English-Taught Courses List **As of May 2026**

(Graduate School of Bio-Applications and Systems Engineering) **This is for your reference only.**

Code	Course title	Semester	Quarter	Main Instructor	Course description
125007	Advanced Material and Environmental designing I	Fall Semester	3rd Quarter	QIAN Eika	Development of new energy conversion catalyst development by catalytic chemistry / engineering process, basic knowledge of develop catalyst, read highly specialized academic papers, "Catalytic Chemistry Basics", "Catalyst Analysis Method "and" reaction kinetics "more deeply. A deep understanding of related papers and debate on contents are central.
125008	Advanced Material and Environmental designing II	Fall Semester	3rd Quarter	QIAN Eika	Development of new energy conversion catalyst development by catalytic chemistry / engineering process, basic knowledge of develop catalyst, read highly specialized academic papers, "Catalytic Chemistry Basics", "Catalyst Analysis Method "and" reaction kinetics "more deeply. A deep understanding of related papers and debate on contents are central.
125021	Bioelectronics I	Fall Semester	3rd Quarter	TABATA Miyuki	This course is for introduction of Bioelectronics. Seminar-style classes are held on electrical/electrochemical measurement principles, experimental methods, and data analysis.
125022	Bioelectronics II	Fall Semester	3rd Quarter	TABATA Miyuki	This course is for introduction of Bioelectronics. Seminar-style classes are held on electrical/electrochemical measurement principles, experimental methods, and data analysis.
125722	Practical Presentation in English	Fall Semester	3rd Quarter	TOMINAGA Yoichi	Practice and performance of effective English presentetion in conferences and public meetings.
125724	Practical Presentation in English	Fall Semester	3rd Quarter	QIAN Eika	Practice and performance of effective English presentation in conferences and public meetings.
125741	Practical Presentation in English	Fall Semester	3rd Quarter	AKISAWA Atsushi	Practice and performance of effective English presentation in conferences and public meetings. This course corresponds to the interdisciplinary exchange courses of the curriculum of the Department of Bio-Functions and Systems Science.
125742	Practical Presentation in English	Fall Semester	3rd Quarter	MIZUUCHI Ikuo	Practice and performance of effective English presentation in conferences and public meetings. This course corresponds to the interdisciplinary exchange courses of the curriculum of the Department of Bio-Functions and Systems Science.
125761	Practical Presentation in English	Fall Semester	3rd Quarter	TOYODA Koki	Practice and performance of effective English presentetion in conferences and public meetings.
125770	Practical Presentation in English	Fall Semester	3rd Quarter	SUZUKI Takeshi	Presentations at international academic conferences are one of the most important steps in the publication of scientific research results. This course aims to provide techniques for effective presentations and question-and-answer sessions to reach target audience through external presentation opportunities.
125806	Practical Presentation in English	Spring Semester	1st Quarter	QIAN Eika	Practice and performance of effective English presentation in conferences and public meetings.
126002	Special Seminars on Bio-Function and Systems Science	Spring Semester	ONE-YEAR	TOMINAGA Yoichi	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
126018	Special Seminars on Bio-Function and Systems Science	Spring Semester	ONE-YEAR	NISHIDATE Izumi	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion. This course corresponds to thesis research etc. of the curriculum of the Department of Bio-Functions and Systems Science. Students in Doctral course Year-1 must complete this course as compulsive.
127002	Special Planning Research of Bio-Function and Systems Science	Spring Semester	ONE-YEAR	TOMINAGA Yoichi	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
128002	Special Seminars on Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	TOMINAGA Yoichi	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.

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128003	Special Seminars on Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	QIAN Eika	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion.
128012	Special Seminars on Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	TOYODA Koki	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course. This subject corresponds to thesis research in the curriculum of the Department of Bio-Functions and Systems Science, and is a required subject for the doctoral program.
128018	Special Seminars on Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	NISHIDATE Izumi	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion. This subject corresponds to thesis research in the curriculum of the Department of Bio-Functions and Systems Science, and is a required subject for the doctoral program.
129002	Special Planning Research of Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	TOMINAGA Yoichi	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
129003	Special Planning Research of Bio-Function and Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	QIAN Eika	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
148105	Doctoral Student Technical Writing	Spring Semester	1st Quarter	TAKEYAMA Haruko (WASEDA University)	In this course, students will develop the scientific and technical writing skills they need to construct research papers in their specialist field. The course will be divided into two parts. In the first part of the course, students will study about the characteristic features of high-quality international research journal papers in terms of intended audience, purpose, organization, flow, style, and presentation. Students will also learn to identify useful features and patterns of writing in their specialist field using powerful text analysis and visualization tools. In the second part of the course, students will plan and complete a short research paper describing their current work following the "Instructions for Authors" guideline of a target journal. As part of the writing process, students will learn how to paraphrase, cite, and reference previous work, write simple and extended definitions, explain methods and processes, introduce, explain, and hedge interpretations of data in figures and tables, and summarize their research in the form of a title, abstract, and list of keywords.
148106	Doctoral Student Technical Writing	Fall Semester	3rd Quarter	TAKEYAMA Haruko (WASEDA University)	In this course, students will develop the scientific and technical writing skills they need to construct research papers in their specialist field. The course will be divided into two parts. In the first part of the course, students will study about the characteristic features of high-quality international research journal papers in terms of intended audience, purpose, organization, flow, style, and presentation. Students will also learn to identify useful features and patterns of writing in their specialist field using powerful text analysis and visualization tools. In the second part of the course, students will plan and complete a short research paper describing their current work following the "Instructions for Authors" guideline of a target journal. As part of the writing process, students will learn how to paraphrase, cite, and reference previous work, write simple and extended definitions, explain methods and processes, introduce, explain, and hedge interpretations of data in figures and tables, and summarize their research in the form of a title, abstract, and list of keywords.

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148309	Life science special lectureⅣ	Spring Semester	1st Quarter	OHSHIMA Toshio (WASEDA University)	Most of the lectures are given on-line together with face-to-face format. Lectures are pointed to the latest topics in the neuroscience field. The first half part focuses cell biological and developmental topics in the neuroscience, and in the last half part lectures are given by the leading researchers from The Brain Science Institute, Riken.
148452	Practical Presentation II	Spring Semester	ONE-YEAR	YOSHIDA Tadashi	To develop students' capabilities to convey the fruits of research to researchers in the same and other disciplines in English in an easy-to-understand way, and to discuss them in a professional manner. To further polish up and put into practice the capabilities for presentation, communication and discussion developed in Advanced Health Science Seminars I to III and the capability for communication in English developed in the practical English education course to a level high enough for presentation to international scholastic societies, and for each student to put in order and recognize his or her problems in these capabilities by learning the peer’s research acehivements and presentation techniques.
148527	Practical Presentation II	Fall Semester	ACROSS ACADEMIC YEAR	YOSHIDA Tadashi	To develop students' capabilities to convey the fruits of research to researchers in the same and other disciplines in English in an easy-to-understand way, and to discuss them in a professional manner. To further polish up and put into practice the capabilities for presentation, communication and discussion developed in Advanced Health Science Seminars I to III and the capability for communication in English developed in the practical English education course to a level high enough for presentation to international scholastic societies, and for each student to put in order and recognize his or her problems in these capabilities by learning the peer’s research acehivements and presentation techniques.
231003	Advanced Energy and Materials Design I	Spring Semester	1st Quarter	TOMINAGA Yoichi	In this class, you learn basics of polymer physics from both sides of physical and chemical points of views. The contents include mechanical, thermal and electrical properties of polymers which are particularly important for the polymer physics. Goal of this class is to learn skills of fundamentals from the viewpoint of microscopic properties and applications from the viewpoint of macroscopic properties of polymers. This class also focuses on widely professional knowledge obtained from introduction of recent advanced research and actual experimental and samples.
231004	Advanced Energy and Materials Design II	Spring Semester	1st Quarter	TOMINAGA Yoichi	These new “polymer electrolytes” are recently winning interest as solid-state alternatives to liquid electrolytes for electrochemical device applications, which range from high-energy density rechargeable batteries to solar cells, ion sensors and electrochromic displays. Above all, secondary lithium batteries based on polymer electrolytes have the capabilities of outstanding performance in terms of easy processibility, mechanical stability, reliability and safety (non flammability and leakage). Solid polymer electrolytes (SPEs) are new electrolyte materials which consist of salt (ion source) and polar polymer such as polyether. In this lecture, you review the basics of polymer materials science learned in the undergraduate lectures. The lecture focuses on SPEs and proceeds fundamentals of history, structures/species, industrial needs and applications. You learn the mechanism of dissociation of salts, diffusion phenomenon, measurement techniques and recent research on SPEs.
232308	Arts of Intercultural Communication I	Spring Semester	1st Quarter	YAMADA Tetsuya	This lecture “Understanding Societies and Cultures in Asian and African Regions” will be the lecture omnibus by teachers of Tokyo University of Foreign Studies. Expecting the cases where you will communicate with local people while conducting re- search, development assistance and others in developing and emerging counties, this lecture will give an outline of existing conditions, languages, cultures, customs and religions in various regions of Asia and Africa. In addition, it aims to provide know-how and knowledge required to understand other cultures and to understand deeply each other by discussing in English. Every teacher gives a lecture in the first week and students are required to discuss the subjects of the lecture in the next week.

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232309	Global Coordination	Fall Semester	3rd Quarter	HORIKIRI Yukiko	Acquire the knowledge and skills required as a member of an international joint research project in a global society that includes diversity. Students will learn about the actual situation of international joint research through its background, related factors, and examples of researchers and coordinators including following abilities. 1. Understanding the background and structure of international joint research projects 2. Understanding the factors involved in coordinating within a project team, including diversity 3. Coordination and communication skills required as a researcher 4. Ability to build relationships including diversity and to coordinate problems
232315	Arts of Intercultural Communication II	Spring Semester	1st Quarter	YAMADA Tetsuya	This lecture “Understanding Societies and Cultures in Asian and African Regions” will be the lecture omnibus by teachers of Tokyo University of Foreign Studies. Expecting the cases where you will communicate with local people while conducting re- search, development assistance and others in developing and emerging counties, this lecture will give an outline of existing conditions, languages, cultures, customs and religions in various regions of Asia and Africa. In addition, it aims to provide know-how and knowledge required to understand other cultures and to understand deeply each other by discussing in English. Every teacher gives a lecture in the first week and students are required to discuss the subjects of the lecture in the next week.
232402	Advanced Energy and Materials Design I	Spring Semester	1st Quarter	TOMINAGA Yoichi	In this lecture, to understand energy problems as a major theme, you learn professional skills to find and summarize research papers that have been described in terms of practical application research of energy devices and basic research centered on organic and polymer ionics materials. Goal of this lecture is to understand the nature of ionics materials, organic/polymeric materials and energy storage/conversion devices by performing the discussion and presentation with respect to the content of research papers.
232410	Advanced Energy and Materials Design II	Spring Semester	1st Quarter	TOMINAGA Yoichi	In this lecture, to understand energy problems as a major theme, you learn professional skills to find and summarize research papers that have been described in terms of practical application research of energy devices and basic research centered on organic and polymer ionics materials. Goal of this lecture is to understand the nature of ionics materials, organic/polymeric materials and energy storage/conversion devices by performing the discussion and presentation with respect to the content of research papers.
233001	Career Development Program I	Spring Semester	1st Quarter	AKISAWA Atsushi	As the students start their five-year postgraduate program, this course will help them develop diverse future careers through presentation skills training, listening to talks by Ph.D. professionals working in various fields
233201	Green and Clean Food Production Advancement I	Fall Semester	3rd Quarter	AKISAWA Atsushi	Lectures on related areas with food, energy, and environment will be given in English. GCFP "I" will especially focus on agricultural fields. Students deepen knowledge through lectures and discussion on current issues and the cutting edge research in the world. In principle, the lectures will be held in several days from October to Novemver.
233203	Green and Clean Food Production Advancement III	Spring Semester	ONE-YEAR	TOYODA Koki	To understand the detail of sustainability concerned with Green, clean food production, some invited professors will give lecture and discuss with professor and students based on this lecture.
233404	International Workshop	Spring Semester	ONE-YEAR	TOMINAGA Yoichi	This subject falls under the international subject in the Department of Food and Energy Systems Science Five-Year integrated Doctoral Course, and is a required subject in the first year.

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233408	International communication exercises I	Spring Semester	INTENSIVE	AKISAWA Atsushi	This course provides an international program collaborating with Steinbeis Unviersity Berlin in Germany for 2 weeks. Everything is conducted in English. Lectures for pre-program are also supplied in advance. A post-program is held to wrap-up the program afterwards. This subject is an international subject in the Department of Food and Energy System Science Five-Year integrated Doctoral Course, and is an elective subject for students in their 1st to 5th years. This program is organized twice a year, in September and March.
233409	International communication exercises II	Spring Semester	INTENSIVE	TOYODA Koki	This course consists of a study trip to China. In the China program, students obtain more understanding for food production, environmental problems, and their solutions through field trips to Northwest China with students of Sophia University (currently Nanchang or Zhanye is a candidate city for the field study). This subject is an international subject in the Department of Food and Energy System Science Five-Year integrated Doctoral Course, and is an elective subject for students in their 1st to 5th years.
233410	International communication exercises I	Fall Semester	3rd Quarter	AKISAWA Atsushi	This course provides an international program collaborating with Steinbeis Unviersity Berlin in Germany for 2 weeks. Everything is conducted in English. Lectures for pre-program are also supplied in advance. A post-program is held to wrap-up the program afterwards. This subject is an international subject in the Department of Food and Energy System Science Five-Year integrated Doctoral Course, and is an elective subject for students in their 1st to 5th years. This program is organized twice a year, in September and March.
238002	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	TOYODA Koki	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238009	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	YOSHINO Daisuke	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238010	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	MIZUUCHI Ikuo	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238012	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	MASUDA Kohji	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238014	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	KAJITA Shinya	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238015	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	NAKATA Kazuya	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238016	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	AKAGI Yuki	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238017	Special Seminars on Food and Energy Systems Science	Spring Semester	ONE-YEAR	KIM Sanghong	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.

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238104	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	TOYODA Koki	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.

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238107	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	MIZUUCHI Ikuo	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238109	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	MASUDA Kohji	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238110	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	NAKATA Kazuya	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238111	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	AKAGI Yuki	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238112	Special Seminars on Food and Energy Systems Science	Fall Semester	ACROSS ACADEMIC YEAR	KIM Sanghong	Seminar is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238209	Special Planning Research of Food and Energy Systems Science	Spring Semester	ONE-YEAR	YOSHINO Daisuke	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.
238210	Special Planning Research of Food and Energy Systems Science	Spring Semester	ONE-YEAR	MIZUUCHI Ikuo	Research is done in each laboratory to bring up research ability and to learn professional knowledge through discussion as a graduate student in the doctor course.