Degree Completion Guide 2025-2026

JAIST
JAPAN
ADVANCED INSTITUTE OF
SCIENCE AND TECHNOLOGY
1990

Degree Completion Guide

Graduate School of Advanced Science and Technology
(Division of Transdisciplinary Sciences)

2025-2026

JAPAN ADVANCED INSTITUTE OF
SCIENCE AND TECHNOLOGY

JAPAN ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY

Challenge of the Transdisciplinary Sciences

- Development of Graduate Education for Transdisciplinary Sciences -

Japan Advanced Institute of Science and Technology and Kanazawa University launched a collaborative educational initiative for graduate education with the aim of cultivating human resources of innovative science and technology in Japan who are capable of leading today's society where it is not easy to predict the future, based on great ideas and ability to realize them.

In order to create new knowledge which can be described as the source of innovative science and technology, it is essential to adopt a perspective of integrating different scientific disciplines (transdisciplinary sciences). Inspirations for genuine innovations will come to those who have a thorough knowledge of their own major field but do not limit themselves within the framework, willingly learn, adopt and practice the methodologies and perspectives of other fields for fearless personal transformation.

As part of our educational mission, we strive to explore and practice the methodology of integrating multiple scientific disciplines and progress the integration under the framework beyond the existing scientific disciplines in order to solve complex social problems. We have the education system, contents, methods and such based on this educational mission.

Creation of new knowledge and innovative science and technology cannot be achieved overnight. However, challengers with strong motivation to create new knowledge using the power of transdisciplinary sciences are strongly desired in today's society where there is a mountain of various problems at both regional and global levels.

We would like to invite you to open the door for "new knowledge" together.

President, Japan Advanced Institute of Science and Technology

TERANO Minoru

President, Kanazawa University

WADA Takashi

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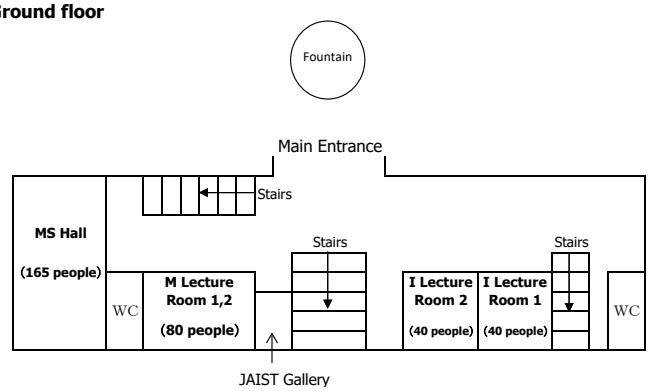

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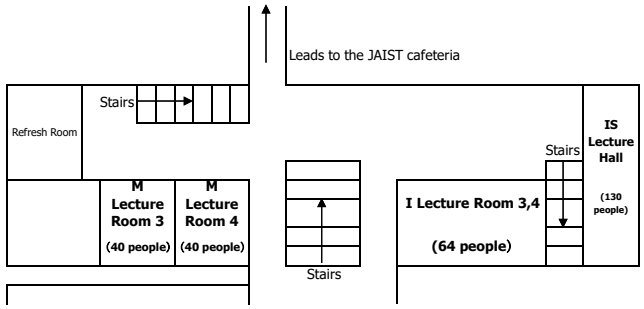
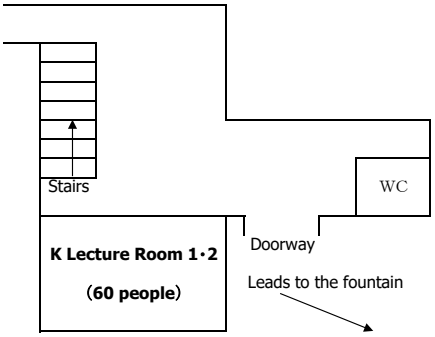


○KS Lecture Building

Ground floor



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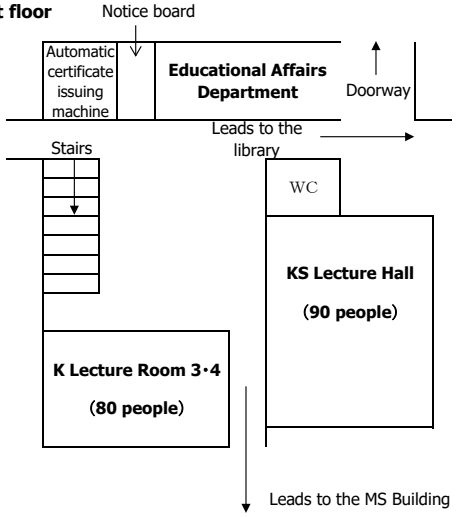

I. Educational Mission, Goals, Human Resource Development, Degree and Policies of Division of Transdisciplinary Sciences

Japan Advanced Institute of Science and Technology (hereinafter referred to as JAIST) and Kanazawa University have organized a collaborative educational program and established the Division of Transdisciplinary Sciences (hereinafter referred to as the collaborative program) in the Graduate School of Advanced Science and Technology at JAIST and in the Graduate School of Frontier Science Initiative at Kanazawa University respectively, with the aim of cultivating "doctoral human resources who are capable of establishing a foundation for innovative science and technology with unique ideas and outstanding research ability and applying it to the society in corresponding to the global needs and trend." (hereinafter referred to as human resources of innovative science and technology).

● Educational Mission and Goals

JAIST and Kanazawa University define that the source of innovation originates from the creation of new knowledge and focus on progress of transdisciplinary sciences as a consistent educational mission in order to cultivate human resources of innovative science and technology.
"Progress of transdisciplinary sciences" is defined as "progressing the integration of multiple scientific disciplines while exploring and practicing the methodology beyond the existing framework of scientific disciplines in order to solve complex social problems relevant to innovative science and technology" and our educational system is structured based on this definition.

○ Framework of three innovative challenges (3 challenges)

This collaborative program consists solely of one division instead of offering multiple courses to realize the educational mission above. On the other hand, the framework of three innovative challenges as described below (3 challenges) has been set by consolidating the strengths and characteristics of the two universities in order to surpass the existing scientific disciplines towards solving complex social problems.

I: Life Innovation (Innovation of healthy and high-quality lifestyle)
[Keywords]
Measurement, analysis and control of biological functions that contribute to healthy living conditions and lifestyles for individuals and their application

II: Green Innovation (Creation of next-generation materials, devices and energy compatible with environment)
[Keywords]
Generation, storage and transportation of the natural / renewable energy;
Development of the energy-efficient devices using new materials and nanotechnology

III: Systems Innovation (Building a future life where human and its society coexists with science and technology)
[Keywords]
Development of intelligent systems utilizing big data and artificial intelligence (AI);
Development of systems and machinery inspired by living organisms;
Improvements in social environment considering the natural and cultural aspects

○ Four "Forces" (Force)

In this collaborative program, we are convinced that, in order to explore and practice the methodology to integrate sciences, the Force to leap into different research fields other than one's own and communicate with others from different backgrounds must be acquired. Although it is difficult to define the Force in one definition, the following four Forces have been set as an underlying foundation.

Force 1: The "Force" for Data analysis
Force to conduct multifaceted analysis of data that represents a phenomenon from a perspective of scientific disciplines that are to be integrated

Force 2: The "Force" for Modeling

Force to propose a model that is consistent with the foundation of transdisciplinary fields

Force 3: The "Force" for Visualization

Force to present an illustration that is easy to understand for people from other fields

Force 4: The "Force" for Designing

Force to solve problems while improving one's own proposals through interactions with other fields and the society

Based on these four Forces, students in this collaborative program are required to choose one challenge from the framework of three innovative challenges (3 challenges) and study the curriculum systematically according to the chosen challenge with guidance from a team of advisors. Also, students are expected to explore and practice the methodology to integrate sciences with the four Forces as a foundation, generate new ideas with different knowledge or from different perspectives, and progress a research topic set by the students themselves while proactively interacting with people of various backgrounds such as faculty members, students and working professionals. In addition to that, students are expected to become valuable human resources of innovative science and technology which is the goal of this collaborative program by acquiring five types of competency defined as "Learning Achievements" in the Diploma Policy below.

● Human Resource Development

Doctoral human resources that are capable of creating a foundation of innovative science and technology based on unique ideas and outstanding research ability and applying it to the society according to the needs and trends of the global society.

● Degree

Degrees conferred in this collaborative program and the titles of degree are as below.

Master's Program	
Master's Degree (Transdisciplinary Sciences)	Master of Philosophy (MPhil)
Doctoral Program	
Doctoral Degree (Transdisciplinary Sciences)	Doctor of Philosophy (Ph.D)
Doctoral Degree (Science)	Doctor of Philosophy in Science
Doctoral Degree (Engineering)	Doctor of Philosophy in Engineering

● Policies

The following policies are established in this collaborative program to advance the education for our students.

Diploma Policy
(Division of Transdisciplinary Sciences)

In the master's course, students are required to acquire the five abilities and competencies listed in the "academic achievement" below through the pursuit and practice of a "Methodology for Transdisciplinary Science" based on the four forces listed as the educational philosophy. The degree of "Master of Philosophy" is conferred on students who have mastered these competencies, enrolled in the program for a specified period of time, earned the specified number of credits, and then have passed either the Master Thesis Examination and the Final Examination or the Ph.D. Qualifying Examination.

1) Ability to contribute to solve social problems related to science, technology and innovation
2) Knowledge and practical skills related to your discipline
3) Motivation and ability to be actively involved in the other discipline than your discipline
4) Ability to understand academic papers and give brief presentation about your research in foreign language
5) Research ethics of science, technology and life

In the doctoral course, students are required to acquire the 1-5 and 6 or 1-5 and 7 abilities and competences listed in the “academic achievement” below through the pursuit and practice of a “Methodology for Transdisciplinary Science” based on the four forces listed as the educational philosophy. The doctoral degree is conferred on students who have mastered these competencies, enrolled in the program for a specified period of time, earned the specified number of credits, and then have passed the Doctoral Dissertation Examination. Among the students mentioned above, those who have acquired the 1-5 and 6 are conferred a doctoral degree “Doctor of Philosophy” and those who have acquired 1-5 and 7 are conferred doctoral degree “Doctor of Philosophy in Science” or “Doctor of Philosophy in Engineering”.

1) Ability to identify, structure and solve the social problems related to science, technology and innovation
2) Cutting-edge knowledge and practical skills related to your discipline
3) Ability to utilize knowledge and technology of other disciplines for your discipline
4) Ability to present and discuss your research in foreign language in an international conference or a joint research in overseas
5) Practical research ethics of science, technology and life
6) Ability to integrate your discipline with other disciplines and create new knowledge
7) Ability to create new knowledge based on your discipline

Curriculum Policies
(Division of Transdisciplinary Sciences)

In order to have students obtain academic achievement which is described in Diploma policy under the framework of three challenges listed in the division's mission, the curriculum of the Division of Transdisciplinary Science is oriented as problem-solving and is systematic based on what students are required to acquire from the program. Specifically, the following courses are designed as a systematically-assigned curriculum.

Master's Program

1) Core Courses to foster basic knowledge and attitude toward creation of innovation
2) Transdisciplinary Experience Courses based on cross-disciplinary research such as a cross-disciplinary seminar and group work and research in the other discipline
3) Social Implementation Courses for practical education based on social needs
4) Systematically Specialized Courses and Research Support Courses for students to acquire and utilize basic knowledge about your discipline

Doctoral Program

1) Transdisciplinary Experience Courses based on cross-disciplinary research such as a cross-disciplinary seminar and group work and research in the other discipline
2) Social Implementation Courses for practical education based on social needs and cultivation of international perspective
3) Systematically Specialized Courses and Research Support Courses to deepen the knowledge about your discipline

Ⅱ. Academic Calendar 2025-2026

【JAIST】

First Semester (April 1 - September 30)	April 1 (Tue) - April 3 (Thu)	Spring Break
	April 4 (Fri)	Entrance Ceremony
	April 5 (Sat)	Orientation at Tokyo Satellite
	April 7 (Mon) - April 11 (Fri)	Orientation at Ishikawa Campus
	April 14 (Mon) - June 4 (Wed) **NOTE***	Class Term 1-1
	June 5 (Thu) - June 9 (Mon)	Examination Term 1-1
	June 10 (Tue)	Safety Guidance
	June 11 (Wed)	No Class Day
	June 12 (Thu) - July 31 (Thu) **NOTE****	Class Term 1-2
	August 1 (Fri) - August 4 (Mon)	Examination Term 1-2
	June 24 (Tue)	Degree Conferment Ceremony
	August 5 (Tue) - September 30 (Tue)	Summer Intensive Courses
	August 5 (Tue) - August 31 (Sun)	Summer Break
	August 13 (Wed) - August 15 (Fri)	School Office Closed (Summer Break)
	September 24 (Wed)	Degree Conferment Ceremony
	NOTE* May 7 follows the Tuesday schedule. **NOTE** July 31 follows the Monday schedule.**	
Second Semester (October 1 - March 31)	October 1 (Wed)	School Office Closed (JAIST Anniversary)
	October 2 (Thu)	Entrance Ceremony
	October 4 (Sat)	Orientation at Tokyo Satellite
	October 3 (Fri) - October 9 (Thu)	Orientation at Ishikawa Campus
	October 10 (Fri) - December 2 (Tue) **NOTE*****	Class Term 2-1
	December 3 (Wed) - December 5 (Fri)	Examination Term 2-1
	December 8 (Mon)	No Class Day
	December 9 (Tue) - February 4 (Wed) **NOTE********	Class Term 2-2
	February 5 (Thu) - February 6 (Fri)	Examination Term 2-2
	December 24 (Wed)	Degree Conferment Ceremony
	December 26 (Fri) - January 4 (Sun)	Winter Break
	December 29 (Mon) - January 3 (Sat)	School Office Closed (Winter Break)
	February 9 (Mon) - March 31 (Tue)	Winter Intensive Courses
	March 25 (Wed)	Degree Conferment Ceremony
	NOTE* November 4 follows the Monday schedule. November 28 follows the Monday schedule.** **NOTE**** January 13 follows the Monday schedule. February 4 follows the Friday schedule.**	

Period for Registration and Change of Courses at Ishikawa Campus

Terms	Period for Registration and Course Change
Term 1-1	April 14 (Mon) - April 25 (Fri)
Term 1-2	June 12 (Thu) - June 25 (Wed)
Term 2-1	October 10 (Fri) - October 23 (Thu)
Term 2-2	December 9 (Tue) - December 22 (Mon)

2025-2026 Official Academic Calendar (Quarter System)【Kanazawa University】

1st Quarter & 2nd Quarter

Week/ Month	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	
4	30	31	①	②	②	③	5	Q1 starts on Apr. 1.
	6	7	8	9	10	11	12	
	13	14	15	16	17	18	19	
	20	21	22	23	24	25	26	
	27	28	29	30	1	2	3	
5	4	5	6	Tue.	8	9	10	
	11	12	13	14	15	16	17	
	18	19	20	21	22	23	24	
	25	26	27	28	29	30	31	
6	1	2	3	4	④	6	7	
	8	④		11	12	13	14	Q2 starts on Jun. 11.
	15	16	17	18	19	20	21	
	22	23	24	25	26	27	28	
7	29	30	1	2	3	4	5	
	6	7	8	9	10	11	12	
	13	14	15	16	17	18	19	
	20	21	22	Mon.	24	25	26	
	27	28	29	30	31	1	2	
8	3	4	5	6	7	8	9	
	10	11	12	13	14	15	16	
	17	18	19	20	21	22	23	
	24	25	26	27	28	29	30	
9	31	1	2	3	4	5	6	
	7	8	9	10	11	12	13	
	14	15	16	17	18	19	20	
	21	22	23	24	25	⑤	27	
	28	29	30					
Class*		7.5	7.5	7.5	7.5	7.5	times	
Exam*		0.5	0.5	0.5	0.5	0.5	times	

3rd Quarter & 4th Quarter

Week/ Month	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	
10	28	29	30	⑥	2	3	4	Q3 starts on Oct. 1.
	5	6	7	8	9	10	11	
	12	13	14	Mon.	16	17	18	
	19	20	21	22	23	24	25	
	26	27	28	29	30	Preparations	KU Festival	
11	KU Festival	Clean up	4	5	Mon.	7	8	
	9	10	11	12	13	14	15	
	16	17	18	19	20	21	22	
	23	24	25	26	27	28	29	
	30	1	2	3	4	5	6	
12	7	8	9	10	11	12	13	Q4 starts on Dec. 8.
	14	15	16	17	18	19	20	
	21	22	23	24	25	26	27	
	28	29	30	31	1	2	3	
1	4	5	6	7	8	9	10	
	11	12	Fri.	14	15	Preparations	Common test	
	Common test	19	20	21	22	23	24	
	25	26	27	28	29	30	31	
2	1	2	3	4	5	6	7	
	8	9	10	11	TOEIC-IP		14	
	15	16	17	18	19	20	21	
	22	23	24	⑦	⑦	27	28	
3	1	2	3	4	5	6	7	
	8	9	10	11	12	13	14	
	15	16	17	18	19	20	21	
	⑧	23	24	25	26	27	28	
	29	30	31					
Class*		7.5	7.5	7.5	7.5	7.5	times	
Exam*		0.5	0.5	0.5	0.5	0.5	times	

Classes　Exams　Holidays　Summer, winter and spring holidays, No classes　No Classes Day **

①Registration Guidance
②Orientation for College Students
③Entrance Ceremony (For Degree students)
Health Check for Students Currently Enrolled (Takaramachi) Apr. 15-16
Health Check for Students Currently Enrolled (Kakuma) Apr. 18 - May 15
＃1st Quarter classes start Apr. 7
Conduct Classes for Tuesday May 7
Q1 Make-up Classes Week / 6th period on May 15-28
Face-to-Face Campus Visit in Spring (tentative) May 17
University Founding Day May 31
④Health Check for New Coming College Students
＃2nd Quarter classes start June 11
Conduct Classes for Monday July 23
Q2 Make-up Classes Week / 6th period on July 16-30
Web Campus Visit (tentative) Aug. 1-14
※Live-stereamin (tentative) Aug. 7-8
⑤Commencement Ceremony

⑥Entrance Ceremony (For Degree students)
＃3rd Quarter classes start Oct. 1
Conduct Classes for Monday Oct. 15
Kanazawa University Festival Nov. 1-2
Preparations and clean-up for KU Festival Oct. 31 ,Nov. 3
Conduct Classes for Monday Nov. 6
Q3 Make-up Classes Week / 6th period on Nov. 10-21
＃4th Quarter classes start Dec. 8
Conduct Exams for Friday Jan. 13
Preparations date for Common Test Jan. 16
Common test for University Admissions Jan. 17-18
Q4 Make-up Classes Week / 6th period on Jan. 21-Feb.3
TOEIC-IP (First Year College Student) (tentative) Feb. 12, 13
⑦KU Admission Examination
⑧Commencement Ceremony

* Class and Exam totals are per quarter.

** There may be supplementary or intensive lectures.

III. Study outline

1 Campus

This collaborative educational program is offered in the Division of Advanced Science and Technology at Japan Advanced Institute of Science and Technology in Nomi City, Ishikawa Prefecture and the Graduate School of Frontier Science Initiative at Kanazawa University in Kanazawa City, Ishikawa Prefecture.

2 Programs

The Graduate School of Advanced Science and Technology at JAIST consists of the Division of Advanced Science and Technology and the Division of Transdisciplinary Sciences. The Division of Transdisciplinary Sciences offers a doctoral program which is divided into an initial two-year program and a subsequent three-year program. The initial two-year program is called the master's program and the subsequent three-year program is called the doctoral program. This guide describes on the Division of Transdisciplinary Sciences at JAIST. The guide for the Division of Advanced Science and Technology at JAIST and the Division of Transdisciplinary Sciences at Kanazawa University are specified separately.

3 Academic calendar

JAIST academic calendar shows the dates of classes, vacations, institute-wide activities, course registration periods, and so on. Students must check the academic calendar which is displayed on the notice board next to the automatic certificate issuing machine and is published on JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Students → Academic calendar (JAIST)).
Students must also check the academic calendar for the Graduate School of Frontier Science Initiative at Kanazawa University which is published on JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Student → Academic calendar (Kanazawa University)).

4 Semesters and class terms/periods

Semesters and class terms/periods at JAIST and Kanazawa University are shown in the Appendix Table below. At JAIST, each class is 100-minute long, and a class meets 14 times in one term with two classes a week to complete a course bearing 2 credits. At Kanazawa University, each class is 90-minute long, and a class meets 15 times in one quarter with one class a week to complete a course bearing 2 credits. Refer to the syllabus for details of each course. One credit is awarded for the study amounts of 45 hours of self-study periods and class periods in total (for courses such as Research Support Courses, one credit is awarded for an adequate result required for a study load defined by one's supervisor).

Appendix Table

Location	Terms	Class Periods
JAIST	First Semester: Term 1-1, Term 1-2 (8 weeks each) Summer Intensive (August, September) Second Semester: Term 2-1, Term 2-2 (8 weeks each) Winter Intensive (February, March) *The Examination Term is set after the lectures in each term. The examinations of Intensive Courses are basically conducted after finishing 14 lectures.	1st Period 9:00 - 10:40 2nd Period 10:50 - 12:30 3rd Period 13:30 - 15:10 (Tutorial hours) 4th Period 15:20 - 17:00 5th Period 17:10 - 18:50
Kanazawa University	First Semester: 15 classes (one class a week) and one examination per quarter 1st Quarter (8 weeks) 2nd Quarter (8 weeks) Second Semester: 15 classes (one class a week) and one examination per quarter 3rd Quarter (8 weeks) 4th Quarter (8 weeks) *The examinations are conducted in the last week of each quarter.	1st Period 8:45 - 10:15 2nd Period 10:30 - 12:00 3rd Period 13:00 - 14:30 4th Period 14:45 - 16:15 5th Period 16:30 - 18:00 6th Period 18:15 - 19:45

IV. Matters related to tuition fees and enrollment

All the procedures from 1 to 6 below must be completed at JAIST.

1 Tuition fees

Tuition fees are collected separately for the full amount for each semester (first semester: April 1st - September 30th, second semester: October 1st - March 31st), and as a rule are to be paid by bank transfer (see details in *HANDBOOK for Students*). Note that if the tuition fees are revised while in school, the new fees will be applied upon the revision.

2 Leaves of absence

When you are not able to continue your studies for more than two consecutive months due to illness or other special reasons, you may apply for a leave of absence. In principle, the maximum period of a leave of absence is one year in total for each of the programs, the master's and the doctoral. The period of a leave of absence is not included in the period of enrollment, and you are not allowed to engage in any academic activities, including course registration, but there are no restrictions on use of JAIST Library or JAIST email.

The start of a leave of absence is the first day of each month, and in the middle of the month is not permitted. If you wish to take a leave of absence, you must contact the Educational Service Section (hereafter, Kyoumu) to confirm the procedure and get approval from the supervisors, and apply to Kyoumu by the end of the month two months prior to the month in which the leave of absence begins. If leave of absence is due to health problems, you must also submit a doctor's certificate. Due to internal procedures, if you wish to start your leave of absence in September, you must submit your application by the end of June.

Please note that if the tuition payment is not completed before the desired leave of absence start date, the application will not be accepted.

If you wish to have a leave of absence midway through either semester, and you submit an application by April 10th (for the first semester) or October 10th (for the second semester), tuition will not be charged for the leave of absence. If the application is made after these dates, the full amount of tuition must be paid before the application is accepted. Check details of tuition fee payment during leaves of absence on the JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Student → Application for Absence and Withdrawal (JAIST)).

3 Returning

You automatically return to school when your leave of absence ends. If you wish to return to school before the end of the leave of absence, you must contact Kyoumu to confirm the procedure and apply to Kyoumu by the end of the month two months prior to the month of returning. The date for the returning to school is the first day of each month. Due to internal procedures, if you wish to return to school in September, you must submit your application by the end of June.

4 Withdrawal

The date for the withdrawing from school is the last day of each month, and in the middle of the month is not permitted. If you wish to withdraw from school, you must contact Kyoumu to confirm the procedure and obtain comments from the supervisors, and apply to Kyoumu by the end of the month prior to the month of withdrawal. Due to internal procedures, if you wish to withdraw from school at the end of August, you must submit your application by the end of June.

Regardless of the date of withdrawal, if the tuition and other fee payments required by JAIST are not completed, the application will not be accepted.

5 Disenrollment (loss of student status)

Students falling under any one of the following categories will result in the loss of student status:

(1) Those who have spent more than the permitted maximum periods (four years for the master's program, six years for the doctoral program)

*Students who wish to withdraw must complete the withdrawal procedures.

(2) Those whose leave of absence exceeds the period specified in Paragraph 4, Article 27 of the JAIST School Regulations (two years).

(3) Those who have not paid their entrance fee by the specified date and fall into one of the categories below:
- Students who have not been granted an entrance fee reduction or deferment.
- Students who have been granted a half entrance fee reduction or deferment.
- Students whose entrance fee reduction or deferment has been revoked.

(4) Those who have neglected to pay their tuition fees and have not paid even at urging.

Note that if course credits have been earned during the period in which the tuition was unpaid for those who fall under either (3) or (4), the credits will also be cancelled.

6 Supplemental student status

Doctoral students who have spent more than three years in the doctoral program or long-term students who have spent its designated period may be allowed to keep student status for up to two years out of the permitted maximum period (6 years for the doctoral program) only if they have met all the following requirements:

(1) Have obtained all the required credits for degree completion, except for credits from "Doctor Thesis Report II".

(2) Have submitted the outline of doctoral dissertation with the necessary research guidance from the supervisor by the designated date.

(3) Have been judged by the dean that the students will be able to apply for a degree conferment within two years.

Supplemental student status can start only on April 1, July 1, October 1 or January 1. It cannot start subsequently right after leave of absence. If you wish to get this supplemental status, you must contact Kyoumu to confirm the procedure, consult the supervisor to be given a comment on the form, and apply to Kyoumu by the end of the month two months prior to the month in which the status begins. This status restricts you to conduct any academic work on campus, thus JAIST does not help you to apply for student visa and extension of the valid period of residence card for the period of this supplemental status.

7 Change of Family name, Name or Use of Alias

The following students must contact Kyoumu to confirm the procedure.

・Have changed your family name or name.
・Wish to use or discontinue use the old name.
・Wish to use or discontinue use the alias.

The use of the alias is permitted only once, and once the use of the name is discontinued, it cannot be used again. Since acceptance of the notification of change of family name or name, or the approval of the use of original family name or alias, all certificates and documents of JAIST will be issued under the approved name.

Certificates after completion, withdrawal, or other separation from the school will be issued in the name at the time of separation.

V. Matters related to taking courses

1 Degree completion requirements

In this collaborative program, which aims to cultivate human resources of innovative science and technology, the following courses are systematically organized in the curriculum based on the elements that students are expected to learn in these courses in light of the educational mission, goals and curriculum policies.

It is insufficient for you merely to take lectures with a passive attitude. To acquire abilities that will benefit you in the future, JAIST expects you to actively develop the seeds of social, organizational, or technological innovation for the next era while learning advanced science and technology and understanding social and organizational problems through your learning process.

2 Course divisions and credit requirements for the master's program

2.1 Core Courses

The courses below (1 credit each) are offered from Term 1-1 to Term 2-1 in the first year and students must take at least 2 courses (2 credits) of the 10 courses (10 credits) below as required elective courses. In these courses, students will build fundamental knowledge base for conducting research to solve complex social problems related to innovative science and technology.

- S101 Innovation Theory and Methodology for Social Competencies (JAIST)
- S102 Innovation Theory and Methodology for Creativity (JAIST)
- 15003 Research Ethics (Kanazawa University)
- 15008 Advanced Science and Technology in the Next Generation (Kanazawa University)
- 15009 Innovation Methodology (Kanazawa University)
- 15014 MoT as for Disruptive Innovation (Kanazawa University)
- 15015 Smart Science and Technology for Innovation (Kanazawa University)
- 15016 Innovation in Healthcare (Kanazawa University)
- 15017 Human and Social Challenges (Kanazawa University)
- 15019 Strategy for Business and Technology Management (Kanazawa University)

"Statistics for Data Analytics" (JAIST/2 credits), "Data Science in Society 5.0" and "Mathematical, Data Science, and AI Basic" (Kanazawa University/1 credit each) are also offered from Term 1-1 to Term 1-2 in the first year and students must earn at least 2 credits as required elective courses from these courses. These courses are designed to promote mainly `Force 1: The "Force" for Data analysis' and `Force 3: The "Force" for Visualization' of `Four "Forces" (Force)' which serve as the foundation of the methodology for integrating sciences.

[Credit Requirements] *Students must satisfy both of the requirements below.

(1) Earn at least 2 credits from the courses below. (1 credit each)
- S101 Innovation Theory and Methodology for Social Competencies (JAIST)
- S102 Innovation Theory and Methodology for Creativity (JAIST)
- 15003 Research Ethics (Kanazawa University)
- 15008 Advanced Science and Technology in the Next Generation (Kanazawa University)
- 15009 Innovation Methodology (Kanazawa University)
- 15014 MoT as for Disruptive Innovation (Kanazawa University)
- 15015 Smart Science and Technology for Innovation (Kanazawa University)
- 15016 Innovation in Healthcare (Kanazawa University)
- 15017 Human and Social Challenges (Kanazawa University)
- 15019 Strategy for Business and Technology Management (Kanazawa University)

(2) Earn at least 2 credits from the courses below.
- I119 Statistics for Data Analytics (JAIST) (2 credits)
- 15007 Data Science in Society 5.0 (Kanazawa University) (1 credit)
- 15018 Mathematical, Data Science, and AI Basic (Kanazawa University) (1 credit)

2.2 Transdisciplinary Experience Courses

"Transdisciplinary Session I" (2 credits) is offered in August in the first year and "Transdisciplinary Laboratory Rotation Ia" and "Transdisciplinary Laboratory Rotation Ib" (1 credit each) are offered from Term 2-1 to Term 2-2 in the first year at both universities as required courses.

"Transdisciplinary Session I" takes the form of a joint session between JAIST and Kanazawa University and consists of general discussions, presentations of research proposals by students and Q&A sessions. Its aim is to adopt the knowledge and methodologies of different fields beyond the existing academic or research fields by presenting one's research to other students and better understanding each other, and also to deepen the understanding of one's research further by taking an opportunity to review the topic, direction or purpose of one's research. This course is designed to promote `Force 2: The "Force" for Modeling' of `Four "Forces" (Force)' which serve as the foundation of the methodology for integrating sciences.

In "Transdisciplinary Laboratory Rotation Ia" and "Transdisciplinary Laboratory Rotation Ib", students participate in more than 40 hours (per a credit) laboratory rotations in different laboratories from your major field and take experimental and theoretical research practice. In these laboratory rotations, students can learn practical knowledge of research methods and ideas of a different field while acquiring comprehensive knowledge and skills beyond your own major field. New knowledge and perspectives gained in these rotations will facilitate students to generate new ideas and develop a basic mindset which gives you an objective perspective on your own research topic resulting in exploring the potential of research integration.

For "Transdisciplinary Laboratory Rotation Ia" and "Transdisciplinary Laboratory Rotation Ib", the following 4 courses are offered at JAIST and Kanazawa University (depending on the laboratory the student belongs to).

- T004 Transdisciplinary Laboratory Rotation Ia (JAIST) (1 credit)
- T005 Transdisciplinary Laboratory Rotation Ib (JAIST) (1 credit)
- T002 Transdisciplinary Laboratory Rotation Ia (KU) (1 credit)
- T003 Transdisciplinary Laboratory Rotation Ib (KU) (1 credit)

Either "Transdisciplinary Laboratory Rotation Ia (KU)" or "Transdisciplinary Laboratory Rotation Ib (KU)" must be completed as part of the credit requirements. For selection of rotations, students must decide which laboratories to identify considering discussion with own supervisor and lessons learned from "Transdisciplinary Session I". This course is designed to foster mainly `Force 4：The "Force" for Designing' of `Four "Forces" (Force)' which serve as the foundation of the methodology for integrating sciences.

[Credit Requirements] *Students must satisfy both of the requirements below.
(1) Take T001 Transdisciplinary Session I (2 credits).
(2) Earn 1 credit from the courses below (1 credit each).
- T002 Transdisciplinary Laboratory Rotation Ia (KU)
- T003 Transdisciplinary Laboratory Rotation Ib (KU)

2.3 Social Implementation Courses

These courses are required elective and consist of 1 or 2 credit offered "Industrial Internship" and "Research Internship". In these courses, students go through a field-based learning. You learn, based on Four "Forces" (Force) you have developed so far, how research with high potential becomes a successful business in actual workplaces and how it leads to innovation. Students must determine your host company (domestic or foreign private companies, public research institutions, etc.) under the guidance of your supervisor and complete the necessary procedures at Kyoumu and the Career Support Section at least two weeks before the starting date of "Industrial Internship". For "Research Internship", students must complete the necessary procedures at Kyoumu at least two months before the starting month of the internship. The standard duration of "Industrial Internship" and

"Research Internship" is 1-2 weeks. Students are required to write a report after the internship and also report achievements in optional forms to your supervisor.

[Credit Requirements] *Students must complete one of the followings.
- T011 Industrial Internship a (JAIST) (1 credit) *Duration of min. one week and less than two weeks
- T012 Industrial Internship b (JAIST) (2 credits) *Duration of min. 2 weeks
- T013 Research Internship a (JAIST) (1 credit) *Duration of min. one week and less than two weeks
- T014 Research Internship b (JAIST) (2 credits) *Duration of min. 2 weeks

2.4 Specialized Courses

Students must earn at least 10 credits (at least 12 credits for those who choose "Survey for Doctoral Research Plan") as required elective courses from "Specialized Courses" which are aimed to develop specialist knowledge according to one's own research topic based on the basic knowledge and skills acquired in the first and second year.

"Specialized Courses" are classified into 4 categories which are Common Subjects, Life Science Subjects, Materials Science Subjects and Social Systems Science Subjects. Based on this classification, students must choose courses from at least 2 categories according to the framework of the three innovative challenges (3 challenges) under the guidance of your supervisor with the following as a reference. This will enable students to integrate multiple scientific disciplines in addition to improving your specialist knowledge.

I: Students who choose Life Innovation: Life Science Subjects
II: Students who choose Green Innovation: Materials Science Subjects
III: Students who choose Systems Innovation: Social Systems Science Subjects or Materials Science Subjects

[Credit Requirements] *Students must satisfy both of the requirements below.
(1) Students who choose "Master's Thesis Project" or "Research Project" as a form of your research report must earn at least 10 credits from "Specialized Courses". Students who choose "Survey for Doctoral Research Plan" must earn at least 12 credits from "Specialized Courses".
(2) Students must choose courses from at least 2 categories out of Common Subjects, Life Science Subjects, Materials Science Subjects and Social Systems Science Subjects according to the one of the three innovative challenges (3 challenges) that students chose after discussing with your supervisor.

2.5 Research Support Courses

From the last half of the first year to the second year, "Seminar and Exercise I (KU)" (2 credits) is offered, where students receive instructions and supervision from your second supervisor and present your research outcomes at the mid-term presentation mentioned below.

Also, as supportive courses for research summary, "Master Thesis Report I (JAIST)" (6 credits), "Research Project (JAIST)" (2 credits) and "Research Planning for Ph.D. Course (JAIST)" (2 credits) are designed. They are required elective, students must select one of the 3 options and receive guidance through seminars, experiments, practical training, and exercises etc. from your supervisor. The final form of your research summary, in accordance with own idea of research topic, students should discuss with your supervisor and choose from (1) - (3) below. Then, students are required to submit "Research Proposal" which summarizes your ongoing research plan to Kyoumu by the end of March in the first year and determine the form of your research summary. In Research Support Courses, students will consolidate and sublimate the Four "Forces" (Force) cultivated so far and work on your research topic using sufficiently developed specialist knowledge.

(1) Master's Thesis Project
Students who set a research theme which constructs, verifies and develops a hypothesis or a model or a research theme which develops innovative technology to contribute to solving social problems based on the 3 challenges should choose this option and summarize your research in the form of a thesis.
Elective course: T008 Master Thesis Report I (JAIST) (6 credits)

(2) Research Project
Students who set a research theme which derives the correlation or causal connections of phenomena, proposes a roadmap for science and technology and new concepts and designs the future based on comprehensive facts and data including previous research to contribute to solving social problems based on the 3 challenges should choose this option.
Elective course: T009 Research Project (JAIST) (2 credits)

(3) Survey for Doctoral Research Plan
This option is recommended for students who wish to progress to the doctoral program. It is essential that the research plan leads to the research theme in the doctoral program and the achievements must be summarized in a Survey Report for Doctoral Research Plan.
Elective course: T010 Research Planning for Ph.D Course (JAIST) (2 credits)

[Credit Requirements] *Students must satisfy the respective requirements according to the chosen form of your research report.

(1) Master's Thesis Project
Must take "T008 Master Thesis Report I (JAIST)" (6 credits) and "T007 Seminar and Exercise I (KU)" (2 credits).

(2) Research Project
Must take "T009 Research Project (JAIST)" (2 credits) and "T007 Seminar and Exercise I (KU)" (2 credits).
Must earn at least 4 credits from "Transdisciplinary Experience Courses (excluding "T001 Transdisciplinary Session I"), Social Implementation Courses or Specialized Courses in addition to the credit requirements and the total number of required credits in Section 2.1 to 2.4 after discussing with the supervisor.

(3) Survey for Doctoral Research Plan
Must take "T010 Research Planning for Ph.D Course (JAIST)" (2 credits) and "T007 Seminar and Exercise I (KU)" (2 credits).
Must earn at least 4 credits from "Transdisciplinary Experience Courses (excluding "T001 Transdisciplinary Session I"), Social Implementation Courses or Specialized Courses in addition to the credit requirements and the total number of required credits in Section 2.1 to 2.4 after discussing with the supervisor.

3 Degree completion requirements for the master's program

Students must satisfy all the requirements listed below for degree completion. It is the responsibility of each student to discuss with your supervisor and check whether or not you satisfy these requirements.

(1) In principle, students are required to spend a minimum of two years in the master's program. If a prior application for fast-track degree completion is made and granted, and the plan for degree completion in a shorter period (one year minimum) is carried out with the academic grades deemed sufficiently high by faculty, according to Article 36 of the JAIST School Regulations, one will be able to finish in less than two years. Those who wish to apply for fast-track degree completion should contact Kyoumu by the date designated by JAIST.

(2) Students must submit a master's thesis or a research project report after receiving sufficient research guidance, and pass the defense on the thesis and the final examination. Those who select a Survey for Doctoral Research Plan must submit a report of Survey for Doctoral Research Plan, and pass the Ph.D. Qualifying Examination.

(3) Students must earn a total of at least 10 credits from each of the courses offered at JAIST and Kanazawa University respectively. As there is a requirement in Section 2.2 and 2.5 for the number of credits that needs to be earned at Kanazawa University as specified below, students are required to earn at least 6 credits from courses offered at Kanazawa University.
- Transdisciplinary Experience Courses
  T001 Transdisciplinary Session I (1 credit: 1 of the 2 credits is counted as a credit earned at Kanazawa University.)
  T002 Transdisciplinary Laboratory Rotation Ia (KU) or T003 Transdisciplinary Laboratory Rotation Ib (KU) (1 credit)
- Research Support Courses
  T007 Seminar and Exercise I (KU) (2 credits)

Note, however, that "a total of at least 10 credits" does not include credits from courses other than those in the Master's and Doctoral programs in the Division of Transdisciplinary Sciences, credits obtained prior to admission, and credits from taking courses at other graduate institutes through the course interchange agreement.

(4) Students must earn a total of at least 32 credits including the credits recognized by satisfying the credit requirements specified in Section 2.1 to 2.5 above. Those who choose "Survey for Doctoral Research Plan" as the form of your research summary must earn a total of at least 34 credits.

【Notes】

Students must take the master's courses in the collaborative program. Courses in the doctoral program of the collaborative program may not be included in the requirements for completion of the master's program.

With regards to the courses other than the courses of the master's and doctoral program offered by this collaborative program at JAIST and Kanazawa University, a maximum of 6 credits can be counted toward the degree completion requirements as "Optional Courses" including the credits recognized in Section 9 and 10 mentioned below. (For courses offered at JAIST, only K/I/M/Nxxx courses in the Division of Advanced Science and Technology are applicable.)

4 Course divisions and credit requirements for the doctoral program

4.1 Transdisciplinary Experience Courses

"Transdisciplinary Session II" (2 credits) and "Transdisciplinary Laboratory Rotation II (KU)" (1 credit) are offered as required courses from the first year. They are offered as the upgraded version of "Transdisciplinary Session I" and "Transdisciplinary Laboratory Rotation I" respectively.

"Transdisciplinary Session II" is offered as a required course in the second half of the first year in the form of collaboration between JAIST and Kanazawa University. In this course, students are required to present your research to other students and participate in discussions as well as participating in group work where they work on a theme of transdisciplinary sciences with the application of sciences to society in mind (e.g. developing a new product, starting a new business or finding solutions to social problems, etc.) in order to adopt the knowledge and methodologies of different fields beyond the existing academic fields. This course aims to further develop mainly `Force 2: The "Force" for Modeling' of `Four "Forces" (Force)'.

In "'Transdisciplinary Laboratory Rotation II", students, from the first year to the second year, participate in more than 40 hours a laboratory rotation in different laboratories from your major field and take experimental and theoretical research practice in order to acquire practical knowledge of research methods and ideas of a different field. The host laboratory will be that of Kanazawa University. This laboratory rotation will allow students to explore the potential of transdisciplinary research while acquiring comprehensive knowledge and skills beyond your own major field by conducting experimental and theoretical research. This course aims to enhance mainly `Force 4 : The "Force" for Designing' of `Four "Forces" (Force)'.

[Credit Requirements] *Students must satisfy both of the requirements below.
(1) Take "T051 Transdisciplinary Session II". (2 credits)
(2) Take "T052 Transdisciplinary Laboratory Rotation II (KU)". (1 credit)

4.2 Social Implementation Courses

"Overseas Research Challenge" (1, 2 or 4 credits) where students participate in an overseas research program at a foreign university or foreign research institution and "International Internship" (1 credit) where students participate in an internship at a foreign or global company are offered as required elective courses. In "Overseas Research Challenge", 1, 2 or 4 credits are granted according to the duration of the program. These courses will give students an opportunity to learn new ways of approaching your research from different fields at a higher level and deepen the understanding of your own research theme even further.
Students must decide your host university, research institution or company under the guidance of your supervisor and complete the necessary procedures at Kyoumu and the Career Support Section at least two weeks before the starting date of "International Internship". For "Overseas Research Challenge", students must complete the necessary procedures at Kyoumu at least two months before the starting month of the program. Students are required to write a report after the program/internship and also report achievements in optional forms to your supervisor.

[Credit Requirements] *Students must complete one of the followings.
- T054 Overseas Research Challenge A (JAIST) (1 credit) *Duration of min. one week and less than two weeks
- T055 Overseas Research Challenge B (JAIST) (2 credits) *Duration of min. two weeks and less than two months
- T056 Overseas Research Challenge C (JAIST) (4 credits) *Duration of min. 2 months
- T057 International Internship (JAIST) (1 credit) *Duration of min. 2 weeks

4.3 Specialized Courses

"Innovation Theory and Methodology for Total Capability Development" (JAIST) and "Research Ethics for Ph.D. Researchers" (KU) (1 credit each) are offered in the first year as required elective courses. In these courses, students cultivate an ability to build good relationship with real world and an ability to actualize the future needs using practical methods.
Students must earn at least 9 credits including one of the credits mentioned above as required elective courses from "Specialized Courses", which are aimed to cultivate specialist knowledge according to your own research topic based on the basic knowledge and skills acquired in the first year to the third year.
"Specialized Courses" are classified into 4 categories which are Common Subjects, Life Science Subjects, Materials Science Subjects and Social Systems Science Subjects. Based on this classification, students must choose courses from at least 2 categories according to the framework of the three innovative challenges (3 challenges) under the guidance of your supervisor with the following as a reference. This will enable students to acquire comprehensive and deepened specialist knowledge from the perspective of transdisciplinary sciences in addition to developing specialist knowledge.
I: Students who choose Life Innovation: Life Science Subjects
II: Students who choose Green Innovation: Materials Science Subjects
III: Students who choose Systems Innovation: Social Systems Science Subjects or Materials Science Subjects
"Statistics for Data Analytics II" (JAIST) (2 credits) and "Introduction to Practical Data Analysis and Statistics a" (1 credit) are offered for those who have never studied subjects such as statistics in order to equip them with the required level of knowledge to conduct research of transdisciplinary sciences in the doctoral program and enhance `Force 1: The "Force" for Data analysis' and `Force 3: The "Force" for Visualization' of the `Four "Forces" (Force)'. Although students are strongly advised to discuss taking these courses with your supervisor, the earned credits are not counted toward the

completion requirements.

[Credit Requirements] *Students must satisfy all the requirements below.
(1) Earn at least 1 credit from the courses below. (1 credit each)
- S503 Innovation Theory and Methodology for Total Capability Development (JAIST)
- 17306 Research Ethics for Ph.D. Researchers (KU)
(2) Earn at least 9 credits from "Specialized Courses" including 1 credit earned in (1).
(3) Take courses from at least 2 categories from Common Subjects, Life Science Subjects, Materials Science Subjects and Social Systems Science Subjects according to the one of the three innovative challenges (3 challenges) that students chose after discussing with your supervisor. The credit(s) earned in (1) above can be counted toward the credit requirements for Common Subjects.

4.4 Research Support Courses

"Seminar and Exercise II (KU)" (4 credits) and "Doctoral Thesis Report II (JAIST)" (6 credits) are offered as required courses. In "Seminar and Exercise II (KU)", students will receive supervision and advice from the second supervisor chosen from faculty of Kanazawa University. In addition, students will acquire new ways of approaching their research through joint research, discussions and group study with other students of different major fields from your own and deepen the understanding of your own research theme under the guidance of the second supervisor.
Also, "Doctoral Thesis Report II (JAIST)" is designed as a supportive course for research summary. Students are required to submit "Research Proposal" about your doctoral research to Kyoumu by March in the first year and receive guidance through seminars, experiments, practical training, and exercises etc. from your supervisor in all aspects of your research including how to make the best use of the `Four "Forces" (Force)' that students have been developing so far or new knowledge and skills acquired in a laboratory rotation and from research guidance received in other research fields.

[Credit Requirements]
Must take "T058 Seminar and Exercise II (KU)" (4 credits) and "T059 Doctoral Thesis Report II (JAIST)" (6 credits).

5 Degree completion requirements for the doctoral program

Students must satisfy all the requirements listed below for degree completion. It is the responsibility of each student to discuss with your supervisor and check whether or not you satisfy these requirements.

(1) In principle, to be eligible for a doctoral degree from JAIST, students are required to spend a minimum of five years in a graduate institute (including the time spent in the master's program). If an application for fast-track degree completion is made by the specified time, and it is recognized at a faculty meeting that there are excellent research achievements, one will be able to complete a doctoral program in a shorter time after spending three years (including the time spent in the master's program) in according to Article 37 of the JAIST School Regulations. Those who wish to apply for fast-track degree completion should contact Kyoumu by the date designated by JAIST.
(2) Students must submit a doctoral dissertation after receiving sufficient research guidance, and pass the defense on the dissertation and the final examinations.
(3) Students must earn a total of at least 10 credits from courses offered at JAIST and Kanazawa University except for those who progressed to the doctoral program from the master's program of this collaborative program by the Internal Entrance Examination. Note, however, that "a total of at least 10 credits" does not include credits from courses other than those in the Master's and Doctoral programs in the Division of Transdisciplinary Sciences, credits obtained prior to admission, and credits from taking courses at other graduate institutes through the course interchange agreement.

(4) Students must earn a total of at least 23 credits including the credits recognized by satisfying the credit requirements specified in Section 4.1 to 4.4 mentioned above.

【Notes】

Students must take the doctoral courses in the collaborative program. Courses in the master's program of the collaborative program may not be included in the requirements for completion of the doctoral program.

With regards to the courses other than the courses of the master's and doctoral program offered by this collaborative program at JAIST and Kanazawa University (for courses offered at JAIST, only K/I/Mxxx courses except K/I/M1xx courses in the Division of Advanced Science and Technology are applicable.), a maximum of 2 credits can be counted toward the degree completion requirements as "Specialized Courses" (Common Subjects) including the credits recognized in Section 9 and 10 mentioned below.

(5) Credits earned by taking courses or evaluated by credit transfer while enrolled in the Master's program of this collaborative program or the division of Advanced Science and Technology cannot be included in the requirements for completion of the doctoral program, even if they are earned in the doctoral program.

(Reference)【Master's Program】Summary of Credits Requirements

Course Division	Course Title/*Notes*	Offered by	Offered Credits	Type of Requirement	Credits to Be Earned			Of which, to Be Earned from KU.
					Master Thesis Report	Research Project	Research Planning for Ph.D Course	
Core Courses	S101 Innovation Theory and Methodology for Social Competencies	JAIST	1	Required Elective	2	2	2	※
	S102 Innovation Theory and Methodology for Creativity	JAIST	1					
	15003 Research Ethics	KU	1					
	15008 Advanced Science and Technology in the Next Generation	KU	1					
	15009 Innovation Methodology	KU	1					
	15014 MoT as for Disruptive Innovation	KU	1					
	15015 Smart Science and Technology for Innovation	KU	1					
	15016 Innovation in Healthcare	KU	1					
	15017 Human and Social Challenges	KU	1					
	15019 Strategy for Business and Technology Management	KU	1					
Core Courses (Data)	I119 Statistics for Data Analytics	JAIST	2	Required Elective	2	2	2	※
	15007 Data Science in Society 5.0	KU	1					
	15018 Mathematical, Data Science, and AI Basic	KU	1					
Transdisciplinary Experience Courses	T001 Transdisciplinary Session I	JAIST-KU Joint	2 (J1・KU1)	Required	2	2	2	1
	T004 Transdisciplinary Laboratory Rotation Ia (JAIST) T005 Transdisciplinary Laboratory Rotation Ib (JAIST)	JAIST	each 1	Required Elective *1 credit from I a(KU) or I b(KU) must be included	1	1	1	1
	T002 Transdisciplinary Laboratory Rotation Ia (KU) T003 Transdisciplinary Laboratory Rotation Ib (KU)	KU	each 1					
Social Implementation Courses	T011 Industrial Internship a (JAIST)	JAIST	1	Required Elective	1	1	1	
	T012 Industrial Internship b (JAIST)	JAIST	2					
	T013 Research Internship a (JAIST)	JAIST	1					
	T014 Research Internship b (JAIST)	JAIST	2					
Specialized Courses	*Specialized courses consist of 4 subjets categories; Common, Life Science, Materials Sience and Systems Innovation. Students must take courses from at least two subject categories, focusing on the following subjects that correspond to the challenge they have chosen. I. Life Innovation: Life Science Subjects II. Green Innovation: Materials Science Subjects III. Systems Innovation: Social Systems Science Subjects or Materials Science Subjects*	JAIST KU	1or2	Required Elective	10	10	12	※
Research Support Courses	T007 Seminar and Exercise I (KU)	KU	2	Required	2	2	2	2
	T008 Master Thesis Report I (JAIST)	JAIST	6	Required Elective	6	2	2	
	T009 Research Project (JAIST)	JAIST	2					
	T010 Research Planning for Ph.D Course (JAIST)	JAIST	2					
	Those who choose "T009 Research Project" or "T010 Research Planning for Ph.D Course" must earn at least 4 credits from "Transdisciplinary Experience Courses"(excluding "T001 Transdisciplinary Session I"),"Social Impremention Courses" or "Specialized Courses" in addition to a total of required credits above.	JAIST KU	1or2	Required Elective		4	4	※
Optional Courses	*Students earn freely at least 6 credits from all the categories except for "T001 Transdisciplinary Session I" and Research Support Courses in addition to a total of required credits above. The credits earned at other than the master's and doctoral program of the collaborative program can be counted up to 6 credits as Optional Courses toward the degree completion requirements along with credits obtained prior to admission and credits from taking courses at other graduate institutes through the course interchange agreement. Credits earned in Division of Advanced Science and Technology in JAIST are limited to those of K, I, M, and Nxxx courses.*	JAIST KU	1or2	Required Elective	6	6	6	※
				Total	**32**	**32**	**34**	**10**

※ implies that students must earn credits from KU offering courses so that the total of ※ becomes at least 6 credits. Note, however, that does not include credits from courses other than those in the Master's and Doctoral programs in the Division of Transdisciplinary Sciences, credits obtained prior to admission, and credits from taking courses at other graduate institutes through the course interchange agreement.

(Reference)【Doctoral Program】Summary of Credits Requirements

Course Division	Course Title/*Notes*	Offered by	Offered Credits	Type of Requirement	Credits to Be Earned	Of which, to Be Earned from KU.
Transdisciplinary Experience Courses	T051 Transdisciplinary Session Ⅱ	JAIST-KU Joint	2 (J1・KU1)	Required	2	1
	T052 Transdisciplinary Laboratory Rotation Ⅱ (KU)	KU	1	Required	1	1
Social Implementation Courses	T054 Overseas Research Challenge A (JAIST)	JAIST	1	Required Elective	1	
	T055 Overseas Research Challenge B (JAIST)	JAIST	2			
	T056 Overseas Research Challenge C (JAIST)	JAIST	4			
	T057 International Internship (JAIST)	JAIST	1			
Specialized Courses	S503 Innovation Theory and Methodology for Total Capability Development *Common Subject	JAIST	1	Required Elective	1	4 (※)
	17306 Research Ethics for Next Generation *Common Subject	KU	1			
	Specialized courses consist of 4 subjets categories; Common, Life Science, Materials Sience and Systems Innovaion. *Students must take courses from at least two subject categories, focusing on the following subjects that correspond to the challenge they have chosen.* *I. Life Innovation: Life Science Subjects* *II. Green Innovation: Materials Science Subjects* *III. Systems Innovation: Social Systems Science Subjects or Materials Science Subjects* *Students can fulfill the requirements for completion of common subjects by earning credits of "Innovation Theory and Methodology for Total Capability Developement(JAIST)" or "Research Ethics for Ph.D. Researchers (KU)".* *The credits earned at other than the master's and doctoral program of the collaborative program can be counted up to 2 credits as Common Subjects toward the degree completion requirements along with credits obtained prior to admission and credits from taking courses at other graduate institutes through the course interchange agreement. For the credits earned in Division of Advanced Science and Technology of JAIST, the specialized courses are included in the requirements excluding the subjects of K, I and M1xx series.*	JAIST KU	1or2	Required Elective	8	
Research Support Courses	T058 Seminar and Exercise Ⅱ (KU)	KU	4	Required	4	4
	T059 Doctor Thesis Report Ⅱ (JAIST)	JAIST	6	Required	6	
				Total	**23**	**10**

※ implies that, with the exception of those who proceeded from Master's course of this collaborative program, students must earn at least 4 credits from Specialized Courses offered by KU. Note, however, that does not include credits from courses other than those in the Master's and Doctoral programs in the Division of Transdisciplinary Sciences, credits obtained prior to admission, and credits from taking courses at other graduate institutes through the course interchange agreement.

6 Course-related procedures

6.1 Gakumu System (Academic Affairs System)

JAIST uses the Gakumu System for all procedures related to course registration, grade checking, and so on for courses offered at JAIST. Make sure that you fully understand how to use the system and that do not to have any problems with registration or other actions. If there are any points that you do not understand after reading the manual, contact Kyoumu.

[Logging in to the Gakumu System]
<JAIST top page → Education → Taking Courses → Gakumu System (Academic Affairs System)>
*Note that the user ID for login is the same as the ID assigned at the time of enrollment, and the password is the same one used for JAIST Mail.

6.2 Syllabi

Course syllabi can be viewed on the Gakumu System and on the JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Student→ Syllabi (JAIST)), and make sure to check them. The syllabus booklet is not available.

6.3 Course registration

Plan your course registration properly by checking the class schedule and the course syllabi carefully. Neither registration of two courses which have overlapping schedules (even if only partially), nor registration of courses from which you have obtained credits will be allowed. Note that the courses for which credits are earned after enrollment are regarded as the same course, even if the language used is different. (e.g. K211 and K211E)

The registration process for courses offered at JAIST is explained in this guide as below. The process for courses offered at Kanazawa University will be separately explained in another way.
Students in this collaborative program must take courses held at the Ishikawa Campus.
Make course registration through the Gakumu System. All the academic activities should be planned with the advice of your supervisor. Register online for courses through the Gakumu System during the designated period for each term after a consultation with your supervisor. You can add, change, and cancel courses freely during the designated registration period, however once the registration period ends, no course can be added/removed without exception. You are responsible for reviewing your registration carefully, correcting any mistakes and making sure the course registration is properly done. Confirm the course registration period for each term on the academic calendar, the JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Student → Course Registration (On-Campus Use Only, JAIST)) and notifications made by JAIST.
Notification of intensive courses and other irregular courses will be made to students once the schedules have been set.

7 Examinations, grade assessments, etc.

(1) A final exam will generally be given to complete a course. When exams are difficult to be given, research reports or similar tasks will be required for grade assessment.
(2) Grades are assessed by the result of a final examination and student's achievement using a 100 point scale with 60 points or higher being considered "Passing", and 59 points or less being considered "Failing" based on the view point, method, and criteria listed in the syllabus. Courses which are difficult to score with points will be assessed as either "Pass" or "Fail". The specified credits will be awarded to those who receive a "Passing" evaluation.
(3) Credits that have already been obtained cannot be canceled and grades cannot be updated.
(4) Grades for courses offered at JAIST can be confirmed on the Gakumu System around two weeks after the end of each term, and grades for courses offered at Kanazawa University can be confirmed once notification for grade reports is sent from Kyoumu. Contact Kyoumu for any questions regarding grade assessments.
(5) If there is any doubt about the grade assessments, confirm it with the instructor of the course

within 14 days (excluding holidays) from the date the grade was disclosed. If you still have an objection after receiving an explanation from the instructor, you may file an objection within 14 days (excluding holidays) from the date you received the explanation.

Please contact Kyoumu for the procedure for filing an objection. As to objection procedure about the grades for courses offered at Kanazawa University, you will be notified separately.

(6) If there are any improprieties related to taking courses or examinations, all credits for that semester will be withdrawn.

(7) JAIST may calculate an objective academic performance index based on (1) and (2) so that it might be used for certain procedures that JAIST deems necessary.

8 Course evaluations

To help improve class quality, JAIST asks you to provide an evaluation for each course you have attended at the end of the course. The results are notified to the course instructors after grades are reported.

9 Recognition of credits obtained prior to admission

Credits obtained prior to admission can be recognized as credits obtained at JAIST by credits transfer. If you wish to apply for credits transfer, obtain approval from your supervisor and submit an application form "Request for Evaluation of Transfer Credit" to Kyoumu within three weeks of enrollment. Download the application form from the JAIST website (Education → Academic Procedures → Request for Evaluation of Transfer Credit). To transfer credits obtained at other graduate institutes, the official transcript and syllabi for the courses must be submitted as well.

The result of application for credit transfer will turn up on the Gakumu system around two months after enrollment, and you are responsible to confirm it. It is not allowed to change or withdraw any approved application. The grade of the transferred course is recorded as "T" (Transferred), however by taking the same course at JAIST after enrollment, the grade will be changed into numerical grade.

Check the following details.

(1) Credits obtained at other graduate institutes

(Master's Program)

With regards to the credits obtained in the master's program at other graduate institutes prior to enrolment to JAIST, a maximum of 6 credits (including courses offered in the Division of Advanced Science and Technology) can be transferred as K/I/Mxxx courses with approval at a faculty meeting. These credits can be counted toward the degree completion requirement as "Specialized Courses" (courses offered in the master's program in the Division of Transdisciplinary Sciences only) or "Optional Courses".

(Doctoral Program)

With regards to the credits obtained in the doctoral program at other graduate institutes prior to enrolment to JAIST, a maximum of 2 credits (Courses offered in the Division of Advanced Science and Technology are also included. However, K/I/M1xx courses and courses for the Master's program in the Division of Transdisciplinary Sciences are not included.) can be transferred as K/I/Mxxx courses with approval at a faculty meeting. These credits can be counted toward the degree completion requirement as "Specialized Courses".

(2) Credits obtained as a JAIST non-degree seeking student

All credits of the courses successfully obtained in the year you enter as a degree seeking student will be recognized in the master's program.

(3) Other

With regards to the credits obtained in the master's program at JAIST (Division of Advanced Science and Technology and Division of Transdisciplinary Sciences (Including courses offered by Kanazawa University)) cannot be transferred to the doctoral program.

For information on the number of credits available by credit transfer to transferred or re-enrolled students, please contact Kyoumu.

10 Taking courses at other graduate institutes through the course interchange agreement

To promote exchange and cooperation with the graduate institutes listed in the Appendix Table (hereafter referred to as "Partner Institutes") and to enhance our educational content, JAIST has implemented a course interchange agreement whereby each other's courses can be taken by students. After checking the syllabi of our Partner Institutes, students who wish to take courses there should discuss with your supervisor and follow the procedures. When applying, you must confirm the class schedule to select courses that you can attend. For the first six months after enrollment, courses at JAIST have priority and you are not allowed to take courses at the partner institutes.

(1) Application fees, admission fees, and tuition fees

Students will be classified as "non-degree seeking students from a partner institute" and thus will not have to pay any fees for application, admission, or tuition except the tuition fees for the School of Graduate Studies at the Open University of Japan.

(2) Courses and credits

Courses that you can take at Partner Institutes (except the Open University of Japan) must be ones that can be beneficial for your research and that do not cover topics in the courses offered at JAIST. See the Appendix Table below. During your enrollment at JAIST, you can acquire up to 15 credits. The credits obtained in courses other than the courses of the master's and doctoral program offered by the Division of Transdisciplinary Sciences (for courses offered at JAIST, only K/I/M/Nxxx courses in the Division of Advanced Science and Technology are applicable) and the credits approved in Section 9 for a maximum 20 credits. Note that the number of credits obtained at Partner Institutes that can be counted toward the degree completion requirements is as follows.

Master's Program:

A maximum of 6 credits as "Optional Courses" including the credits obtained in courses other than the courses of the master's and doctoral program offered by divisions other than the Division of Transdisciplinary Sciences at JAIST and Kanazawa University (for courses offered at JAIST, only K/I/M/Nxxx courses in the Division of Advanced Science and Technology are applicable) and the credits recognized in Section 9.

Doctoral Program:

A maximum of 2 credits as "Specialized Courses" (Common Subjects) including the credits obtained in courses other than the courses of the master's and doctoral program offered by divisions other than the Division of Transdisciplinary Sciences at JAIST and Kanazawa University (for courses offered at JAIST, only K/I/Mxxx except K/I/M1xx courses in the Division of Advanced Science and Technology are applicable) and the credits recognized in Section 9.

Permission for taking courses and the way JAIST will handle the obtained credits are determined at a faculty meeting after receiving your application.

(3) Application procedure

If you wish to take courses at a Partner Institute, consult with your supervisor and then carry out the procedure within the specified period. The class schedules, syllabi, and procedures for Partner Institutes will be notified once available.

Appendix Table

Partner Institutes	Courses available
Graduate School of Natural Science and Technology, Kanazawa University	Courses taught by full-time faculty members of Partner Institutes (Laboratory work, practices, exercises, research projects, etc. are not included.) Only for master's students
Graduate School of Engineering, Kanazawa Institute of Technology	
Graduate School of Arts and Sciences, the Open University of Japan	All the graduate school courses Only for master's students

VI. Matters related to study and research supervision

1 Study and research supervision

In the master's program, the research supervision system consists of two faculty members; one supervisor (from JAIST) and one second supervisor (from Kanazawa University). Firstly, all students will be temporarily assigned to a laboratory of a faculty member who will be your advisor of JAIST in April in the first year (temporary assignment). Then, you will be formally assigned to a lab to determine the supervisor by late June in the first year (formal lab assignment). The second supervisor will be assigned by September in the first year.

In the doctoral program, the research supervision system consists of three faculty members; one supervisor (from JAIST) and two second supervisors (one of them is from Kanazawa University). After consultation with a proposed supervisor prior to enrollment, each student will be formally assigned to one's desired lab and the supervisor will be assigned at the time of enrollment. The second supervisor will be assigned in June in the first year.

This supervision system enables faculty members from both universities to provide students with collaborative research supervision which caters to individual needs of the students.

1.1 Supervisor

The supervisor plays a main role in supervising students' education and research and provides guidance on taking courses, guidance through seminars, experiments, practical training, and exercises etc. or guidance on writing a thesis/dissertation based on the research theme of individual student while working closely with the second supervisor and other faculty members to focus on supervising their students.

Students are required to decide a research theme that integrates multiple scientific disciplines and is related to innovative science and technology under the guidance of your supervisor. Students must submit a research proposal in writing by the end of the first year based on the ideas of a research topic related to the research theme, which must be confirmed by your supervisor and second supervisor. Based on the research proposal submitted, students will receive research instructions with the integration of different fields in mind. The supervisor is expected to help students summarize their research outcomes in a form of a thesis/dissertation and provide guidance related to bibliographic research and research activities.

1.2 Second supervisor

The second supervisor provides students with advice and guidance from a different perspective to the supervisor while working closely with the supervisor so that the research of the student will integrate multiple scientific disciplines.

With the advice and guidance of your second supervisor from a different perspective to your supervisor related to research theme, students will deepen the knowledge of your own research theme while learning ways of approaching your research from different fields through joint research, discussions or group study with the second supervisor and other students.

Although advice and guidance by the second supervisor from Kanazawa University should be ideally given in person, online communication tools and e-mail may also be used as required.

2 Research guidance at other graduate institutes

(1) Receiving guidance at other graduate institutes

Under the guidance of the supervisor, you can conduct part of the major research project at another graduate institute except with full-time faculty at Kanazawa University.

(2) Research period

A research period at other graduate institutes should be no longer than 12 months for the master's program and 18 months for the doctoral program.

(3) Procedures

If you wish to receive research support and guidance at another graduate institute outside JAIST, you must submit an "Entrustment of Research Guidance Outside JAIST" form to Kyoumu at least two months prior to the start of research through your supervisor.

3 Ph.D. Qualifying Examination

Those who choose Survey for Doctoral Research Plan must contact Kyoumu.

VII. Matters related to conferment of degree

The conferment of a degree will be conducted on specified dates in March or September.

1 Degree defense for the master's program

The procedures related to a defense and a final examination are laid out in the "Degree Regulations" and the "Bylaws Related to the Defense for Granting the Master's Degree" and other arrangements.

1.1 Application for conferment of degree

When you have met all the degree completion requirements except for "Research Support Courses" and wish to apply for a degree conferment, you must submit an Application for Conferment of Degree and the necessary documents to Kyoumu with your supervisor's approval. Note that those who select Survey for Doctoral Research Plan will apply for a degree conferment after you have passed the Ph.D. qualifying examination and internal entrance examination for doctoral program at JAIST.

The deadline for submitting the Application for Conferment of Degree will be two months before the scheduled completion month. For those who wish to graduate in September, the deadline will be a specified date about three months before the scheduled completion month.

1.2 Submission of master's thesis or research project report

Degree applicants in Master's Thesis Project or Research Project must submit the master's thesis or research project report through the prescribed submission method on the date specified by JAIST to Kyoumu with your supervisor's approval. Note that names of the examination committee will be announced accordingly along with the thesis presentation schedule.

Those who choose Survey for Doctoral Research Plan will be notified separately regarding this matter.

1.3 Mid-term presentation and thesis presentation

In preparation for the defense of the master's thesis, the mid-term presentation on research activities will take place in the first half of the second year and the master's thesis presentation will take place in the second half of the second year. Students will receive comprehensive advice on your future research at the mid-term presentation. Also, the presentations will be made public to faculty in other divisions at both JAIST and Kanazawa University.

1.4 Master's thesis defense

The master's thesis defense will be held at JAIST. The examination committee will consists of at least three faculty members; at least two faculty members from JAIST and at least one faculty member from Kanazawa University. The evaluations and opinions given at the mid-term presentation and the thesis presentation will be taken into consideration at the defense. The thesis will also be checked against research ethics.

1.5 Conferment of degree

Based on the result of the master's thesis defense above, after deliberations at a faculty meeting at each of collaborative university, conferment of degree will be discussed by the liaison council established by JAIST and Kanazawa University. At the liaison council, in addition to the evaluations and opinions given at the mid-term presentation and the thesis presentation as well as the result of the master's thesis defense, students will be evaluated from the viewpoint of the contribution of their research to solving social problems mentioned in the "3 challenges", the level of completion of the `Four "Forces" (Force)' and five types of competency listed in the Diploma Policy, which are 1. Competency to solve problems, 2. Expertise knowledge and practical skills, 3. Understanding and active attitude to other disciplines, 4. Language proficiency for communication and 5. Research ethics. With the evaluations at the liaison council, each of collaborative university will confer a degree.

(Reference) Degree conferment schedule for the master's program

The standard schedule for those enrolled in April to complete the program in two years is shown below. The schedule shows approximate period for some main items. You must check the detailed information in other pages of this guide and other announcements and notifications made by JAIST.

○ **For those who selected Master's Thesis Project/Research Project**

Month	First Year	Second Year
April	- Temporary lab assignment *Assignment to a faculty member (JAIST) who will be your advisor - Register one of the 3 challenges - Take Core Courses *Should be taken between Term 1-1 and Term 2-1	
May		
June	- Laboratory inquiry - Formal lab assignment *Official assignment of a supervisor (JAIST)	
July		
August	- Take Transdisciplinary Session I - Course instructor inquiry for Transdisciplinary Laboratory Rotation I - Second supervisor (KU) inquiry - Participate in Industrial Internship / Research Internship *Should be completed in the first year if possible	- Mid-term presentation
September	- Official assignment of a course instructor for Transdisciplinary Laboratory Rotation I - Official assignment of a second supervisor (KU)	
October	- Transdisciplinary Laboratory Rotation I begins *Should be completed by February in the first year	
November		
December		
January		- Submit an application for degree conferment
February		- Submit master's thesis/research project report - Thesis presentation - Defense of thesis/research project report
March	- Submit a research proposal	- Conferment of degree

○ **For those who selected Survey for Doctoral Research Plan**

Month	First Year	Second Year
April	- Temporary lab assignment *Assignment to a faculty member (JAIST) who will be your advisor - Register one of the 3 challenges - Take Core Courses *Should be taken between Term 1-1 and Term 2-1	
May		
June	- Laboratory inquiry - Formal lab assignment *Official assignment of a supervisor (JAIST)	
July		- Submission of application for Ph.D. Qualifying Examination - Application for the Internal Entrance Examination for Doctoral Program
August	- Take Transdisciplinary Session I - Course instructor inquiry for Transdisciplinary Laboratory Rotation I - Second supervisor (KU) inquiry - Participate in Industrial Internship / Research Internship *Should be completed in the first year if possible	- Mid-term presentation - Preliminary examination of Ph.D. Qualifying Examination - Internal Entrance Examination for Doctoral Program
September	- Official assignment of a course instructor for Transdisciplinary Laboratory Rotation I - Official assignment of a second supervisor (KU)	
October	- Transdisciplinary Laboratory Rotation I begins *Should be completed by February in the first year	- Submit a report of Survey for Doctoral Research Plan - Ph.D. Qualifying Examination
November		
December		
January		- Submit an application for degree conferment
February		
March	- Submit a research proposal *Register your choice of Survey for Doctoral Research Plan	- Conferment of degree

2 Degree defense for the doctoral program

The procedures related to a defense and a final examination are laid out in the "Degree Regulations" and the "Bylaws Related to the Defense for Granting the Doctoral Degree" and other arrangements.

2.1 Dissertation outline

After gaining the approval from all three advisors, a dissertation outline must be submitted to Kyoumu at least six months before applying for a degree.

2.2 Check sheet

Students must submit a check sheet about their level of achievement in transdisciplinary sciences to Kyoumu prior to the preliminary defense and defense of their dissertation. The check sheet includes questions on what field of knowledge and technology are applied in relation to one's research topic and how those two are integrated (Criteria 1 of Section 2.7) and what kind of new knowledge it generates (Criteria 2). As for Criteria 3, students will be evaluated in the final defense mentioned in Section 2.6.

2.3 Preliminary defense

Students must go through preliminary defense prior to applying for a degree. The preliminary defense is conducted by committee members from the degree awarding committee mentioned in Section 2.6 and takes place at least three months before the scheduled completion month. At the preliminary defense, guidance is given based on whether the research achievement is adequate for applying for a doctoral degree as valuable human resources of innovative science and technology in light of the educational mission of this collaborative program. Particular focus will be on whether the achievement is adequate for applying for a doctoral degree (Transdisciplinary Sciences) in light of the educational mission of this collaborative program. Following the result of the preliminary defense, further advice is given to students for obtaining a doctoral degree (Transdisciplinary Sciences) and the result is returned to the supervisor and the students for feedback. The supervisor and the second supervisors then thoroughly examine the result and give instructions to their students for finishing a dissertation. Note that students must have earned the required number of credits for degree completion (at least 13 credits) by the time of preliminary defense excluding "Seminar and Exercise II (KU)" and "Doctoral Thesis Report II (JAIST)".

Those who wish to apply for a preliminary defense must submit an application for preliminary defense and other required documents to Kyoumu with the approval from their supervisors three months before your degree application. Your supervisor will carry out the procedures for holding a preliminary defense based on this request.

2.4 Application for conferment of degree

Those who have met all the degree completion requirements except for Research Support Courses and wish to apply for conferment of degree must submit an application for conferment of degree and other required documents to Kyoumu with the approval from all three supervisors.

The deadline for submitting the Application for Conferment of Degree will be two months before the scheduled completion month.

2.5 Submission of doctoral dissertation

Those who apply for conferment of degree must submit a doctoral dissertation in the designated method by the designated date by JAIST to Kyoumu with the approval from their supervisors. Note that the committee members and the schedule for the dissertation defense will be separately announced by Kyoumu.

2.6 Dissertation defense

A formal hearing and final examination will be held for the final dissertation defense. Students will first present their dissertation to faculty members and students from both universities at the formal hearing and then take the final defense and the final examination by the degree awarding committee. The degree awarding committee consists of at least five faculty members in total including at least

two members from JAIST and at least one member from Kanazawa University.

2.7 Conferment of degree

Based on the result of the dissertation defense above, after deliberations at a faculty meeting at each of collaborative university, conferment of degree will be discussed by the liaison council established by JAIST and Kanazawa University. At the liaison council, factors such as the result of the dissertation defense and the number of credits earned will be taken into consideration. With the result of the liaison council deliberation, each of collaborative university will confer a degree to students respectively. Note that dissertations will be published in a research repository of the relevant university.

The conferment of a doctoral degree will be decided based on whether or not students have completed the learning achievements specified in the Diploma Policy in light of the fact that the educational mission of this collaborative program is to progress transdisciplinary sciences, in addition to factors such as whether or not the research contributes to solving problems related to innovative science and technology and the novelty and uniqueness of the research in the field of science and engineering with the knowledge and skills of multiple scientific fields acquired. Upon the conferral of a degree, it is made obligatory to publish one's dissertation in international journals or present it at academic conferences in order to ensure a decent standard of research outcomes. In particular, the following criteria will be applied for the evaluation of "Ability to create new knowledge by integrating one's own academic discipline and others" from the Diploma Policy with the acquisition of Doctoral Degree (Transdisciplinary Sciences) in mind.

1. Does the dissertation incorporate ideas from transdisciplinary sciences and integrate the knowledge and technology of multiple fields?
2. Do the research outcomes lead to the creation of new knowledge?
3. Does the composition of the dissertation incorporate perspectives of transdisciplinary sciences?

Note that the dissertation will still be evaluated for the conferral of Doctoral Degree (Science) or Doctoral Degree (Engineering) even when it does not meet the standards for the conferral of Doctoral Degree (Transdisciplinary Sciences).

(Reference) Degree conferment schedule for the doctoral program

The standard schedule for those enrolled in April to complete a program in three years is shown below. The schedule shows approximate period for some main information. You must check the detailed information in the related pages of this guide and announcements and notifications made by JAIST.

Month	First Year	Second Year	Third Year
April	- Formal lab assignment *Official assignment of a supervisor (JAIST) - Register one of the 3 challenges - Take Specialized Courses *Should be taken between Term 1-1 and Term 2-1		
May	- Second supervisors inquiry (KU/JAIST)		
June	- Official assignment of second supervisors (KU/JAIST)		
July			- Submit dissertation outline
August	- Course instructor (KU) inquiry for Transdisciplinary Laboratory Rotation II - Participate in Research Challenge / International Internship *Should be completed by March in the second year		
September	- Official assignment of a course instructor for Transdisciplinary Laboratory Rotation II		
October	- Transdisciplinary Laboratory Rotation II begins *Should be completed by September in the second year - Take Transdisciplinary Session II *Should be completed by March in the first year		- Submit an application for preliminary defense
November			
December			- Preliminary defense
January			- Submit an application for conferment of degree - Submit doctoral dissertation
February			- Final defense and examination
March	- Submit a research proposal		- Conferment of degree

VIII . Systems in place

1 Long-term Study System

Students may be granted extension of your study period when you face difficulty in completing the degree within the standard study period due to fair reasons related to their work or some personal affairs. Students who wish to extend study period must check the JAIST website (Education → Academic Procedures → Long-term Study System) and apply by the designated deadline.

2 Progression within JAIST

Students who have completed a master's program at JAIST and wish to continue onto the doctoral program must check the Application Guide or the JAIST website (Education → Application Guide for Internal Entrance Examination for Doctoral Program) to apply for the Internal Entrance Examination.

3 Academic rules

Check the website (https://education.joureikun.jp/jaist/) in regards to the details of the general academic rules, the regulations and bylaws on degree completion, course taking, collaborative education and research facility courses, and matters relevant to conferment of Master's and Doctoral degree.

Courses and Class Schedules

Courses and Class Schedules

1 Overview

(JAIST)

Each course has its course number which consists of an alphabet (K=Knowledge Science course group, I=Information Science course group, M=Materials Science course group, and other alphabets represent other course groups.), followed by three-digit numbers. The letter E at the end of the course number indicates the course conducted in English (K/I/MxxxE). Some courses at JAIST are offered both in Japanese and English in the same academic year.

(Kanazawa University)

At Kanazawa University, each class is 90-minute long, for a 2-cresidt course, 15 classes are basically offered with one class per a week. The examinations are held in the last week of each quarter.
Courses offered at Kanazawa University, in principle, should be taken at Kanazawa University. However, some courses may be offered remotely using a video conferencing system as required. More details about this matter will be announced separately.

1.1 Courses

The tables in Section 2-1 (For the Master's Program) and 2-2 (For the Doctoral Program) list show the information of course title, language, terms and instructors for the Division of Transdisciplinary Sciences at JAIST, and the information of course title etc. for the Division of Transdisciplinary Sciences at Kanazawa University.
The J, E, EJ codes in the language row indicate the language of instruction at JAIST: J indicates the course is conducted in Japanese; E, English; EJ in both English and Japanese. Check the syllabi for details about each course. If a course has multiple instructors, either "," or "•" are used between the names. "," indicates each instructor teaches the course and "•" indicates the course is taught by all the instructors in turns (course in relay). See the faculty profiles page on the web for more information about the course instructors at JAIST (JAIST top page → Research → Faculty Profiles).
The course term of each course at Kanazawa University will be announced separately. Check the syllabi of Kanazawa University for language, terms and instructors about each course. The course titles and class schedules will be published on the KU website (Kanazawa University Graduate School of Frontier Science Initiative → to Students → Transdisciplinary Sciences → Timetable).

1.2 Class schedules

The tables in Section 3 show the class schedules offered by the Division of Transdisciplinary Sciences at JAIST. At JAIST, each course is basically held mainly twice a week except for intensive courses and the courses with irregular timetables. K･I･Mxxx courses are held in the morning (1st and 2nd periods) and in the afternoon (4th and 5th periods). 3rd period is for the tutorial hours for the 1st period class on that day. Students can ask questions or discuss with the instructor during the tutorial hours and the time can be used for exercises, supplemental instruction etc. Note that K･I･Mxxx Courses held in the afternoon (4th and 5th periods) have no tutorial hours. Other courses are also held in the afternoon (4th and 5th periods). The ordinary examination terms come after the end of each lecture term, however the examinations of intensive courses are exceptionally conducted after finishing all the lectures in general. Class schedules with the assigned rooms will be displayed on the bulletin board next to the automatic certificate issuing machine and on the JAIST website (Division of Transdisciplinary Sciences, Graduate School of Advanced Science and Technology (hyperlink button) → For Student → Class Schedule (JAIST)). You must check the schedule before the start of classes each term.
The courses offered in the master's program of the Division of Transdisciplinary Sciences are indicated by ◆ next to the name of the course instructor and the courses offered in the doctoral program of the Division of Transdisciplinary Sciences are indicated by □ next to the name of the course instructor. Courses without ◆ or □ are offered as Advanced Science and Technology courses. Check the syllabi for details about each course offered by the Division of Advanced Science and Technology. Note that courses offered in the master's program of the Division of

Transdisciplinary Sciences at JAIST are held mainly on Tuesdays and Thursdays.

2 Courses for 2025-2026

2－1 For the Master's Program (JAIST and Kanazawa University (KU))

Course Division		Course Number	Course Title	Offered by	Language	Course Term 1-1 1-2	Course Term 2-1 2-2	Offered Credits Compulsory	Offered Credits Elective	Instructor(s)	Note	Completion Requirements
Core Courses		S101	Innovation Theory and Methodology for Social Competencies	JAIST	J / E	1-1	2-1		1	Required lecture faculty		– At least four credits must be earned from Core Courses. – At least two credits must be earned from *1 subjects.
		S102	Innovation Theory and Methodology for Creativity	JAIST	J / E	1-1	2-1		1	Required lecture faculty		
		15003	Research Ethics	KU					1			
		15008	Advanced Science and Technology in the Next Generation	KU					1			
		15009	Innovation Methodology	KU					1			
		15014	MoT as for Disruptive Innovation	KU					1			
		15015	Smart Science and Technology for Innovation	KU					1			
		15016	Innovation in Healthcare	KU					1			
		15017	Human and Social Challenges	KU					1			
		15019	Strategy for Business and Technology Management	KU					1			
		I119	Statistics for Data Analytics *1	JAIST	J	1-1			2	KIDANI		
		15007	Data Science in Society 5.0 *1	KU					1			
		15018	Mathematical, Data Science, and AI Basic *1	KU					1			
Transdisciplinary Experience Courses		T001	Transdisciplinary Session I *2	Joint	J / E	Summer		2		Faculties at Division of Transdisciplinary Sciences (KU and JAIST)		– At least three credits, including compulsory subjects, must be earned from Transdisciplinary Experience Courses. – For *2 subjects, one credit is from JAIST and one from KU, for a total of two credits. – JAIST students must earn at least one credit from *3 subjects. – JAIST students are allowed to take *4 after acquiring *3.
		T002	Transdisciplinary Laboratory Rotation I a (KU) *3	KU					1	Faculties, et al. at Division of Transdisciplinary Sciences (KU)		
		T003	Transdisciplinary Laboratory Rotation I b (KU) *3	KU					1			
		T004	Transdisciplinary Laboratory Rotation I a (JAIST) *4	JAIST					1	Faculties, et al. at Division of Transdisciplinary Sciences (JAIST)		
		T005	Transdisciplinary Laboratory Rotation I b (JAIST) *4	JAIST					1			
Social Implementation Courses		T011	Industrial Internship a (JAIST) *5	JAIST					1	Supervisor		– At least one credit must be earned from Social Implementation Courses. – JAIST students must earn one or more of *5 subjects.
		T012	Industrial Internship b (JAIST) *5	JAIST					2	Supervisor		
		T013	Research Internship a (JAIST) *5	JAIST					1	Supervisor		
		T014	Research Internship b (JAIST) *5	JAIST					2	Supervisor		
		15204	Industrial Internship a (KU) # cannot be taken	KU					1	Supervisor		
		15205	Industrial Internship b (KU) # cannot be taken	KU					2	Supervisor		
		15202	Research Internship a (KU) # cannot be taken	KU					1	Supervisor		
		15203	Research Internship b (KU) # cannot be taken	KU					2	Supervisor		
Specialized Courses	Common Subjects	K121	Introduction to Cognitive Science	JAIST	J	1-2			2	HIDAKA		– Specialized courses consist of four subjets categories; Common, Life Science, Materials Sience and Systems Innovation. Students must take courses from at least two subject categories, focusing on the following subjects that correspond to the challenge they have chosen. I. Life Innovation: Life Science Subjects II. Green Innovation: Materials Science Subjects III. Systems Innovation: Social Systems Science Subjects or Materials Science Subjects – Students who take *11 or *12 subjects of the Research Support Courses, earn at least 10 credits from Specialized Subjects. – Students who will take *13 subjects of the Research Support Courses, must earn at least 12 credits from Specialized Subjects. Note : ※ indicates the course is not offered in the 2025 academic year.
		K236	Basis of Data-Driven AI	JAIST	EJ	1-2			2	DAM･GOKON		
		K238	Introduction to Experimental Philosophy	JAIST	J	1-1			2	MIZUMOTO		
					E		2-1					
		K417	Co-Creation with Data-Driven AI	JAIST	EJ		2-1		2	DAM･GOKON		
		K427	Theory on Creative Process in Design	JAIST	J	※	※		2	NAGAI･MAEKAWA	Offered in alternate years	
					E	※	※			KOOHSARI	Offered in alternate years	
		I111	Algorithms and Data Structures	JAIST	J	1-1			2	IKEDA K･HSUEH		
					E		2-1			SCHWARTZMAN		
		I116	Fundamentals of Programming	JAIST	J	1-2			2	OGATA･DO		
					E		2-1			CHONG･NGUYEN(NHAN)		
		I211	Mathematical Logic	JAIST	E	1-1			2	HIROKAWA		
					J		2-1			TAKAGI TSUBASA		
		I212	Analysis for Information Science	JAIST	J	1-1			2	YOSHITAKA		
					E		2-2			OKADA		

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

Course Division		Course Number	Course Title	Offered by	Language	Course Term 1-1 1-2	Course Term 2-1 2-2	Offered Credits Compulsory	Offered Credits Elective	Instructor(s)	Note	Completion Requirements
Specialized Courses	Common Subjects	I237	Formal Languages and Automata	JAIST	J	1-1			2	TAKAGI TSUBASA		– *6 subject is for students who enrolled before April 2025, so students who enrolled in April 2025 cannot take this subject. – *7 subject is for students who enrolled in April 2025, so students who enrolled before April 2025 cannot take this subject. Note : ※ indicates the course is not offered in the 2025 academic year.
					E		2-1			TOMITA		
		I238	Computation Theory	JAIST	E	1-2			2	SCHWARTZMAN		
					J		2-1			UEHARA		
		I419	Image Information Science	JAIST	J	1-2			2	YOSHITAKA	Offered in alternate years	
		I468	Modeling of Dynamics	JAIST	J	※	※		2	HONGO	Offered in alternate years	
		15310	Data Mining a	KU					1			
		15311	Data Mining b	KU					1			
		15312	Information Processing in Video Systems a	KU					1			
		15313	Information Processing in Video Systems b	KU					1			
		15318	Advanced Communication Engineering a	KU					1			
		15319	Advanced Communication Engineering b	KU					1			
		15320	Fundamentals of Nanoscale Measurements and Control A	KU					1			
		15321	Fundamentals of Nanoscale Measurements and Control B	KU					1			
	Life Science Subjects	M113	Introduction to Bioscience	JAIST	J	1-1			2	HOHSAKA・OHKI・TAKAMURA YUZURU・HIRATSUKA・HAMADA・TSUTSUI・YAMAGUCHI T		
		M231	Bioorganic Chemistry	JAIST	J	1-1	2-1		2	HOHSAKA・FUJIMOTO		
		M232	Biophysics and Biophysical Chemistry	JAIST	J	1-2			2	HAMADA		
		M261	Functional Biomolecules	JAIST	J		2-1		2	TSUTSUI		
		M262	Biomaterial Sensing	JAIST	J	1-2			2	TAKAMURA YUZURU		
		M415	Medical Biomaterials	JAIST	J		2-1		2	KURISAWA		
		15408	Human Body: Functions *6	KU					2			
		15409	Human Body: Diseases	KU					2			
		15412	Bioscience of Cancer Ⅰa	KU					1			
		15413	Bioscience of Cancer Ⅰb	KU					1			
		15414	Bioscience of Cancer Ⅱa	KU					1			
		15415	Bioscience of Cancer Ⅱb	KU					1			
		15416	Introduction to Dynamics of Biomolecules a	KU					1			
		15417	Introduction to Dynamics of Biomolecules b	KU					1			
		15418	Introduction to Molecular and Biophysics a	KU					1			
		15419	Introduction to Molecular and Biophysics b	KU					1			
		15422	Introduction to Discovering Molecular Probes a	KU					1			
		15423	Introduction to Discovering Molecular Probes b	KU					1			
		15424	Human Body: Structures a	KU					1			
		15425	Human Body: Structures b	KU					1			
		15429	Human Body: Functions a *7	KU					1			
		15430	Human Body: Functions b *7	KU					1			
	Materials Science Subjects	M111	Introduction to Physics	JAIST	J	1-1			2	OSHIMA		
					E		2-1			MIZUTANI		
		M112	Introduction to Chemistry	JAIST	J	1-1			2	TANIIKE・MIYAKO・WADA		
		M211	Quantum Mechanics	JAIST	J	1-1			2	MURATA		
		M212	Statistical Mechanics	JAIST	J	1-1			2	KOYANO		
		M213	Electromagnetic Theory	JAIST	J	1-1			2	TAKAMURA YUKIKO		
		M221	Organic Chemistry	JAIST	J	1-1			2	MATSUMI		
		M222	Computational Material Design	JAIST	J	1-2			2	TANIIKE・DAM・MIZUKAMI		
		M223	Properties of Organic Materials	JAIST	J		2-1		2	NAGAO・GOTOH・AOKI K		
		M224	Inorganic Materials Chemistry	JAIST	J	1-2			2	MAENOSONO		
		M225	Instrumental Analytical Chemistry	JAIST	J	1-2			2	SHINOHARA		

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

Course Division		Course Number	Course Title	Offered by	Language	Course Term 1-1 1-2	Course Term 2-1 2-2	Offered Credits Compulsory	Offered Credits Elective	Instructor(s)	Note	Completion Requirements
Specialized Courses	Materials Science Subjects	M243	Solid State Physics I	JAIST	J	1-2			2	UEDA		Note : ※ indicates the course is not offered in the 2025 academic year.
		M245	Mathematics for Condensed Matter Science and Technology	JAIST	J	1-1			2	AN		
		M251	Chemistry of Catalyst and Catalysis	JAIST	J	1-1			2	NISHIMURA S		
		M254	Polymer Chemistry I	JAIST	J	1-2			2	MATSUMURA･OKEYOSHI		
		M273	Mechatronics	JAIST	EJ	※	※		2	HO･NGUYEN(NHAN)		
		M414	Device Physics	JAIST	J		2-1		2	OHDAIRA		
		M420	Solid State Physics II	JAIST	J		2-1		2	AKABORI		
		15504	Introduction of Energy and Environmental Program	KU					1			
		15505	Introduction of Material Program	KU					1			
		15506	Advanced study of solar cell technology I	KU					2			
		15508	Synthetic Chemistry of Polymeric Materials	KU					2			
		15509	Functional Polymer Materials	KU					2			
		15516	Advanced solid state physical chemistry I a	KU					1			
		15517	Advanced solid state physical chemistry I b	KU					1			
		15518	Advanced bio-refinery engineering I a	KU					1			
		15519	Advanced bio-refinery engineering I b	KU					1			
		15520	Advanced Surface and Interface Engineering Ⅰa	KU					1			
		15521	Advanced Surface and Interface Engineering Ⅰb	KU					1			
		15522	Devices Process Engineering a	KU					1			
		15523	Devices Process Engineering b	KU					1			
		15526	Optical Engineering a	KU					1			
		15527	Optical Engineering b	KU					1			
		15528	Fundamentals of Materials Characterization	KU					1			
		15529	Separation and Purification Technology A	KU					1			
		15530	Separation and Purification Technology B	KU					1			
	Social Systems Science Subjects	K211	Methodology for the Social Sciences	JAIST	J	1-1			2	NISHIMURA T･SATO		
					E	1-1				KIM		
		K213	Methodology for Systems Science	JAIST	J		2-1		2	GOKON		
		K214	Methodology for Knowledge Media	JAIST	J	1-2			2	SATO		
					E		2-2			KANAI		
		K471	Media Creation	JAIST	J	1-1			2	MIYATA･XIE		
		K473	Management of Innovation	JAIST	J	1-2			2	SHIMADA		
		K479	Service Management	JAIST	J		2-1		2	SHIRAHADA		
		K487	Network Science	JAIST	J	1-2			2	HAYASHI		
		I213	Discrete Signal Processing	JAIST	J	1-2			2	ASANO		
					E		2-2			CHONG		
		I214	System Optimization	JAIST	J	1-1			2	HIRAISHI		
					E		2-2			KURKOSKI		
		I218	Computer Architecture	JAIST	J	1-2			2	TANAKA		
					E		2-2			INOGUCHI		
		I219	Software Design Methodology	JAIST	J	1-2			2	AOKI T･ISHII D		
					E		2-2					
		I223	Natural Language Processing	JAIST	E	1-2			2	SHIRAI		
					J		2-1			INOUE		

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

Course Division		Course Number	Course Title	Offered by	Language	Course Term 1-1 1-2	Course Term 2-1 2-2	Offered Credits Compulsory	Offered Credits Elective	Instructor(s)	Note	Completion Requirements
Specialized Courses	Social Systems Science Subjects	I225	Statistical Signal Processing	JAIST	E	1-1			2	UNOKI・MAWALIM		– *8 subject is for students who enrolled before April 2025, so students who enrolled in April 2025 cannot take this subject. – *9 subject is for students who enrolled in April 2025, so students who enrolled before April 2025 cannot take this subject. Note : ※ indicates the course is not offered in the 2025 academic year.
					J		2-1			HONGO		
		I233	Operating Systems	JAIST	J	1-1			2	UDA		
					E		2-2			BEURAN		
		I235	Game Informatics	JAIST	J	1-1			2	IKEDA K・IIDA・HSUEH		
					E		2-2					
		I411	Pattern Analysis and Recognition	JAIST	J	※	※		2	To be announced		
		I443	Foundation of Software Verification	JAIST	J	※	※		2	AOKI T	Offered in alternate years	
		15608	Science in Archaeology a	KU					1			
		15609	Science in Archaeology b	KU					1			
		15610	Elementary Theories of Transdisciplinary Science on Cognition and Behavior a	KU					1			
		15611	Elementary Theories of Transdisciplinary Science on Cognition and Behavior b	KU					1			
		15612	Introduction to comparative cognition a	KU					1			
		15613	Introduction to comparative cognition b	KU					1			
		15614	Introduction of Exercise Physiology a	KU					1			
		15615	Introduction of Exercise Physiology b	KU					1			
		15618	Clinical Neuropsychology Ⅰa	KU					1			
		15619	Clinical Neuropsychology Ⅰb	KU					1			
		15620	Introduction to Cultural Resource Studies a	KU					1			
		15621	Introduction to Cultural Resource Studies b	KU					1			
		15622	Intelligent Mobile Robot Ⅰa	KU					1			
		15623	Intelligent Mobile Robot Ⅰb	KU					1			
		15624	Biomechanical Engineering Ⅰa	KU					1			
		15625	Biomechanical Engineering Ⅰb	KU					1			
		15626	History of Technology and Society	KU					1			
		15627	Computer Vision A	KU					1			
		15628	Computer Vision B	KU					1			
		15629	Applied mathematical behavior models *8	KU					2			
		15630	Applied mathematical behavior models *9	KU					1			
Research Support Courses		T007	Seminar and Exercise I (KU) *10	KU					2	Second supervisor		– JAIST Students must take *10 subjects. – JAIST students who will compile their research as a master's thesis must take *11 subjects and earn at least eight credits from Research Support Courses. – JAIST students who will compile their research as a research project must take *12 subjects and earn at least four credits from Research Support Courses. – JAIST students who will compile their research as a doctoral research plan must take *13 subjects and earn at least four credits from Research Support Courses. – JAIST Students are not required to register for Research Support Courses.
		16751	Seminar and Exercise I (JAIST) # cannot be taken	JAIST					2	Second supervisor		
		T008	Master Thesis Report I (JAIST) *11	JAIST					6	Supervisor		
		T009	Research Project (JAIST) *12	JAIST					2	Supervisor		
		T010	Research Planning for Ph.D. Course (JAIST) *13	JAIST					2	Supervisor		
		16702	Master Thesis Report I (KU) # cannot be taken	KU					6	Supervisor		
		16703	Research Project (KU) # cannot be taken	KU					2	Supervisor		
		16704	Research Planning for Ph.D. Course (KU) # cannot be taken	KU					2	Supervisor		

Students who will compile their research as a master's thesis or as a research project must earn at least 32 credits, and students who will compile their research as a doctoral research plan must earn at least 34 credits.

Students must obtain at least 10 credits from subjects held at KU.

JAIST students cannot take subjects marked #.

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

2－2 For the Doctoral Program (JAIST and Kanazawa University (KU))

Course Division		Course Number	Course Title	Offered by	Language	Course Term 1-1 1-2	Course Term 2-1 2-2	Offered Credits Compulsory	Offered Credits Elective	Instructor(s)	Note	Completion Requirements
Transdisciplinary Experience Courses		T051	Transdisciplinary Session II *1	Joint	J / E			2		Faculties at Division of Transdisciplinary Sciences (KU and JAIST)		– At least three credits, including compulsory subjects, must be earned from Core Courses. – For *1 subjects, one credit is from KU and one from JAIST, for a total of two credits. – JAIST students are allowed to take *3 after acquiring *2.
		T052	Transdisciplinary Laboratory Rotation II (KU) *2	KU				1		Faculties, et al. at Division of Transdisciplinary Sciences (KU)		
		T053	Transdisciplinary Laboratory Rotation II (JAIST) *3	JAIST					1	Faculties, et al. at Division of Transdisciplinary Sciences (JAIST)		
Social Implementation Courses		T054	Overseas Research Challenge A (JAIST) *4	JAIST					1	Supervisor		– At least one credit must be earned from Social Implementation Courses. – JAIST students must earn one or more of *4 subjects.
		T055	Overseas Research Challenge B (JAIST) *4	JAIST					2	Supervisor		
		T056	Overseas Research Challenge C (JAIST) *4	JAIST					4	Supervisor		
		T057	International Internship (JAIST) *4	JAIST					1	Supervisor		
		17201	Overseas Research Challenge A (KU) # cannot be taken	KU					1			
		17202	Overseas Research Challenge B (KU) # cannot be taken	KU					2			
		17203	Overseas Research Challenge C (KU) # cannot be taken	KU					4			
		17204	International Internship (KU) # cannot be taken	KU					1			
Specialized Courses	Common Subjects	S503	Innovation Theory and Methodology for Total Capability Development *5	JAIST	J / E	1-1	2-1		1	Required lecture faculty		– At least nine credits must be earned from Specialized Courses. – Specialized courses consist of four subjets categories; Common, Life Science, Materials Sience and Systems Innovaion. Students must take courses from at least two subject categories, focusing on the following subjects that correspond to the challenge they have chosen. I. Life Innovation: Life Science Subjects II. Green Innovation: Materials Science Subjects III. Systems Innovation: Social Systems Science Subjects or Materials Science Subjects – Students can fulfill the requirements for completion of common subjects by earning credits of "Innovation Theory and Methodology for Total Capability Developement (JAIST)" or "Research Ethics for Ph.D. Researchers (KU)". – The credits earned at other than the master's and doctoral program of the collaborative program can be counted up to two credits as Common Subjects toward the degree completion requirements. For the credits earned in Division of Advanced Science and Technology of JAIST, the specialized courses are included in the requirements excluding the subjects of K, I and M1xx series. – JAIST students must take one or more of *5 subjects. – *6 subjects are storongly recommended to the students who have never studied statistics etc. before. However, its credits can not be counted for degree completion requirements. Note: ※ indicates the course is not offered in the 2024 academic year.
		17306	Research Ethics for Ph.D. Researchers *5	KU					1			
		K619	Advanced AI and Co-Creation	JAIST	E	※	※		2	DAM・GOKON	Offered in alternate years	
		I119	Statistics for Data Analytics II *6	JAIST	J	1-1			2	KIDANI		
		17308	Unleashing the Potential of Innovation for Future # cannot be taken	KU					1			
		17309	Introduction to Practical Data Analysis and Statistics a *6	KU					1			
		17311	Mathematical, Data Science, and AI Advanced	KU					1			
		17312	Advanced Data Mining	KU					1			
		17313	Advanced Bioinformatics	KU					1			
	Life Science Subjects	M423	Functional Protein Device	JAIST	J	1-2			2	HIRATSUKA		
		M615	Advanced Biofunctions	JAIST	E	1-1			2	TAKAMURA YUZURU・FUJIMOTO・HOHSAKA・HIROSE	Offered in alternate years	
		M616	Advanced Biomaterials	JAIST	E		Winter		2	HIRATSUKA・TSUTSUI・HAMADA・YAMAGUCHI T	Offered in alternate years	
		M622	Advanced Biomolecular Science	JAIST	E	※	※		2	OHKI・YAMAGUCHI T	Offered in alternate years	
		17401	Integrated Life Sciences	KU					2			
		17407	Structure and dynamics of biological molecules	KU					1			
		17408	Functional dynamics of biological molecules	KU					1			
		17409	Nanobio-materials science	KU					1			
		17410	Nanobio-metrology	KU					1			
		17411	Molecular and Cellular Biology	KU					1			
		17412	Molecular Microbiology	KU					1			
		17413	Radiation Biology	KU					1			
	Materials Science Subjects	M413	Functional Nanomaterials	JAIST	E		2-1		2	MAENOSONO・NAGAO・NISHIMURA S・TAKAHASHI		
		M421	Electronics	JAIST	J	1-2			2	SUZUKI T		
		M424	Polymer Chemistry II	JAIST	J		2-1		2	MATSUMURA・YAMAGUCHI M		
		M425	Analytical Mechanics	JAIST	E	※	※		2	HO		
		M612	Optical Properties of Solids	JAIST	E	※	※		2	UEDA・MURATA・KOYANO	Offered in alternate years	
		M614	Advanced Device Physics	JAIST	E	1-2			2	OHDAIRA・HIROSE・MAEDA	Offered in alternate years	
		M617	Molecular and Functionality Design of Polymers	JAIST	E	※	※		2	OKEYOSHI・SHINOHARA・YAMAGUCHI M	Offered in alternate years	
		M618	Materials Design	JAIST	E	Summer			2	MATSUMURA・MIYAKO・NISHIDA・MISRA	Offered in alternate years	

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

Course Division		Course Number	Course Title	Offered by	Language	Course Term		Offered Credits		Instructor(s)	Note	Completion Requirements
						1-1 1-2	2-1 2-2	Compulsory	Elective			
Specialized Courses	Materials Science Subjects	M619	Materials Morphology	JAIST	E	※	※		2	MATSUMI・TANIIKE・MANTRIPRAGADA・KABEER	Offered in alternate years	Note : ※ indicates the course is not offered in the 2024 academic year.
		M620	Electronic Properties of Condensed Matter	JAIST	E		Winter		2	OSHIMA・KOYANO・TAKAMURA YUKIKO	Offered in alternate years	
		17501	Advanced study of solar cell technology II	KU					2			
		17502	Advanced solid state physical chemistry II	KU					2			
		17503	Polymer and Material Chemistry	KU					2			
		17510	Bioprocess Engineering	KU					1			
		17511	Surface Control Engineering	KU					1			
		17512	Oxide Device Processing	KU					1			
		17513	Thin Film Electronics	KU					1			
		17514	Environmental Load Reduction Engineering	KU					1			
	Social Systems Science Subjects	K412	Anthropology of Knowledge	JAIST	J	1-1			2	ITO		
		K469	Knowledge Creation Support Media	JAIST	J	1-2			2	NISHIMOTO		
		K613	Social-Technical Complex Systems	JAIST	E	1-2			2	HUYNH	Offered in alternate years	
		I441	Advanced Computer Networks	JAIST	J	1-2			2	UDA	Offered in alternate years	
		I448	Distance Learning System	JAIST	J		2-1		2	HASEGAWA・OTA・GU	Offered in alternate years	
		I470	Theory of Advanced Algorithms	JAIST	E	※	※		2	SCHWARTZMAN	Offered in alternate years	
		I615	Robotics	JAIST	E		2-1		2	CHONG	Offered in alternate years	
		I645	Human Perceptual Systems and its Models	JAIST	E	※	※		2	UNOKI	Offered in alternate years	
		I649	Advanced Wireless Networks	JAIST	E	※	※		2	LIM・HE	Offered in alternate years	
		17602	Biomechanical Engineering II	KU					2			
		17603	Measurement systems	KU					2			
		17607	Theories of Transdisciplinary Science on Cognition and Behavior I	KU					2			
		17608	Theories of Transdisciplinary Science on Cognition and Behavior II	KU					2			
		17610	Psychology of Learning and Behavior	KU					2			
		17611	Interdisciplinary Studies in Archaeology and Cultural Heritage Studies I	KU					2			
		17612	Interdisciplinary Studies in Archaeology and Cultural Heritage Studies II	KU					2			
		17615	Modern Neural Computation	KU					2			
		17616	Advanced design for future society	KU					2			
		17617	Intelligent Vehicle	KU					1			
		17618	Digital Video Processing	KU					1			
		17619	Advanced Exercise Physiology	KU					1			
		17620	Optical Sensing	KU					1			
Research Support Courses		T058	Seminar and Exercise II (KU) *7	KU					4	Second supervisor		- At least 10 credits must be earned from Research Support Courses. - JAIST students must take *7 and *8 subjects. - JAIST students are not required to register for Research Support Courses.
		18751	Seminar and Exercise II (JAIST) # cannot be taken	JAIST					4	Second supervisor		
		T059	Doctoral Thesis Report II (JAIST) *8	JAIST					6	Supervisor		
		18702	Doctoral Thesis Report II (KU) # cannot be taken	KU					6	Supervisor		

At least 23 credits must be earned. (However, for those enrolled from the doctoral program, a total of at least 10 credits must be earned from both KU and JAIST respectively.)

JAIST students cannot take subjects marked #.

◎Check the Kanazawa University syllabus for the Language, Course Term, and Instructor(s) of KU courses.

3 Class schedules for 2025-2026 (JAIST)

NOTE:
May 7 follows the Tuesday schedule.

Term 1-1：Class Term (April 14 – June 4) 1st - 3rd
Examination Term (June 5 – June 9)

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	1 9:00－10:40	2 10:50－12:30	3
Mon.	K211E Methodology for the Social Sciences (KIM)◆ K470 Introduction to Knowledge Creation (YUIZONO) I114 Fundamental Mathematics for Information Science (TOMITA･KAMATA) I115 Digital Logic and Computer Design (INOGUCHI) I233 Operating Systems (UDA)◆ M245 Mathematics for Condensed Matter Science and Technology (AN)◆ M285E Bioscience and Biotechnology (YAMAGUCHI T･HAMADA･FUJIMOTO･TSUTSUI･HOHSAKA)	K228 Introduction to Knowledge Science (HASHIMOTO･DAM) K444E Design Cognition (KOOHSARI) I211E Mathematical Logic (HIROKAWA)◆ I235 Game Informatics (IKEDA K･IIDA･HSUEH)◆ I483 Smart Embedded System Development (SIOUTIS) M213 Electromagnetic Theory (TAKAMURA YUKIKO)◆ M221 Organic Chemistry (MATSUMI)◆	
Tue.	K241 Transformative Knowledge Management (SHIRAHADA) K471 Media Creation (MIYATA･XIE)◆ I119 Statistics for Data Analytics (KIDANI)◆□ I212 Analysis for Information Science (YOSHITAKA)◆ I225E Statistical Signal Processing (UNOKI･MAWALIM)◆ M113 Introduction to Bioscience (HOHSAKA･OHKI･TAKAMURA YUZURU･HIRATSUKA･HAMADA･TSUTSUI･YAMAGUCHI T)◆ M211 Quantum Mechanics (MURATA)◆	K114 Introduction to Social Research Methods (NAKAWAKE) K412 Anthropology of Knowledge (ITO)□ I111 Algorithms and Data Structures (IKEDA K･HSUEH)◆ I214 System Optimization (HIRAISHI)◆ I237 Formal Languages and Automata (TAKAGI TSUBASA)◆ M111 Introduction to Physics (OSHIMA)◆ M212 Statistical Mechanics (KOYANO)◆	
Wed.	K125 Introduction to Systems Development for Knowledge Science Experiment / Survey (IJUIN) K211 Methodology for the Social Sciences (NISHIMURA T･SATO)◆ K238 Introduction to Experimental Philosophy (MIZUMOTO)◆ I112 Fundamentals of Computer Systems and AI (HONGO･TOMITA･UDA) I120 Fundamentals of Logic and Mathematics (ISHII D) I232E Information Theory (KURKOSKI) M112 Introduction to Chemistry (TANIIKE･MIYAKO･WADA)◆ M251 Chemistry of Catalyst and Catalysis (NISHIMURA S)◆ M615E Advanced Biofunctions (TAKAMURA YUZURU ・ FUJIMOTO ・ HOHSAKA ・ HIROSE)□	K211E Methodology for the Social Sciences (KIM)◆ K470 Introduction to Knowledge Creation (YUIZONO) I114 Fundamental Mathematics for Information Science (TOMITA･KAMATA) I115 Digital Logic and Computer Design (INOGUCHI) I233 Operating Systems (UDA)◆ M245 Mathematics for Condensed Matter Science and Technology (AN)◆ M285E Bioscience and Biotechnology (YAMAGUCHI T･HAMADA･FUJIMOTO･TSUTSUI･HOHSAKA)	**Tutorial Hours (13:30－15:10)**
Thu.	K114 Introduction to Social Research Methods (NAKAWAKE) K412 Anthropology of Knowledge (ITO)□ I111 Algorithms and Data Structures (IKEDA K･HSUEH)◆ I214 System Optimization (HIRAISHI)◆ I237 Formal Languages and Automata (TAKAGI TSUBASA)◆ M111 Introduction to Physics (OSHIMA)◆ M212 Statistical Mechanics (KOYANO)◆	K241 Transformative Knowledge Management (SHIRAHADA) K471 Media Creation (MIYATA･XIE)◆ I119 Statistics for Data Analytics (KIDANI)◆□ I212 Analysis for Information Science (YOSHITAKA)◆ I225E Statistical Signal Processing (UNOKI･MAWALIM)◆ M113 Introduction to Bioscience (HOHSAKA･OHKI･TAKAMURA YUZURU･HIRATSUKA･HAMADA･TSUTSUI･YAMAGUCHI T)◆ M211 Quantum Mechanics (MURATA)◆	
Fri.	K228 Introduction to Knowledge Science (HASHIMOTO･DAM) K444E Design Cognition (KOOHSARI) I211E Mathematical Logic (HIROKAWA)◆ I235 Game Informatics (IKEDA K･IIDA･HSUEH)◆ I483 Smart Embedded System Development (SIOUTIS) M213 Electromagnetic Theory (TAKAMURA YUKIKO)◆ M221 Organic Chemistry (MATSUMI)◆	K125 Introduction to Systems Development for Knowledge Science Experiment / Survey (IJUIN) K211 Methodology for the Social Sciences (NISHIMURA T･SATO)◆ K238 Introduction to Experimental Philosophy (MIZUMOTO)◆ I112 Fundamentals of Computer Systems and AI (HONGO･TOMITA･UDA) I120 Fundamentals of Logic and Mathematics (ISHII D) I232E Information Theory (KURKOSKI) M112 Introduction to Chemistry (TANIIKE･MIYAKO･WADA)◆ M251 Chemistry of Catalyst and Catalysis (NISHIMURA S)◆ M615E Advanced Biofunctions (TAKAMURA YUZURU ・ FUJIMOTO ・ HOHSAKA ・ HIROSE)□	

Irregular class schedule:

No applicable courses in Term 1-1

NOTE:

The class schedule of the courses with the assigned lecture rooms will be posted on the notice board next to the automatic certificate issuing machine before each term begins. It can also be viewed on the JAIST website (Education → Taking Courses → Class Schedule).

"I119 Statistics for Data Analytics" will be treated as "I119 Statistics for Data Analytics II" for Doctoral students in Division of Transdisciplinary Sciences.

Class schedules for 2025-2026 (JAIST)

NOTE:
May 7 follows the Tuesday schedule.

Term 1-1：Class Term (April 14 – June 4) 4th - 5th
Examination Term (June 5 – June 9)

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	4 15:20－17:00	5 17:10－18:50
Mon.		
Tue.	G211 Empathy and Collaboration for Creating Sustainable World (MOTOYAMA) M231 Bioorganic Chemistry (HOHSAKA·FUJIMOTO)◆	
Wed.		
Thu.	G211 Empathy and Collaboration for Creating Sustainable World (MOTOYAMA) M231 Bioorganic Chemistry (HOHSAKA·FUJIMOTO)◆	
Fri.	S101 Innovation Theory and Methodology for Social Competencies (Required lecture faculty)◆ S102 Innovation Theory and Methodology for Creativity (Required lecture faculty)◆ * S102 will follow when S101 ends after 7 class meetings. S503 Innovation Theory and Methodology for Total Capability Development (Required lecture faculty)□	S101 Innovation Theory and Methodology for Social Competencies (Required lecture faculty)◆ S102 Innovation Theory and Methodology for Creativity (Required lecture faculty)◆ * S102 will follow when S101 ends after 7 class meetings. S503 Innovation Theory and Methodology for Total Capability Development (Required lecture faculty)□

Class schedules for 2025-2026 (JAIST)

NOTE:
July 31 follows the Monday schedule.

Term 1-2：Class Term (June 12 – July 31) 1st - 3rd
Examination Term (August 1, August 4)

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	1 9:00－10:40	2 10:50－12:30	3
Mon.	K121 Introduction to Cognitive Science (HIDAKA)◆ K632E Risk Management Theory (LAM) I223E Natural Language Processing (SHIRAI)◆ I226 Computer Networks (TAN) I439 Speech Information Processing (UNOKI) M224 Inorganic Materials Chemistry (MAENOSONO)◆ M274 Mechanics of Materials (JI)	K613E Social-Technical Complex Systems (HUYNH)□ I218 Computer Architecture (TANAKA)◆ I419 Image Information Science (YOSHITAKA)◆ M222 Computational Material Design (TANIIKE･DAM･MIZUKAMI)◆ M423 Functional Protein Device (HIRATSUKA)□	Tutorial Hours (13:30－15:10)
Tue.	K214 Methodology for Knowledge Media (SATO)◆ K487 Network Science (HAYASHI)◆ I213 Discrete Signal Processing (ASANO)◆ I217 Functional Programming (OGATA･DO) I238E Computation Theory (SCHWARTZMAN)◆ M262 Biomaterial Sensing (TAKAMURA YUZURU)◆ M421 Electronics (SUZUKI T)□	K236EJ Basis of Data-Driven AI (DAM･GOKON)◆ K473 Management of Innovation (SHIMADA)◆ I116 Fundamentals of Programming (OGATA･DO)◆ I219 Software Design Methodology (AOKI T･ISHII D)◆ I657E Quantum/Materials informatics (HONGO) M243 Solid State Physics I (UEDA)◆ M254 Polymer Chemistry I (MATSUMURA･OKEYOSHI)◆	
Wed.	K469 Knowledge Creation Support Media (NISHIMOTO)□ I239 Machine Learning (OKADA･HASEGAWA) I413E Theoretical Computer Science（HIROKAWA） I441 Advanced Computer Networks (UDA)□ M225 Instrumental Analytical Chemistry (SHINOHARA)◆ M614E Advanced Device Physics (OHDAIRA･HIROSE･MAEDA)□	K121 Introduction to Cognitive Science (HIDAKA)◆ K632E Risk Management Theory (LAM) I223E Natural Language Processing (SHIRAI)◆ I226 Computer Networks (TAN) I439 Speech Information Processing (UNOKI) M224 Inorganic Materials Chemistry (MAENOSONO)◆ M274 Mechanics of Materials (JI)	
Thu.	K236EJ Basis of Data-Driven AI (DAM･GOKON)◆ K473 Management of Innovation (SHIMADA)◆ I116 Fundamentals of Programming (OGATA･DO)◆ I219 Software Design Methodology (AOKI T･ISHII D)◆ I657E Quantum/Materials informatics (HONGO) M243 Solid State Physics I (UEDA)◆ M254 Polymer Chemistry I (MATSUMURA･OKEYOSHI)◆	K214 Methodology for Knowledge Media (SATO)◆ K487 Network Science (HAYASHI)◆ I213 Discrete Signal Processing (ASANO)◆ I217 Functional Programming (OGATA･DO) I238E Computation Theory (SCHWARTZMAN)◆ M262 Biomaterial Sensing (TAKAMURA YUZURU)◆ M421 Electronics (SUZUKI T)□	
Fri.	K613E Social-Technical Complex Systems (HUYNH)□ I218 Computer Architecture (TANAKA)◆ I419 Image Information Science (YOSHITAKA)◆ M222 Computational Material Design (TANIIKE･DAM･MIZUKAMI)◆ M423 Functional Protein Device (HIRATSUKA)□	K469 Knowledge Creation Support Media (NISHIMOTO)□ I239 Machine Learning (OKADA･HASEGAWA) I413E Theoretical Computer Science（HIROKAWA） I441 Advanced Computer Networks (UDA)□ M225 Instrumental Analytical Chemistry (SHINOHARA)◆ M614E Advanced Device Physics (OHDAIRA･HIROSE･MAEDA)□	

Irregular class schedule:

I465S Literacy in Information Security Management (FUJISAKI E･BEURAN･TAKAGI TSUYOSHI･KANNO･OMOTE･IZU)

4th period of every Wednesday and Friday in Terms 1-2 and Summer (Dates to be announced)

NOTE:

The class schedule of the courses with the assigned lecture rooms will be posted on the notice board next to the automatic certificate issuing machine before each term begins. It can also be viewed on the JAIST website (Education → Taking Courses → Class Schedule).

Class schedules for 2025-2026 (JAIST)

Term 1-2：**Class Term (June 12 – July 31) 4th - 5th**
Examination Term (August 1, August 4)

NOTE:
July 31 follows the Monday schedule.

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	4 15:20－17:00	5 17:10－18:50
Mon.		
Tue.	M232 Biophysics and Biophysical Chemistry (HAMADA)◆	
Wed.	K243 Media Design Workshop (MIYATA･KANAI･XIE･SATO･YUIZONO) I465S Literacy in Information Security Management (FUJISAKI E･BEURAN･TAKAGI TSUYOSHI･KANNO･OMOTE･IZU)	K243 Media Design Workshop (MIYATA･KANAI･XIE･SATO･YUIZONO)
Thu.	M232 Biophysics and Biophysical Chemistry (HAMADA)◆	
Fri.	I465S Literacy in Information Security Management (FUJISAKI E･BEURAN･TAKAGI TSUYOSHI･KANNO･OMOTE･IZU)	

Class schedules for 2025-2026 (JAIST)

NOTE:
November 4 follows the Monday schedule.
November 28 follows the Monday schedule.

Term 2-1：Class Term (October 10 – December 2) 1st - 3rd
Examination Term (December 3 – December 5)

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	1 9:00－10:40	2 10:50－12:30	3
Mon.	K502 Biological and Resource Management (YOSHIOKA) I226E Computer Networks (LIM) I427 System Control Theory (ASANO) I481 Software Development Laboratory for Highly Dependable Embedded Systems (SUZUKI M) I615E Robotics (CHONG)□ M413E Functional Nanomaterials (MAENOSONO·NAGAO·NISHIMURA S·TAKAHASHI)□ M623E Intelligent Robotic Systems (JI·NGUYEN(NHAN)·MIYAKO)	K228E Introduction to Knowledge Science (HASHIMOTO·DAM·HUYNH·NGUYEN(TOAN)) I111E Algorithms and Data Structures (SCHWARTZMAN)◆ I232 Information Theory (FUJISAKI H) I437E Coding Theory (KURKOSKI) M281E Solid State Physics and its Application to Electronics I (MURATA·AN·UEDA) M415 Medical Biomaterials (KURISAWA)◆	
Tue.	K417EJ Co-Creation with Data-Driven AI (DAM·GOKON)◆ K479 Service Management (SHIRAHADA)◆ I211 Mathematical Logic (TAKAGI TSUBASA)◆ I223 Natural Language Processing (INOUE)◆ I237E Formal Languages and Automata (TOMITA)◆ I448 Distance Learning System (HASEGAWA·OTA·GU)□ M261 Functional Biomolecules (TSUTSUI)◆ M420 Solid State Physics II (AKABORI)◆	K213 Methodology for Systems Science (GOKON)◆ K238E Introduction to Experimental Philosophy (MIZUMOTO)◆ I116E Fundamentals of Programming (CHONG·NGUYEN(NHAN))◆ I217E Functional Programming (OGATA·DO) I225 Statistical Signal Processing (HONGO)◆ M223 Properties of Organic Materials (NAGAO·GOTOH·AOKI K)◆	
Wed.	K611E Next-Generation Management of Technology (KOHDA·JAVED) I238 Computation Theory (UEHARA)◆ I489 Advanced Lectures on Public-Key Cryptography (FUJISAKI E) I491E Advanced Machine Learning (NGUYEN(LE)·TRAN) M111E Introduction to Physics (MIZUTANI)◆ M414 Device Physics (OHDAIRA)◆ M424 Polymer Chemistry II (MATSUMURA·YAMAGUCHI M)□	K502 Biological and Resource Management (YOSHIOKA) I226E Computer Networks (LIM) I427 System Control Theory (ASANO) I481 Software Development Laboratory for Highly Dependable Embedded Systems (SUZUKI M) I615E Robotics (CHONG)□ M413E Functional Nanomaterials (MAENOSONO·NAGAO·NISHIMURA S·TAKAHASHI)□ M623E Intelligent Robotic Systems (JI·NGUYEN(NHAN)·MIYAKO)	Tutorial Hours (13:30－15:10)
Thu.	K213 Methodology for Systems Science (GOKON)◆ K238E Introduction to Experimental Philosophy (MIZUMOTO)◆ I116E Fundamentals of Programming (CHONG·NGUYEN(NHAN))◆ I217E Functional Programming (OGATA·DO) I225 Statistical Signal Processing (HONGO)◆ M223 Properties of Organic Materials (NAGAO·GOTOH·AOKI K)◆	K417EJ Co-Creation with Data-Driven AI (DAM·GOKON)◆ K479 Service Management (SHIRAHADA)◆ I211 Mathematical Logic (TAKAGI TSUBASA)◆ I223 Natural Language Processing (INOUE)◆ I237E Formal Languages and Automata (TOMITA)◆ I448 Distance Learning System (HASEGAWA·OTA·GU)□ M261 Functional Biomolecules (TSUTSUI)◆ M420 Solid State Physics II (AKABORI)◆	
Fri.	K228E Introduction to Knowledge Science (HASHIMOTO·DAM·HUYNH·NGUYEN(TOAN)) I111E Algorithms and Data Structures (SCHWARTZMAN)◆ I232 Information Theory (FUJISAKI H) I437E Coding Theory (KURKOSKI) M281E Solid State Physics and its Application to Electronics I (MURATA·AN·UEDA) M415 Medical Biomaterials (KURISAWA)◆	K611E Next-Generation Management of Technology (KOHDA·JAVED) I238 Computation Theory (UEHARA)◆ I489 Advanced Lectures on Public-Key Cryptography (FUJISAKI E) I491E Advanced Machine Learning (NGUYEN(LE)·TRAN) M111E Introduction to Physics (MIZUTANI)◆ M414 Device Physics (OHDAIRA)◆ M424 Polymer Chemistry II (MATSUMURA·YAMAGUCHI M)□	

Irregular class schedule:

I466 Introduction to International Standardization (SHIMADA)
5th period of every Friday in Terms 2-1 and 2-2

I466S Advanced Information Security Theory and Application (MIYAJI·TARUTANI·OKUMURA)
Every Wednesday from 18:00 to 19:40 in Terms 2-1 and 2-2

NOTE:
The class schedule of the courses with the assigned lecture rooms will be posted on the notice board next to the automatic certificate issuing machine before each term begins. It can also be viewed on the JAIST website (Education → Taking Courses → Class Schedule).

Class schedules for 2025-2026 (JAIST)

Term 2-1：Class Term (October 10 – December 2) 4th - 5th

Examination Term (December 3 – December 5)

NOTE:
November 4 follows the Monday schedule.
November 28 follows the Monday schedule.

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	4 15:20－17:00	5 17:10－18:50
Mon.	I493 Research Ethics for AI/Humans I (HASEGAWA) N001 Fabrication of Nano-Devices with Training Course (AKABORI･SUZUKI T)	N001 Fabrication of Nano-Devices with Training Course (AKABORI･SUZUKI T)
Tue.	G213E Social Problems in Contemporary Japan (MOTOYAMA) M231 Bioorganic Chemistry (HOHSAKA･FUJIMOTO)◆ N002 Study on Nanobiotechnology with Training Course (HOHSAKA･TAKAMURA YUZURU･HIROSE)	N002 Study on Nanobiotechnology with Training Course (HOHSAKA･TAKAMURA YUZURU･HIROSE)
Wed.	N003 Analysis of Nano-Materials with Training Course (OHKI･YAMAGUCHI M･YAMAGUCHI T)	N003 Analysis of Nano-Materials with Training Course (OHKI･YAMAGUCHI M･YAMAGUCHI T)
Thu.	K244 Media Design Practice (SATO･KANAI･MIYATA･XIE･YUIZONO) G213E Social Problems in Contemporary Japan (MOTOYAMA) M231 Bioorganic Chemistry (HOHSAKA･FUJIMOTO)◆ N004 Structural Analysis of Solids on Nano-Scale with Training Course (MAENOSONO･GOTOH･AN･TAKAHASHI)	K244 Media Design Practice (SATO･KANAI･MIYATA･XIE･YUIZONO) N004 Structural Analysis of Solids on Nano-Scale with Training Course (MAENOSONO･GOTOH･AN･TAKAHASHI)
Fri.	S101 Innovation Theory and Methodology for Social Competencies (Required lecture faculty)◆ S102 Innovation Theory and Methodology for Creativity (Required lecture faculty)◆ * S102 will follow when S101 ends after 7 class meetings. S503 Innovation Theory and Methodology for Total Capability Development (Required lecture faculty)□ N005 Material Analysis with Training Course (SHINOHARA･YAMAMOTO･OKEYOSHI)	S101 Innovation Theory and Methodology for Social Competencies (Required lecture faculty)◆ S102 Innovation Theory and Methodology for Creativity (Required lecture faculty)◆ * S102 will follow when S101 ends after 7 class meetings. S503 Innovation Theory and Methodology for Total Capability Development (Required lecture faculty)□ I466 Introduction to International Standardization (SHIMADA) N005 Material Analysis with Training Course (SHINOHARA･YAMAMOTO･OKEYOSHI)

Class schedules for 2025-2026 (JAIST)

NOTE:
January 13 follows the Monday schedule.
February 4 follows the Friday schedule.

Term 2-2：Class Term (December 9 – February 4) 1st - 3rd

Examination Term (February 5, February 6)

※ ◆ indicates the course offered for Master's students in Division of Transdisciplinary Sciences. □ indicates the course offered for Doctoral students in Division of Transdisciplinary Sciences. The course without ◆ or □ is offered as the course in Division of Advanced Science and Technology.

	1 9:00－10:40	2 10:50－12:30	3
Mon.	I214E System Optimization (KURKOSKI)◆ I239E Machine Learning (NGUYEN(LE)･KERTKEIDKACHORN･RACHARAK) M282E New Materials Design and Synthesis (OKEYOSHI･YAMAMOTO･GOTOH)	K213E Methodology for Systems Science (HUYNH･LAM) I212E Analysis for Information Science (OKADA)◆ I482 Software Process Design for Highly Dependable Embedded Systems (SUZUKI M･AOKI T) M284E Solid State Physics and its Application to Electronics II (OSHIMA･SUZUKI T･AN)	Tutorial Hours (13:30－15:10)
Tue.	K214E Methodology for Knowledge Media (KANAI)◆ I218E Computer Architecture (INOGUCHI)◆ I219E Software Design Methodology (AOKI T･ISHII D)◆	K114E Introduction to Social Research Methods (JAVED) I233E Operating Systems (BEURAN)◆ I235E Game Informatics (IKEDA K･IIDA･HSUEH)◆ I450 Network Design Laboratory (LIM)	
Wed.	K414 Complex Systems Analysis (HASHIMOTO) K501E Advanced Topics on Creating Innovations (KIM) I213E Discrete Signal Processing (CHONG)◆ I440 Enhanced Operating Systems (TANAKA) M283E Biofunction and Organization (TAKAMURA YUZURU･KURISAWA･OHKI･HIRATSUKA･HIROSE)	I214E System Optimization (KURKOSKI)◆ I239E Machine Learning (NGUYEN(LE)･KERTKEIDKACHORN･RACHARAK) M282E New Materials Design and Synthesis (OKEYOSHI･YAMAMOTO･GOTOH)	
Thu.	K114E Introduction to Social Research Methods (JAVED) I233E Operating Systems (BEURAN)◆ I235E Game Informatics (IKEDA K･IIDA･HSUEH)◆ I450 Network Design Laboratory (LIM)	K214E Methodology for Knowledge Media (KANAI)◆ I218E Computer Architecture (INOGUCHI)◆ I219E Software Design Methodology (AOKI T･ISHII D)◆	
Fri.	K213E Methodology for Systems Science (HUYNH･LAM) I212E Analysis for Information Science (OKADA)◆ I482 Software Process Design for Highly Dependable Embedded Systems (SUZUKI M･AOKI T) M284E Solid State Physics and its Application to Electronics II (OSHIMA･SUZUKI T･AN)	K414 Complex Systems Analysis (HASHIMOTO) K501E Advanced Topics on Creating Innovations (KIM) I213E Discrete Signal Processing (CHONG)◆ I440 Enhanced Operating Systems (TANAKA) M283E Biofunction and Organization (TAKAMURA YUZURU･KURISAWA･OHKI･HIRATSUKA･HIROSE)	

Irregular class schedule:

I466 Introduction to International Standardization (SHIMADA)
5th period of every Friday in Terms 2-1 and 2-2

I466S Advanced Information Security Theory and Application (MIYAJI･TARUTANI･OKUMURA)
Every Wednesday from 18:00 to 19:40 in Terms 2-1 and 2-2

NOTE:

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Class schedules for 2025-2026 (JAIST)

Term 2-2：**Class Term (December 9 – February 4) 4th - 5th**

Examination Term (February 5, February 6)

NOTE:
January 13 follows the Monday schedule.
February 4 follows the Friday schedule.

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	4 15:20－17:00	5 17:10－18:50
Mon.	I494 Data Science Practical Exercise I (INOUE)	
Tue.	I662E Data Science Practical Exercise II (KERTKEIDKACHORN)	
Wed.		
Thu.	I495 Machine Learning Laboratory I (SHIRAI)	
Fri.		I466 Introduction to International Standardization (SHIMADA)

4 Time Table of the Examination Term for 2025-2026 （JAIST）

Examinations of the courses for 2025-2026 are held as the following schedule.

【Term1-1】

	1st period 9:00-10:40	2nd period 10:50-12:30	3rd period 13:30-15:10	4th period 15:20-17:00	5th period 17:10-18:50
June 5(Thu.)	Tuesday 2nd period	Tuesday 1st period		Tuesday 4th period	Tuesday 5th period
June 6(Fri.)	The last class of S102 and S503				
June 9(Mon.)	Monday 1st period	Monday 2nd period	Wednesday 1st period	Monday 4th period	Monday 5th period

【Term1-2】

	1st period 9:00-10:40	2nd period 10:50-12:30	3rd period 13:30-15:10	4th period 15:20-17:00	5th period 17:10-18:50
August 1(Fri.)	Tuesday 2nd period	Tuesday 1st period		Tuesday 4th period	Tuesday 5th period
August 4(Mon.)	Monday 1st period	Monday 2nd period	Wednesday 1st period	Monday 4th period	Monday 5th period

【Term2-1】

	1st period 9:00-10:40	2nd period 10:50-12:30	3rd period 13:30-15:10	4th period 15:20-17:00	5th period 17:10-18:50
December 3(Wed.)	Wednesday 1st period	Monday 1st period	Monday 2nd period	Monday 4th period	Monday 5th period
December 4(Thu.)	Tuesday 2nd period	Tuesday 1st period		Tuesday 4th period	Tuesday 5th period
December 5(Fri.)	The last class of S102 and S503				

【Term2-2】

	1st period 9:00-10:40	2nd period 10:50-12:30	3rd period 13:30-15:10	4th period 15:20-17:00	5th period 17:10-18:50
February 5(Thu.)	Tuesday 2nd period	Tuesday 1st period		Tuesday 4th period	Tuesday 5th period
February 6(Fri.)	Monday 2nd period	Wednesday 1st period	Monday 1st period	Monday 4th period	Monday 5th period

Contact:
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