics	MTH.A405	Advanced topics in Algebra A1	Shimomoto Kazuma	1Q	Undergraduate-level knowledge of rings, modules and homomorphisms
Graduate major in Mathematics	MTH.A406	Advanced topics in Algebra B1	Shimomoto Kazuma	2Q	Undergraduate-level knowledge of rings, modules and homomorphisms
Graduate major in Mathematics	MTH.B405	Advanced topics in Geometry A1	Masai Hidetoshi	1Q	Undergraduate-level knowledge of Calculus and Linear Algebra
Graduate major in Mathematics	MTH.B406	Advanced topics in Geometry B1	Masai Hidetoshi	2Q	Undergraduate-level knowledge of Calculus, Linear Algebra, Group theory, Topology, and Geometry
Graduate major in Mathematics	MTH.C405	Advanced topics in Analysis A1	Koike Kai	1Q	Undergraduate-level knowledge of Fourier analysis, measure theory, functional analysis
Graduate major in Mathematics	MTH.C406	Advanced topics in Analysis B1	Koike Kai	2Q	Undergraduate-level knowledge of Fourier analysis, measure theory, functional analysis
Graduate major in Physics	PHY.L412	Fundamental Physics Experiments	Jinnouchi Osamu, Nakamura Takashi, Somiya Kentaro, Fujioka Hiroyuki	1Q	
Graduate major in Physics	PHY.F436	Advanced Particle Physics	Kuze Masahiro	2Q	
Graduate major in Physics	PHY.F437	Advanced Nuclear Physics	Sekiguchi Kimiko, Sekizawa Kazuyuki	2Q	
Graduate major in Physics	PHY.Q433	Field Theory I	Ito Katsushi	2Q	
Graduate major in Physics	PHY.F431	Cosmology	Suyama Teruaki	1Q	
Graduate major in Physics	PHY.F430	Hadron Physics	Jido Daisuke	1Q	
Graduate major in Physics	PHY.Q438	Quantum Mechanics of Many-Body Systems	Saito Susumu	1Q	
Graduate major in Physics	PHY.C441	Crystal Physics	Uchida Masaki	1Q	
Graduate major in Physics	PHY.C448	Light and Matter III	Notomi Masaya	2Q	
Graduate major in Physics	PHY.C439	Physics of Magnetic Materials	Sato Takuya	2Q	
Graduate major in Physics	PHY.C442	Superfluidity	Okuma Satoshi	1Q	
Graduate major in Physics	PHY.C443	Superconductivity	Okuma Satoshi	2Q	
Graduate major in Earth and Planetary Sciences	EPS.A410	Advanced Earth and Space Sciences A	Nakamoto Taishi	1Q	
Graduate major in Earth and Planetary Sciences	EPS.A421	Advanced Earth and Space Sciences G	Ogawa Yasuo, Kanda Wataru	2Q	
Graduate major in Mechanical Engineering	MEC.C432	Structural Integrity Assessment	Mizutani Yoshihiro	1Q	
Graduate major in Mechanical Engineering	MEC.H431	Advanced Mechanical Elements	Iwatsuki Nobuyuki	1Q	Fundamentals of geometry
Graduate major in Mechanical Engineering	MEC.G431	Mechanical Processing	Tanaka Tomohisa, Hirata Atsushi	2Q	
Graduate major in Mechanical Engineering	MEC.C431	Mechanics of Composite Materials	Todoroki Akira	2Q	Mechanics of materials, Theory of Elasticity and Plasticity, Strength and fracture of materials
Graduate major in Systems and Control Engineering	SCE.I401	Advanced Course of Measurement and Signal Processing	Hara Seiichiro	1Q	
Graduate major in Systems and Control Engineering	SCE.M401	Numerical Analysis of Heat Transfer and Fluid Flow	Kosaka Hidenori	2Q	
Graduate major in Systems and Control Engineering	SCE.M402	Modeling of Bio-Systems I	Nakashima Motomu, Kurabayashi Daisuke, Miyazaki Yusuke	2Q	
Graduate major in Systems and Control Engineering	SCE.A404	Nonlinear Dynamics	Nakao Hiroya	2Q	
Graduate major in Systems and Control Engineering	SCE.C451	Optimal Control	Hatanaka Takeshi	1Q	
Graduate major in Systems and Control Engineering	SCE.I434	Robot Audition and Scene Analysis	Nakadai Kazuhiro	1Q	
Graduate major in Electrical and Electronic Engineering	EEE.C441	VLSI Technology I	Wakabayashi Hitoshi, Kakushima Kuniyuki	1Q	
Graduate major in Electrical and Electronic Engineering	EEE.D451	Bipolar Transistors and Compound Semiconductor Devices	Miyamoto Yasuyuki	1Q	Graduate-level knowledge of electronic devices, analog electronic circuits and semiconductor physics (Equivalent to 200s and 300s-level courses in those subjects at Tokyo Tech)
Graduate major in Electrical and Electronic Engineering	EEE.P451	Plasma Engineering	Akatsuka Hiroshi, Okino Akitoshi	1Q	
Graduate major in Electrical and Electronic Engineering	EEE.D431	Fundamentals of Light and Matter I	Kajikawa Kotaro, Iino Hiroaki, Ito Haruhiko	1Q	Completion of courses in quantum mechanics and electromagnetism is preferable.
Graduate major in Electrical and Electronic Engineering	EEE.D411	Semiconductor Physics	Yamada Akira	2Q	Basic knowledge of quantum mechanics and electronic properties of solids.
Graduate major in Electrical and Electronic Engineering	EEE.S451	Wireless Communication Engineering	Sakaguchi Kei, Tran Gia Khanh	2Q	The fundamentals on signal & systems are prerequisite.
Graduate major in Electrical and Electronic Engineering	EEE.D401	Fundamentals of Electronic Materials	Nakagawa Shigeki, Sugahara Satoshi	1Q	Basic knowledge of quantum mechanics and electronic properties of solids.
Graduate major in Electrical and Electronic Engineering	EEE.S401	Advanced Electromagnetic Waves	Hirokawa Jiro, Tomura Takashi	1Q	The undergraduate-level knowledge is required on electromagnetism and electromagnetic wave.

Graduate major in Electrical and Electronic Engineering	EEE.P412	Power electronics circuits and systems	Fujita Hideaki	2Q	It is required to understand the knowledge taught in the undergraduate power electronics course.
Graduate major in Information and Communications Engineering	ICT.C401	Modern Cryptography	Ogata Wakaha	1Q	Completion of courses of discrete mathematics and probability and statistics
Graduate major in Information and Communications Engineering	ICT.S407	Wireless Signal Processing	Fukawa Kazuhiko	2Q	Completion of courses in linear algebra, calculus, probability and statistics
Graduate major in Information and Communications Engineering	ICT.A406	Human-Centric Information Systems I	Nakayama Minoru, Koike Yasuharu, Yamaguchi Masahiro, Nakamoto Takamichi, Kaneko Hirohiko, Obi Takashi, Hasegawa Shoichi	2Q	Sufficient basic academic skills in information and communications.
Graduate major in Information and Communications Engineering	ICT.H409	Optics in Information Processing	Yamaguchi Masahiro	2Q	Basic knowledge of calculus, linear algebra, probability and statistics and Fourier analysis.
Graduate major in Information and Communications Engineering	ICT.H411	Basic Sensation Informatics	Kaneko Hirohiko, Nagai Takehiro	2Q	Sufficient basic academic skills in information and communications.
Graduate major in Information and Communications Engineering	ICT.I427	Reconfigurable Computing	Nakahara Hiroki	2Q	Sufficient basic academic skills in information and communications.
Graduate major in Industrial Engineering and Economics	IEE.D431	Distribution and Marketing	Chung Su-Lin	1Q	
Graduate major in Industrial Engineering and Economics	IEE.C432	Cognitive Ergonomics	Aoki Hirotake	2Q	No prerequisites.
Graduate major in Materials Science and Engineering	MAT.M401	Applied Diffraction Crystallography in Metals and Alloys	Fujii Toshiyuki	2Q	Students need knowledge of metallurgy equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.M410	Deformation and Strength of Solids	Onaka Susumu, Terada Yoshihiro	2Q	Students need knowledge of metallurgy equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.P401	Organic Optical Materials physics	Ishikawa Ken	2Q	Students need knowledge equivalent to the course content of MAT.P302 "Optics".
Graduate major in Materials Science and Engineering	MAT.M409	Thermodynamics for Phase Equilibria	Sone Masato, Chang Tso-Fu	1Q	Students need knowledge of metallurgy equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.C402	Quantum Physics in Optical Response of Materials	Nakamura Kazutaka	2Q	Students need knowledge of quantum mechanics equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.P416	Soft Materials Chemistry	Sagara Yoshimitsu	2Q	Students need knowledge of organic chemistry equivalent to that of fourth-year undergraduates.
Graduate major in Materials Science and Engineering	MAT.M433	Advanced Microstructure Design of Non-ferrous Materials A	Kobayashi Equo	2Q	Students need knowledge of metallurgy equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.M434	Advanced Microstructure Design of Non-ferrous Materials B	Muraishi Shinji	2Q	Students need knowledge of metallurgy equivalent to that of fourth-year undergraduates at Tokyo Tech and need to consult with the lecturer when attending this course first.
Graduate major in Materials Science and Engineering	MAT.P407	Catalysis and Electrocatalysis	Nabae Yuta	2Q	Students need knowledge of electrochemistry equivalent to that of fourth-year undergraduates.
Graduate major in Chemical Science and Engineering	CAP.A461	Advanced Solid State Chemistry I	Ohtomo Akira	1Q	Knowledge of fundamental solid-state chemistry is needed.
Graduate major in Chemical Science and Engineering	CAP.C423	Computational Fluid Dynamics	Okawara Shinichi	2Q	Fundamental knowledge of fluid dynamics and transport phenomena is needed.
Graduate major in Chemical Science and Engineering	CAP.C421	Advanced Energy Transfer Operation	Sekiguchi Hidetoshi	2Q	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.C412	Process Systems Engineering	Matsumoto Hideyuki	1Q	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.I420	Advanced Supramolecular Science	Fukushima Takanori, Yoshizawa Michito	2Q	Fundamental knowledge on organic chemistry, inorganic chemistry, physical chemistry
Graduate major in Chemical Science and Engineering	CAP.I407	Introduction to Chemical Engineering (Basics)	Yamaguchi Takeo	1Q	
Graduate major in Chemical Science and Engineering	CAP.C424	Advanced Reaction Process Engineering	Tago Teruoki	2Q	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.I419	Analytical Techniques for Environmental Chemistry	Toyoda Sakae, Yamada Keita	2Q	Fundamental knowledge of general chemistry is desired.
Graduate major in Chemical Science and Engineering	CAP.I405	Environmental Chemistry	Toyoda Sakae, Yamada Keita	1Q	Fundamental knowledge of general chemistry is desired.
Graduate major in Chemical Science and Engineering	CAP.I426	Introduction to Polymer Science	Tomita Ikuyoshi, Imaoka Takane	1Q	
Graduate major in Chemical Science and Engineering	CAP.I427	Introduction to Polymer Chemistry	Tomita Ikuyoshi, Yamamoto Kimihisa, Kubo Shoichi	2Q	
Graduate major in Chemical Science and Engineering	CAP.P422	Advanced Polymer Properties	Tokita Masatoshi	2Q	Knowledge of fundamental polymer chemistry and physics is required.
Graduate major in Chemical Science and Engineering	CAP.C425	Advanced Bioprocess Engineering	Okochi Mina, Tanaka Masayoshi	2Q	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.A425	Advanced Biofunctional Chemistry I	Tanaka Katsunori	1Q	Knowledge of synthetic and bioorganic chemistry is required.
Graduate major in Chemical Science and Engineering	CAP.A426	Advanced Biofunctional Chemistry II	Tanaka Katsunori	2Q	Knowledge of synthetic and bioorganic chemistry is required.
Graduate major in Mathematical and Computing Science	MCS.T418	Practical Parallel Computing	Endo Toshio	1Q	
Graduate major in Mathematical and Computing Science	MCS.T403	Statistical Learning Theory	Watanabe Sumio	2Q	
Graduate major in Mathematical and Computing Science	MCS.T401	Analysis on Continuous Systems	Nishibata Shinya, Miura Hideyuki, Umehara Masaaki, Murofushi Toshiaki, Suzuki Sakie	1Q	
Graduate major in Computer Science	CSC.T438	Distributed Algorithms	Defago Xavier	1Q	Basic notions of concurrency, networking, algorithms and data structures. Some programming experience.

Graduate major in Life Science and Technology	LST.A403	Biophysics	Kobatake Eiry, Ueno Takafumi, Kamachi Toshiaki, Mie Masayasu, Asakura Noriyuki	1Q	
Graduate major in Life Science and Technology	LST.A404	Cell Physiology	Tachibana Kazunori, Nakatogawa Hitoshi, Fujita Naonobu, Kano Fumi, Kadonosono Tetsuya	2Q	Undergraduate-level basic knowledge of cell biology.
Graduate major in Life Science and Technology	LST.A401	Molecular and Cellular Biology	Kimura Hiroshi, Iwasaki Hiroshi, Yamaguchi Yuki, Aizawa Yasunori	1Q	Acquisition of basics of molecular biology and cell biology.
Graduate major in Life Science and Technology	LST.A412	Biomaterial Science and Engineering	Tagawa Yoh-ichi, Maruyama Atsushi, Mori Toshiaki, Matsuda Tomoko, Kinbara Kazushi	1Q	Undergraduate-level basic knowledge of materials science, molecular biology and genetic engineering.
Graduate major in Life Science and Technology	LST.A411	Biomolecular Engineering	Fukui Toshiaki, Ueda Hiroshi, Hirota Junji, Kitaguchi Tetsuya	2Q	Undergraduate-level basic knowledge of molecular biology and genetic engineering.
Graduate major in Architecture and Building Engineering	ARC.D402	Architectural Preservation and Renovation	Fujita Yasuhito	1Q	
Graduate major in Architecture and Building Engineering	ARC.D421	Architectural Design Studio I	Yasuda Koichi, Okuyama Shinichi, Tsukamoto Yoshiharu, Yamazaki Taisuke, Murata Ryo, Nasu Satoshi, Shiozaki Taishin, Ishida Kentaro	1Q	
Graduate major in Architecture and Building Engineering	ARC.D441	Passive Solar Design	Murata Ryo	1Q	
Graduate major in Architecture and Building Engineering	ARC.D443	Structural Planning in Architecture	Takeuchi Toru	2Q	
Graduate major in Architecture and Building Engineering	ARC.P441	Theories in Urban Analysis and Planning I	Saio Naoko	2Q	
Graduate major in Architecture and Building Engineering	ARC.D445	Theory of Architectural Design1	Murata Ryo, Yasuda Koichi, Okuyama Shinichi, Tsukamoto Yoshiharu, Yamazaki Taisuke, Shiozaki Taishin,	3~4Q	
Graduate major in Civil Engineering	CVE.G401	Aquatic Environmental Science	Yoshimura Chihiro	2Q	
Graduate major in Civil Engineering	CVE.B401	Water Resource Systems	Kanae Shinjiro	1Q	
Graduate major in Civil Engineering	CVE.C403	Geo-environmental Engineering	Takemura Jiro	1Q	Basic knowledge of civil and environmental engineering is required.
Graduate major in Global Engineering for Development, Environment and Society	GEG.S401	Environmental Policy	Murayama Takehiko, Nishikizawa Shigeo	1Q	The number of the participants are limited and students of Major in Global Engineering for Development, Environment and Society (GEDES) are prioritized.
Graduate major in Global Engineering for Development, Environment and Society	GEG.E413	Geospatial data analysis for environment studies	Varquez Alvin Christopher Galang	1Q	The number of face-to-face is limited to 90. If it exceeds the limit, students who exceed need to take Livestream.
Graduate major in Global Engineering for Development, Environment and Society	GEG.I411	Education for Sustainable Development through Design and Technology	Sam T	1Q	The number of the participants are limited and students of Major in Global Engineering for Development, Environment and Society (GEDES) are prioritized.
Graduate major in Social and Human Sciences	SHS.P441	Graduate Lecture in Politics, Law and Administration S1A	Kaneko Hironao	1Q	
Graduate major in Social and Human Sciences	SHS.M461	Graduate Methodologies in Cognition, Mathematics and Information S1	Inohara Takehiro	1~2Q	
Graduate major in Energy Science and Engineering	ENR.A401	Interdisciplinary scientific principles of energy 1	Sasabe Takashi, Tago Teruoki, Ihara Manabu, Hayashi Miyuki, Kubo Shoichi, Wada Hiroyuki	1Q	
Graduate major in Energy Science and Engineering	ENR.A402	Interdisciplinary scientific principles of energy 2	Otomo Junichiro, Arai Hajime, Ihara Manabu, Koshihara Shinya, Okimoto Yoichi, Wada Hiroyuki	2Q	
Graduate major in Energy Science and Engineering	ENR.A403	Interdisciplinary principles of energy devices 1	Hagiwara Makoto, Hanamura Katsunori, Fujita Hideaki, Suekane Tetsuya, Mori Shinsuke	1Q	
Graduate major in Energy Science and Engineering	ENR.A404	Interdisciplinary principles of energy devices 2	Nabae Yuta, Ihara Manabu, Miyajima Shinsuke, Hirayama Masaaki, Wada Hiroyuki	2Q	
Graduate major in Energy Science and Engineering	ENR.H420	Introduction to Photochemistry I	Shishido Atsushi, Wada Hiroyuki	1Q	
Graduate major in Energy Science and Engineering	ENR.H403	Advanced Electrochemistry I	Arai Hajime, Hirayama Masaaki, Suzuki Kota	1Q	Basic class for electrochemistry beginner.
Graduate major in Energy Science and Engineering	ENR.H404	Advanced Electrochemistry II	Arai Hajime, Hirayama Masaaki, Suzuki Kota	2Q	Advanced class for those studied "Advanced Electrochemistry I" or equivalent.
Graduate major in Energy Science and Engineering	ENR.H405	Advanced Inorganic Materials Chemistry I	Hirayama Masaaki, Suzuki Kota	1Q	
Graduate major in Energy Science and Engineering	ENR.H406	Advanced Inorganic Materials Chemistry II	Hirayama Masaaki, Suzuki Kota	2Q	
Graduate major in Global Science and Engineering	ENR.K430	Advanced course of turbulent flow and control	Tanahashi Mamoru	1Q	
Graduate major in Energy Science and Engineering	ENR.L401	Mechanical-to-electrical energy conversion	Fujita Hideaki	1Q	Knowledge of mechanics and electromagnetics equivalent to high school-level physics
Graduate major in Energy Science and Engineering	ENR.H410	Topics in Properties of Semiconductors	Wada Hiroyuki	1Q	
Graduate major in Energy Science and Engineering	ENR.I420	Advanced Lecture on Crystal Structure and Correlation with Properties of Solids	Yashima Masatomo	1Q	
Graduate major in Energy Science and Engineering	ENR.J407	Soft Materials Design	Matsumoto Hidetoshi	2Q	
Graduate major in Energy Science and Engineering	ENR.L410	Introduction to Photovoltaics	Miyajima Shinsuke	2Q	The students are expected to have basic knowledge of semiconductors. (p-type, n-type, Fermi level etc...)
Graduate major in Energy Science and Engineering	ENR.J405	Microstructure Evolution and Diffusion in Metals	Kimura Yoshisato, Nakada Nobuo	2Q	Students are required to have fundamental knowledge of metallurgy, particularly of phase diagrams and diffusion.
Graduate major in Energy Science and Engineering	ENR.B431	Recent technologies of fuel cells, solar cells batteries and energy system	Ihara Manabu, Hirayama Masaaki, Matsumoto Hidetoshi, Kodera Tetsuo, Sasabe Takashi, Maeda Kazuhiko, Miyajima Shinsuke, Manzhos Sergei	2Q	

Graduate major in Energy Science and Engineering	ENR.A402	Interdisciplinary scientific principles of energy 2	Otomo Junichiro, Arai Hajime, Yamada Akira, Hirayama Masaaki, Koshihara Shinya, Okimoto Yoichi, Wada Hiroyuki	2Q	
Graduate major in Energy Science and Engineering	ENR.A404	Interdisciplinary principles of energy devices 2	Nabae Yuta, Yamada Akira, Miyajima Shinsuke, Hirayama Masaaki, Wada Hiroyuki	2Q	
Graduate major in Energy Science and Engineering	ENR.A401	Interdisciplinary scientific principles of energy 1	Sasabe Takashi, Tago Teruoki, Ihara Manabu, Hayashi Miyuki, Kubo Shoichi, Wada Hiroyuki	1Q	
Graduate major in Energy Science and Engineering	ENR.A403	Interdisciplinary principles of energy devices 1	Hagiwara Makoto, Suekane Tetsuya, Okuno Yoshihiro, Mori Shinsuke	1Q	
Graduate major in Engineering Sciences and Design	ESD.D405	Materials and Design for Engineering Design	Inaba Kazuaki, Mizutani Yoshihiro	1Q	
Graduate major in Human Centered Science and Biomedical Engineering	HCB.C423	From Data Analytics to Machine Learning	Slavakis Konstantinos	2Q	
Graduate major in Nuclear Engineering	NCL.N401	Basic Nuclear Physics	Katabuchi Tatsuya	1Q	
Graduate major in Nuclear Engineering	NCL.N402	Nuclear Reactor Theory I	Obara Toru	1Q	
Graduate major in Nuclear Engineering	NCL.N405	Nuclear Reactor Thermal-hydraulics	Kato Yukitaka, Murakami Yoichi, Kikura Hiroshige, Kondo Masatoshi, Takahashi Hideharu	1Q	
Graduate major in Nuclear Engineering	NCL.N406	Nuclear Reactor Theory II	Obara Toru	2Q	
Graduate major in Nuclear Engineering	NCL.N407	Nuclear System Safety Engineering	Kikura Hiroshige, Kondo Masatoshi, Sagara Hiroshi, Takasu Hiroki, Takahashi Hideharu, Uchibori Akihiro, Matsumoto Tsutomu	1Q	
Graduate major in Nuclear Engineering	NCL.O401	Nuclear Non-proliferation and Security	Sagara Hiroshi, Hayashizaki Noriyosu	2Q	
Graduate major in Artificial Intelligence	ART.T452	Modeling of Continuous Systems	Ishii Hideaki, Aonishi Toru	1Q	Basic knowledge on differential equations, Laplace transform, dynamical systems
Graduate major in Artificial Intelligence	ART.T454	Advanced Topics in Artificial Intelligence S	Suzumura Toyotaro, Machida Motoya	1~2Q	In the first half of the lecture series knowledge of deep learning is desirable. For the second half of lecture series the completion of junior and senior-level probability course would be helpful, but not required as prerequisite.
Graduate major in Artificial Intelligence	ART.T467	Computer Vision	Sato Ikuro, Sekikawa Yusuke	1Q	Students are required to have undergraduate-level knowledges on computer science, linear algebra, calculus, probability, and statistics.
Graduate major in Urban Design and Built Environment	UDE.E402	GIS and Digital Image Processing for Built Environment	Matsuoka Masashi	1Q	
Graduate major in Urban Design and Built Environment	UDE.E403	Introduction to Atmospheric Urban Environment	Okaze Tsubasa	2Q	
Graduate major in Urban Design and Built Environment	UDE.S433	Introduction on Theory of Earthquake Ground Motion	Yamanaka Hiroaki	1Q	
Graduate major in Urban Design and Built Environment	UDE.E404	Basic Engineering on Thermal Environment	Asawa Takashi	2Q	
Graduate major in Urban Design and Built Environment	UDE.S401	Dynamics of Structures	Sato Daiki	1Q	
Graduate major in Urban Design and Built Environment	UDE.S402	Nonlinear Behavior of Concrete and Concrete Members	Kono Susumu, Nishimura Koshiro	1Q	
Graduate major in Earth-Life Science	ELS.C401	Earth-Life Science A	Nakamura Ryuhei, Sekine Yasuhito, Mcglynn Shawn, Jia Tony Z, Hara Masahiko	1Q	
Graduate major in Earth-Life Science	ELS.C402	Earth-Life Science B	Matsuura Tomoaki, Mcglynn Shawn, Fujishima Kosuke, Okochi Mina, Virgo Nathaniel David	1Q	
Tokyo Institute of Technology	LAW.X412	Study on Japanese Companies and Industries II	Kawashima Saho, Takemura Jiro	1Q	
Tokyo Institute of Technology	LAW.X419	Communication Skills in Japanese Industries II	Takemura Jiro, Morikawa Junko, Kuwata Shigeki, Hayashi Miyuki, Nakamura Takashi, Kitaguchi Yoshiaki, Wakabayashi Hitoshi, Sasaki Hiroshi, Kanenawa Tomoki, Ved Prasad Kafle, Yahya MAHZOUN, Masuyama Takaaki, Kou Hougou, Ochiai Katsuya	1Q	
Tokyo Institute of Technology	LAW.X425	Global Leadership Practice	Ota Eri	2Q	
Tokyo Institute of Technology	LAW.X440	Advanced Course of Traditional Technology and Intercultural Co-learning	Murakami Rie, Ota Eri, Watanabe Takashi, Kobayashi Equo, Matsuzaki Yuri, Kamura Kenshu, Bektas Yakup	1~2Q	Please take "LAW.X.353 Traditional Technology and Intercultural Co-learning" in case Bachelor students. (same lecture)
Tokyo Institute of Technology	LAW.X434	Idea, Writing and Communication	Kawashima Saho	1Q	

***Japanese courses**

Please check the following web site of Japanese courses.

<http://js.ila.titech.ac.jp/~web/japanese.html>