

List of Graduate Courses Available to Undergraduate-level International Exchange Students <For 1Q, 2Q of the 2019-2020 Academic Year>

As of March 2019

Eligibility for Acceptance

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1Q: April – early June, 2Q: mid-June – early Aug.

Major / Course Category	No.	Course Name	Lecturer	Quarter	Eligibility criteria or prerequisite knowledge, etc. (左欄「受講要件」を英訳したもの)
Graduate major in Mathematics	MTH.A405	Advanced topics in Algebra A1	Naito Satoshi	1	To be announced
Graduate major in Mathematics	MTH.A406	Advanced topics in Algebra B1	Naito Satoshi	2	To be announced
Graduate major in Mathematics	MTH.B405	Advanced topics in Geometry A1	Yamada Kotaro	1	To be announced
Graduate major in Mathematics	MTH.B406	Advanced topics in Geometry B1	Yamada Kotaro	2	To be announced
Graduate major in Mathematics	MTH.C405	Advanced topics in Analysis A1	Onodera Michiaki	1	To be announced
Graduate major in Mathematics	MTH.C406	Advanced topics in Analysis B1	Onodera Michiaki	2	To be announced
Graduate major in Mathematics	MTH.E443	Special Lecture on Science in English (Mathematics 5)	PAJITNOV,Andrei	1	To be announced
Graduate major in Physics	PHY.C439	Physics of Magnetic Materials	Tanaka Hidekazu	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C442	Superfluidity	Okuma Satoshi	1	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C443	Superconductivity	Okuma Satoshi	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C446	Light and Matter I	Kozuma Mikio	1	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C447	Light and Matter II	Kanamori Hideto	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C452	Biophysics I	Hayashi Nobuhiro	1	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.C453	Biophysics II	Undecided	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.F430	Hadron Physics	Jido Daisuke	1	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.F431	Cosmology	Suyama Teruaki	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.F436	Advanced Particle Physics	Jinnouchi Osamu	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.F437	Advanced Nuclear Physics	Nakamura Takashi, Fujioka Hiroyuki	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.P410	Basic Writing in Physics	Tilma Todd	1,2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.Q433	Field Theory I	Imamura Yosuke	2	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Physics	PHY.Q438	Quantum Mechanics of Many-Body Systems	Saito Susumu	1	Students are required to have knowledge of the undergraduate level of physics, electricity and magnetism, analytical dynamics, quantum mechanics, thermodynamics and statistical mechanics.
Graduate major in Earth and Planetary Sciences	EPS.A411	Advanced Earth and Space Sciences B	Nomura Hideko, Okuzumi Satoshi, et al.	1	
Graduate major in Earth and Planetary Sciences	EPS.A418	Advanced Earth and Space Sciences E	Ohta Kenji, Yokoyama Tetsuya, et al.	1	
Graduate major in Earth and Planetary Sciences	EPS.A424	Advanced Earth and Space Sciences H	Ueno Yuichiro, Yokoyama Tetsuya, et al.	2	
Graduate major in Mechanical Engineering	MEC.C431	Mechanics of Composite Materials	Todoroki Akira	2	Mechanics of materials must be taken. The basic of theory of elasticity has better be studied.
Graduate major in Mechanical Engineering	MEC.C432	Structural Integrity Assessment	Mizutani Yoshihiro	1	Mechanics of materials must be taken. The basic of theory of elasticity has better be studied.
Graduate major in Mechanical Engineering	MEC.D431	Advanced Sound and Vibration Measurement	Matsumura Shigeki	1	
Graduate major in Mechanical Engineering	MEC.E431	Thermodynamics of Nonequilibrium Systems	Murakami Yoichi, Okuno Yoshihiro	1	Undergraduate-level international exchange students who are considering to be enrolled in this course first need to contact the lecturer of this course for an interview. Based on his/her interest and eagerness in learning the subjects of this course and the level of the academic knowledge, the permission will be judged.
Graduate major in Mechanical Engineering	MEC.F431	Computational Thermo-Fluid Dynamics	Xiao Feng	2	Students who have acquired the credits for the following courses: fluid dynamics, numerical analysis (fundamental)
Graduate major in Mechanical Engineering	MEC.G431	Mechanical Processing	Yoshioka Hayato, Hirata Atsushi, et al.	2	

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Graduate major in Mechanical Engineering	MEC.H431	Advanced Mechanical Elements	Iwatsuki Nobuyuki	1	
Graduate major in Systems and Control Engineering	SCE.C402	Robust Control	Fujita Masayuki	1	Students are required to have knowledge of the undergraduate level of feedback control and linear systems theory.
Graduate major in Systems and Control Engineering	SCE.I401	Advanced Course of Measurement and Signal Processing	Hara Seichiro	1	Having basic knowledge of measurement and signal processing is preferable.
Graduate major in Systems and Control Engineering	SCE.M401	Numerical Analysis of Heat Transfer and Fluid Flow	Kosaka Hidenori	2	
Graduate major in Systems and Control Engineering	SCE.M402	Modeling of Bio-Systems I	Nakashima Motomu, Kurabayashi Daisuke	2	
Graduate major in Electrical and Electronic Engineering	EEE.D401	Fundamentals of Electronic Materials	Nakagawa Shigeki, Sugahara Satoshi	1	Basic knowledge of quantum mechanics and electronic properties of solids.
Graduate major in Electrical and Electronic Engineering	EEE.D451	Bipolar Transistors and Compound Semiconductor Devices	Miyamoto Yasuyuki	1	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.P401	Electric Power and Motor Drive System Analysis	Fujita Hideaki	2	Undergraduate-level knowledge of electric machinery is required.
Graduate major in Electrical and Electronic Engineering	EEE.S401	Advanced Electromagnetic Waves	Hirokawa Jiro	1	The undergraduate-level knowledge is required on electromagnetism and electromagnetic wave.
Graduate major in Electrical and Electronic Engineering	EEE.S451	Wireless Communication Engineering	Sakaguchi Kei	2	
Graduate major in Information and Communications Engineering	ICT.A406	Human-Centric Information Systems I	Koike Yasuharu, Yamaguchi Masahiro, et al.	2	Sufficient basic academic skills in information and communications
Graduate major in Information and Communications Engineering	ICT.C401	Modern Cryptography	Ogata Wakaha	1	Completion of courses in discrete mathematics, probability and statistics
Graduate major in Information and Communications Engineering	ICT.H409	Optics in Information Processing	Yamaguchi Masahiro	2	Basic knowledge of mathematics such as calculus, linear algebra, probability theory and statistics, and Fourier analysis
Graduate major in Information and Communications Engineering	ICT.H411	Basic Sensation Informatics	Kaneko Hirohiko, Kashino Makio	2	Sufficient basic academic skills in information and communications
Graduate major in Information and Communications Engineering	ICT.I408	Analog Integrated Circuits	Takagi Shigetaka	2	Sufficient basic academic skills in electric circuits, linear circuits and linear electronic circuits
Graduate major in Information and Communications Engineering	ICT.I425	Parallel and Reconfigurable VLSI Computing	Nakahara Hiroki	2	Sufficient basic academic skills in information and communications
Graduate major in Information and Communications Engineering	ICT.S407	Wireless Signal Processing	Fukawa Kazuhiko	2	Completion of courses in linear algebra, calculus, probability and statistics
Graduate major in Industrial Engineering and Economics	IEE.C432	Applied Cognitive Ergonomics	Itoh Kenji, Aoki Hirotsuka	2	Ability to discuss and engage in group work in English
Graduate major in Industrial Engineering and Economics	IEE.D432	Financial Statement Analysis and Valuation	Nagata Kyoko	1	Basic knowledge of accounting and corporate finance. Ability to discuss, create a report and engage in group work in English
Graduate major in Materials Science and Engineering	MAT.C402	Quantum Physics in Optical Response of Materials	Nakamura Kazutaka	2	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.M401	Applied Diffraction Crystallography in Metals and Alloys	Nakamura Yoshio, Fujii Toshiyuki	2	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.M406	Advanced Microstructure Design of Non-ferrous Materials	Kumai Shinji, Muraishi Shinji, et al.	2	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.M409	Thermodynamics for Phase Equilibria	Kajihara Masanori, Sone Masato	1	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	2	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.M419-01	Microscopic characterization of solid materials	Chai Yaw Wang	1	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	2	
Graduate major in Chemical Science and Engineering	CAP.A461	Advanced Solid State Chemistry I	Ohtomo Akira	1	Knowledge of fundamental solid-state chemistry is needed.
Graduate major in Chemical Science and Engineering	CAP.A465	Advanced Bioinorganic Chemistry I	Kuwata Shigeki	1	Knowledge of inorganic, organic, and coordination chemistry is required.
Graduate major in Chemical Science and Engineering	CAP.A466	Advanced Bioinorganic Chemistry II	Kuwata Shigeki	2	Knowledge of inorganic, organic, and coordination chemistry is required.
Graduate major in Chemical Science and Engineering	CAP.C411	Chemical Engineering for Advanced Materials and Chemicals Processing I	Kubouchi Masatoshi, Tago Teruoki, et al.	1	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.C412	Process Systems Engineering	Matsumoto Hideyuki	1	Knowledge of fundamental chemical engineering is desirable.

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Graduate major in Chemical Science and Engineering	CAP.C421	Advanced Energy Transfer Operation	Sekiguchi Hidetoshi	2	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.C423	Computational Fluid Dynamics	Okawara Shinichi	2	Fundamental knowledge of fluid dynamics and transport phenomena is needed.
Graduate major in Chemical Science and Engineering	CAP.C424	Advanced Reaction Process Engineering	Tago Teruoki	2	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.C425	Advanced Bioprocess Engineering	Okochi Mina	2	Knowledge of fundamental chemical engineering is desirable.
Graduate major in Chemical Science and Engineering	CAP.I403	Advanced Coordination Chemistry	Koizumi Takeaki, Yoshizawa Michito	1	Fundamental knowledge on inorganic chemistry
Graduate major in Chemical Science and Engineering	CAP.I405	Environmental Chemistry	Yoshida Naohiro, Toyoda Sakae, et al.	1	Fundamental knowledge of general chemistry is desired.
Graduate major in Chemical Science and Engineering	CAP.I407	Introduction to Chemical Engineering (Basics)	Yamaguchi Takeo, Tamaki Takanori	1	
Graduate major in Chemical Science and Engineering	CAP.I416	Catalysis for the Environmental Issues	Baba Toshihide, Motokura Ken, et al.	2	Fundamental knowledge on organic chemistry, inorganic chemistry, physical chemistry
Graduate major in Chemical Science and Engineering	CAP.I419	Analytical Techniques for Environmental Chemistry	Yoshida Naohiro, Toyoda Sakae, et al.	2	Fundamental knowledge of general chemistry is desired.
Graduate major in Chemical Science and Engineering	CAP.I420	Advanced Supramolecular Science	Fukushima Takanori, Yoshizawa Michito	2	Fundamental knowledge on organic chemistry, inorganic chemistry, physical chemistry
Graduate major in Chemical Science and Engineering	CAP.I426	Introduction to Polymer Science	Tomita Ikuyoshi, Imaoka Takane	1	
Graduate major in Chemical Science and Engineering	CAP.I427	Introduction to Polymer Chemistry	Tomita Ikuyoshi, Yamamoto Kimihisa, et al.	2	
Graduate major in Chemical Science and Engineering	CAP.I436	Introduction to Polymer Physical Properties I	Imaoka Takane, Nagai Keiji	2	
Graduate major in Chemical Science and Engineering	CAP.P411	Advanced Polymer Synthesis I	Ishizone Takashi	1	
Graduate major in Chemical Science and Engineering	CAP.P422	Advanced Polymer Properties	Tokita Masatoshi	2	Knowledge of fundamental polymer chemistry and physics is required.
Graduate major in Chemical Science and Engineering	CAP.P433	Introduction to Polymer Physical Chemistry	Furuya Hidemine	1	
Graduate major in Mathematical and Computing Science	MCS.T401	Analysis on Continuous Systems	Nishibata Shinya, Miura Hideyuki, et al.	1	
Graduate major in Mathematical and Computing Science	MCS.T409	Applied Functional Analysis	Miura Hideyuki, Nishibata Shinya, et al.	1	
Graduate major in Mathematical and Computing Science	MCS.T418	Practical Parallel Computing	Endo Toshio	1	
Graduate major in Computer Science	CSC.T421	Human Computer Interaction	Koike Hideki, Miyake Yoshihiro	1	
Graduate major in Computer Science	CSC.T425	Concurrent System Theory	Nishizaki Shin-Ya	2	
Graduate major in Computer Science	CSC.T426	Software Design Methodology	Saeki Motoshi	2	
Graduate major in Computer Science	CSC.T438	Distributed Algorithms	Defago Xavier	1	
Graduate major in Computer Science	CSC.T439	Augmented Reality	Yuta Itoh	1	
Graduate major in Computer Science	CSC.T441	Internet Infrastructure	Ohta Masataka	2	
Graduate major in Artificial Intelligence	ART.T452	Modeling of Continuous Systems	Ishii Hideaki, Aonishi Toru	1	
Graduate major in Artificial Intelligence	ART.T454-01	Advanced Topics in Artificial Intelligence S	Machida Motoya, Alexander Shibakov	1,2	
Graduate major in Artificial Intelligence	ART.T455	Modeling of Discrete Systems	Konagaya Akihiko, Deguchi Hiroshi, et al.	2	
Graduate major in Artificial Intelligence	ART.T456	Non-linear Dynamical Systems	Miyake Yoshihiro, Takinoue Masahiro, et al.	2	
Graduate major in Artificial Intelligence	ART.T457	Workshop on Building Advanced Computer Network	Yamamura Masayuki	2	
Graduate major in Life Science and Technology	LST.A401	Molecular and Cellular Biology	Kimura Hiroshi, Iwasaki Hiroshi, et al.	1	Students should have basic knowledge of molecular biology and cell biology. When the number of registered students exceeds the capacity of the classroom, exchange students may not be accepted.

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Graduate major in Life Science and Technology	LST.A403	Biophysics	Kobatake Eiry, Ueno Takafumi, et al.	1	When the number of registered students exceeds the capacity of the classroom, exchange students may not be accepted.
Graduate major in Life Science and Technology	LST.A404	Cell Physiology	Tachibana Kazunori, Nakamura Nobuhiro, et al.	2	Undergraduate-level basic knowledge of cell biology. When the number of registered students exceeds the capacity of the classroom, exchange students may not be accepted.
Graduate major in Life Science and Technology	LST.A411	Biomolecular Engineering	Fukui Toshiaki, Ueda Hiroshi, et al.	2	Undergraduate-level basic knowledge of molecular biology and genetic engineering. When the number of registered students exceeds the capacity of the classroom, exchange students may not be accepted.
Graduate major in Architecture and Building Engineering	ARC.D401	History of Architecture	Stewart David-Butler	1	
Graduate major in Architecture and Building Engineering	ARC.D402	Architectural Preservation and Renovation	Yamazaki Taisuke	1	
Graduate major in Architecture and Building Engineering	ARC.D421	Architectural Design Studio I	Yasuda Koichi, Okuyama Shinichi, et al.	1	
Graduate major in Architecture and Building Engineering	ARC.D441	Passive Solar Design	Murata Ryo	1	
Graduate major in Architecture and Building Engineering	ARC.D443	Structural Planning in Architecture	Takeuchi Toru	2	
Graduate major in Civil Engineering	CVE.A401	Introduction to Solid Mechanics	Wjeyewickrema Anil	1	
Graduate major in Civil Engineering	CVE.A403	Analysis of Vibrations and Elastic Waves	Hirose Sohichi	2	Completion of courses in calculus and complex function theory is preferable.
Graduate major in Civil Engineering	CVE.B401	Water Resource Systems	Kanae Shinjiro	1	
Graduate major in Civil Engineering	CVE.C401	Mechanics of Geomaterials	Kitazume Masaki, Kasama Kiyonobu	1	Basic knowledge of soil mechanics is required.
Graduate major in Civil Engineering	CVE.C403	Geo-environmental Engineering	Takemura Jiro	2	Basic knowledge of civil and environmental engineering is required.
Graduate major in Civil Engineering	CVE.D401	Mathematical Modeling of Individual Choice Behavior	Fukuda Daisuke	1	
Graduate major in Civil Engineering	CVE.E401	Mechanics of Structural Concrete	Niwa Junichiro	1	
Graduate major in Civil Engineering	CVE.G401	Aquatic Environmental Science	Yoshimura Chihiro	2	
Graduate major in Global Engineering for Development, Environment and Society	GEG.E403	Environmental Cleanup and Pollution Control Technology	Hinode Hirofumi	1	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.E404	Technologies for Energy and Resource Utilization	Takahashi Fumitake	1	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.E411	Atmospheric Environment in Megacities	Kanda Manabu, Inagaki Atsushi, et al.	1	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.E421	Energy&Environment-1	Tokimatsu Koji, Takahashi Fumitake, et al.	2	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.I401	Sustainable Development and Integrated Management	Takada Jun-Ichi, Yamaguchi Shinobu	1	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.S401	Environmental Policy	Murayama Takehiko, Nishikizawa Shigeo	1	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.T413	Basic Behaviormetrics: Theory and Methods	Takahashi Fumitake	2	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.M441	Graduate Lecture in Cognition, Mathematics and Information S1A	Yamagishi Kimihiko	1	
Graduate major in Social and Human Sciences	SHS.M461	Graduate Methodologies in Cognition, Mathematics and Information S1	Inohara Takehiro	1,2	
Graduate major in Social and Human Sciences	SHS.P441	Graduate Lecture in Politics, Law and Administration S1A	Kaneko Hironao	1	
Graduate major in Urban Design and Built Environment	UDE.E402	GIS and Digital Image Processing for Built Environment	Matsuoka Masashi	1	
Graduate major in Urban Design and Built Environment	UDE.E403	Introduction to Atmospheric Urban Environment	Okaze Tsubasa	2	
Graduate major in Urban Design and Built Environment	UDE.E404	Basic Engineering on Thermal Environment	Asawa Takashi	2	
Graduate major in Urban Design and Built Environment	UDE.P402	Theory of Regional Planning and Process	Yai Tetsuo	1	
Graduate major in Urban Design and Built Environment	UDE.S402	Nonlinear Behavior of Concrete and Concrete Members	Kono Susumu, Nishimura Koshiro	1	

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Graduate major in Urban Design and Built Environment	UDE.S433	Introduction on Theory of Earthquake Ground Motion	Yamanaka Hiroaki	1	
Graduate major in Urban Design and Built Environment	UDE.S434	Safe Built Environment I	Satoh Toshiaki, Suzuki Kojiro	1	
Technology and Innovation Management	TIM.B418	Strategic Management of Technology I	Miyazaki Kumiko	1	
Technology and Innovation Management	TIM.B419	Strategic Management of Technology II	Miyazaki Kumiko	2	
Graduate major in Energy Science and Engineering	ENR.A401-01	Interdisciplinary scientific principles of energy 1	Ihara Manabu, Yamada Akira, et al.	1	
Graduate major in Energy Science and Engineering	ENR.A401-02	Interdisciplinary scientific principles of energy 1	Yamaguchi Takeo, Shishido Atsushi, et al.	1	
Graduate major in Energy Science and Engineering	ENR.A402-01	Interdisciplinary scientific principles of energy 2	Ihara Manabu, Okimoto Yoichi, et al.	2	
Graduate major in Energy Science and Engineering	ENR.A402-02	Interdisciplinary scientific principles of energy 2	Yamada Akira, Arai Hajime, et al.	2	
Graduate major in Energy Science and Engineering	ENR.A403-01	Interdisciplinary principles of energy devices 1	Hanamura Katsunori, Fujita Hideaki, et al.	1	
Graduate major in Energy Science and Engineering	ENR.A403-02	Interdisciplinary principles of energy devices 1	Suekane Tetsuya, Okuno Yoshihiro, et al.	1	
Graduate major in Energy Science and Engineering	ENR.A404-01	Interdisciplinary principles of energy devices 2	Ihara Manabu, Sasabe Takashi, et al.	2	
Graduate major in Energy Science and Engineering	ENR.A404-02	Interdisciplinary principles of energy devices 2	Yamada Akira, Kitamura Fusao, et al.	2	
Graduate major in Energy Science and Engineering	ENR.B431	Recent technologies of fuel cells, solar cells batteries and energy system	Ihara Manabu, Yamada Akira, et al.	2	
Graduate major in Energy Science and Engineering	ENR.H403	Advanced Electrochemistry I	Kanno Ryoji, Arai Hajime, et al.	1	
Graduate major in Energy Science and Engineering	ENR.H404	Advanced Electrochemistry II	Kanno Ryoji, Arai Hajime, et al.	2	
Graduate major in Energy Science and Engineering	ENR.H405	Advanced Inorganic Materials Chemistry I	Kanno Ryoji, Waki Keiko, et al.	1	
Graduate major in Energy Science and Engineering	ENR.H406	Advanced Inorganic Materials Chemistry II	Kanno Ryoji, Waki Keiko, et al.	2	
Graduate major in Energy Science and Engineering	ENR.H410	Topics in Properties of Semiconductors	Wada Hiroyuki, Waki Keiko	1	
Graduate major in Energy Science and Engineering	ENR.H420	Introduction to Photochemistry I	Shishido Atsushi, Wada Hiroyuki	1	
Graduate major in Energy Science and Engineering	ENR.H430	Introduction to Photochemistry II	Nagai Keiji, Shishido Atsushi	2	
Graduate major in Energy Science and Engineering	ENR.I420	Advanced Lecture on Crystal Structure and Correlation with Properties of Solids	Yashima Masatomo	2	
Graduate major in Energy Science and Engineering	ENR.J405	Microstructure Evolution and Diffusion in Metals	Kimura Yoshisato, Nakada Nobuo	2	
Graduate major in Energy Science and Engineering	ENR.J406	Organic Electronic Materials Physics	Mori Takehiko	1	
Graduate major in Energy Science and Engineering	ENR.J407	Soft Materials Design	Matsumoto Hidetoshi	2	
Graduate major in Energy Science and Engineering	ENR.K430	Advanced course of turbulent flow and control	Tanahashi Mamoru, Shimura Masayasu	1	
Graduate major in Energy Science and Engineering	ENR.L401	Mechanical-to-electrical energy conversion	Fujita Hideaki	1	Knowledge of mechanics and electromagnetics equivalent to high school-level physics
Graduate major in Energy Science and Engineering	ENR.L410	Introduction to Photovoltaics	Miyajima Shinsuke	2	The students are expected to have basic knowledge of semiconductors. (p-type, n-type, Fermi level etc...)
Graduate major in Nuclear Engineering	NCLA404	Application of Accelerators and Radiation	Oguri Yoshiyuki, Katabuchi Tatsuya	2	Knowledge of basics in atomic physics, nuclear physics and radiation physics
Graduate major in Nuclear Engineering	NCLN401	Basic Nuclear Physics	Oguri Yoshiyuki, Chiba Satoshi, et al.	1	Knowledge of basic quantum mechanics
Graduate major in Nuclear Engineering	NCLN402	Nuclear Reactor Theory I	Obara Toru, Nishiyama Jun	1	Knowledge of differential and integral equations including vector calculus

List of Graduate Courses Available to Undergraduate-level International Exchange Students <For 1Q, 2Q of the 2019-2020 Academic Year>

As of March 2019

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.

**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.**

1Q: April – early June, 2Q: mid-June – early Aug.

Major / Course Category	No.	Course Name	Lecturer	Quarter	Eligibility criteria or prerequisite knowledge, etc. (左欄「受講要件」を英訳したもの)
Graduate major in Nuclear Engineering	NCLN405	Nuclear Reactor Thermal-hydraulics	Kato Yukitaka, Kikura Hiroshige, et al.	1	
Graduate major in Nuclear Engineering	NCLN406	Nuclear Reactor Theory II	Obara Toru, Nishiyama Jun	2	Knowledge of differential and integral equations including vector calculus
Graduate major in Nuclear Engineering	NCLN407	Nuclear Safety Engineering	Kikura Hiroshige, Sagara Hiroshi	2	
English Language Courses	LAE.E461-01	Academic Writing in English 13	Undecided	1	Graduate students will receive priority if enrollment is limited. Whether or not the student has sufficient academic ability to enroll shall be determined by the instructor.
English Language Courses	LAE.E461-02	Academic Writing in English 13	Undecided	1	Graduate students will receive priority if enrollment is limited. Whether or not the student has sufficient academic ability to enroll shall be determined by the instructor.
English Language Courses	LAE.E462-01	Academic Writing in English 14	Undecided	2	Graduate students will receive priority if enrollment is limited. Whether or not the student has sufficient academic ability to enroll shall be determined by the instructor.
English Language Courses	LAE.E462-02	Academic Writing in English 14	Undecided	2	Graduate students will receive priority if enrollment is limited. Whether or not the student has sufficient academic ability to enroll shall be determined by the instructor.
Breadth Courses	LAW.X402	Introduction to EdTech: Online Courses	Cross Jeffrey Scott	1	enrollment limited to 15 students due to group work, on-seat available basis
Breadth Courses	LAW.X403	Introduction to EdTech: Video-Making	Cross Jeffrey Scott	2	enrollment limited to 15 students due to group work, on-seat available basis
Breadth Courses	LAW.X412	Study on Japanese Companies and Industries II	Sato Yuriko, Saito Hirofumi, et al.	1	Due to the capacity of a bus used in study tours, number of students is limited to 47. YSEP students and master course regular students have priority in participation.
Breadth Courses	LAW.X416	Modern Japan	Hara Masahiko	2	
Breadth Courses	LAW.X419	Communication Skills in Japanese Industries II	Takemura Jiro, Morikawa Junko, et al.	1	
Breadth Courses	LAW.X422	Japan Studies II	Saito Hirofumi, Okazaki Naoaki, et al.	2	Only participants of Tokyo Tech Summer Program can take this course.
Breadth Courses	LAW.X425	Global Leadership Practice	Ota Eri	2	
Breadth Courses	LAW.X426	Tokyo Tech Summer Program Research Exchange Project	Academic Supervisor	2	Only participants of Tokyo Tech Summer Program can take this course.
Breadth Courses	LAW.X429	Multicultural Collaboration and Leadership	TBA	2	