## 2021 Doctoral Program in Informatics

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days,Per iod etc.	Classro om	Instructor	Course Overview	Remarks
0BTW211	Informatics Seminar al	2	1. 0	1, 2	FallABC	by request		Yoshida Yuko, Suzuki Nobutaka, Teruya ma Junko, Academic advisors for the Doctoral Program in Informatics	In order to develop human resources who can solve various problems in the information society by the interdisciplinary approach of humanities and sciences, students belonging to the Degree Program in Informatics take research guidance from faculty members of the Degree Program in informatics in an interactive form. Students have opportunities to get advice on research for their doctoral dissertation beyond the laboratory by presenting the progress of research in front of multiple faculty members.	In every year, classes are taught in Japanese and English: Research Seminar Courses Online(Synchronous)
OBTW212	Informatics Seminar a2	2	1.0	1, 2	FallABC	by request		Yoshida Yuko, Suzuki Nobutaka, Teruya ma Junko, Academic advisors for the Doctoral Program in Informatics	In order to develop human resources who can solve various problems in the information society by the interdisciplinary approach of humanities and sciences, students belonging to the Degree Program in Informatics take research guidance from faculty members of the Degree Program in informatics in an interactive form. Students have opportunities to get advice on research for their doctoral dissertation beyond the laboratory by presenting the progress of research in front of multiple faculty members.	In every year, classes are taught in Japanese and English: Research Seminar Courses Online (Synchronous)
OBTW213	Informatics Seminar b1	2	1.0	1, 2	SprABC	by request		Yoshida Yuko, Suzuki Nobutaka, Teruya ma Junko, Academic advisors for the Doctoral Program in Informatics	In order to develop human resources who can solve various problems in the information society by the interdisciplinary approach of humanities and sciences, students belonging to the Degree Program in Informatics take research guidance from faculty members of the Degree Program in informatics in an interactive form. Students have opportunities to get advice on research for their doctoral dissertation beyond the laboratory by presenting the progress of research in front of multiple faculty members.	In every year, classes are taught in Japanese and English: Research Seminar Courses Online (Synchronous)
OBTW214	Informatics Seminar b2	2	1. 0	1, 2	SprABC	by request		Yoshida Yuko, Suzuki Nobutaka, Teruya ma Junko, Academic advisors for the Doctoral Program in Informatics	In order to develop human resources who can solve various problems in the information society by the interdisciplinary approach of humanities and sciences, students belonging to the Degree Program in Informatics take research guidance from faculty members of the Degree Program in informatics in an interactive form. Students have opportunities to get advice on research for their doctoral dissertation beyond the laboratory by presenting the progress of research in front of multiple faculty members.	In every year, classes are taught in Japanese and English: Research Seminar Courses Online(Synchronous)
OBTW231	Research Internship	2	2. 0	2	SprABC	by appoint ment		Donkai Saori,Koizumi Masanori,Takaku Masao,Matsumura Atsushi	Engage in research activities in organizations other than the degree program to which you belong, such as international research institutes, national laboratories, corporate research laboratories, and university laboratories. Research themes follow the instructions of the recipient. In addition to gaining the opportunity to participate in advanced and cutting-edge research, by experiencing collaborative research, by experiencing collaborative research in addition to applying for a research. In addition to applying for a research institution, this course allows you to negotiate the institution regarding a research intern acceptance.	Practical Seminar Courses Online(Synchronous)

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days,Per iod etc.	Classro om	Instructor	Course Overview	Remarks
OBTW232	Research Instruction	2	2. 0	2	FallABC	by appoint ment		Ikeuchi Atsushi,Fujisaw a Makoto,Wakabaya shi Kei	This course is designed to provide students with guidance for their graduation research under the supervision of their academic advisor, assuming that they will become university faculty members in the future. In the first half of the lecture, students will learn about the various styles of research guidance and understand the flow and main points of graduate research guidance. In the latter half of the seminar, students will be involved in the presentation and writing of their thesis, and acquire actual research guidance skills.	Practical Seminar Courses Hybrid or Others 1st-2nd Online Asynchronous, 3rd Online Synchronous, 4th Online Asynchronous, 5th Online Synchronous, 7th Online Synchronous, 8th Online Asynchronous, 9th - 10th Online Synchronous
OBTW233	Project Based Learning	2	2. 0	1	SprABC	by appoint ment		Joho Hideo,Toshimori Atsushi,Hasegaw a Hidehiko,Maeshi ro Tetsuya	This course exercises project-based learning for those who seek a professional career. Problem formulation and setting are primary performed by students, and the research project is managed by a PDCA cycle. The course aims to navigate students to self manage a research project, adjust the schedule based on the progress, and make a level of contribution. Students report to instructors time to time and receive feedback.	Practical Seminar Courses Hybrid or Others 1st. 5th. 10th Online Synchronous, 2nd-4th, 6th-9th Online Asynchronous
OBTW251	Synthetic Seminar on Informatics Ia	2	1. 0	1	Spr ABC	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Kanae, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses Hybrid or Others In the first class, each supervisor will explain how to implement the course.
OBTW252	Synthetic Seminar on Informatics Ib	2	1.0	1	FallABC	by appoint ment		Satoh Tetsuji,Itsumur a Hiroshi,Hasegaw a Hidehiko,Watanu ki Toyoaki,Goto Yoshihiro,Morit sugu Shuichi,Shirai Tetsuya,Toshimo ri Atsushi,Yoshida Yuko,Donkai Saori,Inoue Tomoo,Yoshikane Fuyuki,Morishim a Atsuyuki,Tsuji Yasuaki,Suzuki Kanae,Suzuki Nobutaka,Uda Norihiko	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses Hybrid or Others In the first class, each supervisor will explain how to implement the course.

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days,Per iod etc.	Classro om	Instructor	Course Overview	Remarks
OBTW253	Synthetic Seminar on Informatics IIa	2	1. 0	3	Spr ABC	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a tidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Kanae, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses Hybrid or Others In the first class, each supervisor will explain how to implement the course.
OBTW254	Synthetic Seminar on Informatics IIb	2	1. 0	3	FallABC	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Suzuki Kanae, Suzuki Nobutaka, Uda Norihiko	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses Hybrid or Others In the first class, each supervisor will explain how to implement the course.
OBTW255	Synthetic Seminar on Informatics Ia	2	1. 0	1	Sum Vac	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Kanae, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses.Only those who plan to complete early can take this course. Applicants need to apply for the Graduate Academic Affairs Section.

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days, Per iod etc.	Classro om	Instructor	Course Overview	Remarks
OBTW256	Synthetic Seminar on Informatics Ib	2	1. 0	1	Spr Vac	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit Sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Kanae, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses. Only those who plan to complete early can take this course. Applicants need to apply for the Graduate Academic Affairs Section.
OBTW257	Synthetic Seminar on Informatics IIa	2	1.0	3	Sum Vac	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses. Only those who plan to complete early can take this course. Applicants need to apply for the Graduate Academic Affairs Section.
OBTW258	Synthetic Seminar on Informatics IIb	2	1. 0	3	Spr Vac	by appoint ment		Satoh Tetsuji, Itsumur a Hiroshi, Hasegaw a Hidehiko, Watanu ki Toyoaki, Goto Yoshihiro, Morit sugu Shuichi, Shirai Tetsuya, Toshimo ri Atsushi, Yoshida Yuko, Donkai Saori, Inoue Tomoo, Yoshikane Fuyuki, Morishim a Atsuyuki, Tsuji Yasuaki, Uda Norihiko, Suzuki Kanae, Suzuki Nobutaka	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Research Seminar Courses.Only those who plan to complete early can take this course. Applicants need to apply for the Graduate Academic Affairs Section.

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days, Per iod etc.	Classro om	Instructor	Course Overview	Remarks
OBTW271	Global Research Seminar IIIa	2	1. 0	1	SprABC	by appoint ment		Itsumura Hiroshi,Academi c advisors for the Doctoral Program in Informatics	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three years of standard enrol Iment periods. (2) Will not be counted as credits in completion requirements: Research Seminar Courses
OBTW272	Global Research Seminar IIIb	2	1. 0	1	FallABC	by appoint ment		Itsumura Hiroshi, Academi c advisors for the Doctoral Program in Informatics	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three sduring the three sduring the three vears of standard enrol ment periods. (2) Will not be counted as credits in completion requirements: Research Seminar Courses
OBTW273	Global Research Seminar IVa	2	1. 0	2	SprABC	by appoint ment		Itsumura Hiroshi, Academi c advisors for the Doctoral Program in Informatics	Students will receive advanced dissertation guidance by academic advisors on the following research topics in the fields of media science, information interaction, and library and information science, to complete a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication (3) Theory and application on the management of knowledge resources as social infrastructure	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three years of standard enrollment periods. (2) Will not be counted as credits in completion requirements: Research Seminar Courses
OBTW274	Global Research Seminar IVb	2	1. 0	2	FallABC	by appoint ment		Itsumura Hiroshi, Academi c advisors for the Doctoral Program in Informatics	a doctoral thesis. (1) Theory and application of data utilization considering the nature of media (2) Theory and application on information use focusing on communication	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three sduring the three sduring the three sduring credits in completion requirements: Research Seminar Courses

Course Number	Course Name	Instructional Type	Credits	standard registrat ion year	Term	Meeting Days,Per iod etc.	Classro om	Instructor	Course Overview	Remarks
OBTW275	Global Research Seminar Va	2	1.0	3	SprABC	by appoint ment		Itsumura Hiroshi, Academi c advisors for the Doctoral Program in Informatics	The purpose is of this course is to comprehensively acquire skills for presenting your work at international conferences. Students prepare presentation materials and have rehearsals for presentations. After that students make presentations at international conferences and participate related research scopes. After conferences students make a self-assesment by looking back on the presentation and make reports on other presentations they found it interesting.	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three sduring the three years of standard enrollment periods. (2) Will not be counted as credits in completion requirements: Research Seminar Courses
OBTW276	Global Research Seminar Vb	2	1. 0	3	FallABC	by appoint ment		Itsumura Hiroshi,Academi c advisors for the Doctoral Program in Informatics	The purpose is of this course is to comprehensively acquire skills for presenting your work at international conferences. Students prepare presentation materials and have rehearsals for presentations. After that students make presentations at international conferences and participate related research presentations, and broaden their research scopes. After conferences students make a self-assessment by looking back on the presentation and make reports on other presentations they found it interesting.	Students will be designated by the main course instructor: (1) Priority applications to "University of Tsukuba Study Abroad Support Program" are available up to three times during the three years of standard enrol Iment periods. (2) Will not be counted as credits in completion requirements: Research Seminar Courses