Guide to Courses for science/engineering graduate students

1. Schools and Programs

There are six schools for science/engineering graduate students at Institute of Science Tokyo (the 'Institute'): School of Science, School of Engineering, School of Materials and Chemical Technology, School of Computing, School of Life Science and Technology, and School of Environment and Society. Each school offers a two-year master's degree program and a three-year doctoral degree program. In addition, a two-year professional master's degree program in the Department of Technology and Innovation Management is offered by the School of Environment and Society. (Articles 2 and 6 of the Institute of Science Tokyo Graduate School Regulations, "Graduate School Regulations")

2. Semesters and Quarters (1Q, 2Q, 3Q, 4Q)

The Institute's academic year commences on April 1 and ends on March 31 of the following year. The spring semester is from April to the fourth or fifth week of September (the exact date is specified by the president every year). The fall semester starts from the day after the last day of the spring semester and ends on the last day of March of the following year. Each semester is divided into two quarters. The length of most of the courses offered at the Institute is one quarter.

The first quarter (1Q) begins in early April and ends in early June, the second quarter (2Q) starts in early June and finishes in early August, the third quarter (3Q) begins in late September and ends in late November, and the fourth quarter (4Q) starts in late November and finishes in early February the following year. The specific dates for each semester and quarter are announced on the Institute's website as well as through other means of communication.

3. Education

Graduate level education is composed of courses and thesis supervision. (Article 32 of the Graduate School Regulations)

4. Academic Supervisors and Academic Advisors

4-1 Academic Supervisors and Academic Advisors

Each student is appointed an academic supervisor who supervises his or her studies upon enrollment in a graduate program. Additionally, two faculty members are appointed as academic advisors. They assist the student with his or her research as experts and specialists as well as give advice on all aspects of student life.

4-2 Changing Academic Supervisors

To ensure proper academic supervision, each student is appointed an academic supervisor who is a faculty member at the department

in which his or her chosen graduate major is offered, or is a faculty member at the Department of Technology and Innovation Management if he or she is enrolled in the professional master's degree program.

However, if a legitimate learning-related reason is provided and approval is given, it is possible to change academic supervisors. (Article 2 of the Institute of Science Tokyo Rules on Graduate Learning, “Rules on Graduate Learning”)

4-3 Procedures to Change Academic Supervisor

Academic supervisors can be changed by submitting Course Administration Form No. 1 to either the Graduate Services Group, Ookayama Campus or the Suzukakedai Student Group, Suzukakedai Campus, of the Student Division (collectively, “Student Division Office”). This form must be approved by both the current and new academic supervisors as well as by the head of graduate studies of the graduate major the student has chosen.

5. Courses and Course Numbers

5-1 Course Numbers

Each course is assigned a systematic course number, ranging from 100- to 600-level, which indicates the learning level and sequence. Courses in the 400- and 500-level are master's level courses and 600-level courses are doctoral level courses. Please refer to Course Numbering System (Section 17) below for further details.

5-2 Core Courses of the Graduate Major Standard Curriculum

Course and credit details of the standard curriculum for each graduate major are available under the section of “Guide to Graduate Majors (for IGP)” in the Guide to Graduate Education and International Graduate Program. (Be sure to check the course timetable as course names and other details may change while the student is enrolled.)

5-3 Liberal Arts and Basic Science Courses

The following Liberal Arts and Basic Science Courses are offered as common courses among all Schools: Humanities and Social Science Courses, English Language Courses, Second Foreign Language Courses, Japanese Language and Culture Courses, Teacher Education Courses, Entrepreneurship Courses, and Breadth Courses. Course description and credit details for these courses can befound under the section of “Liberal Arts and Basic Science Courses” in the Guide to Graduate Education and International Graduate Program.

5-4 Courses That Can Be Counted as Humanities and Social Science Courses or Entrepreneurship Courses

Courses that are recognized as being equivalent to Humanities and Social Science Courses or Entrepreneurship Courses, such as graduate major courses, can be counted as Humanities and Social Science Courses or Entrepreneurship Courses. However, when these courses are to fulfill completion requirements, credits for these courses cannot be counted as credits earned for the course subcategories to which these courses belong. (Article 2 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

1. Of the Major Courses and Research-Related Courses of graduate majors, those that are recognized as being equivalent to Humanities and Social Science Courses or Entrepreneurship Courses can be counted as the Humanities and Social Science Courses or Entrepreneurship Courses that are specified for the graduate majors. (Refer to each graduate

major's Study Guide under the section of "Guide to Graduate Majors (for IGP)" in the Guide to Graduate Education and International Graduate Program.)

2. Of the Japanese Language and Culture Courses (these can only be taken by international students), those that are recognized as being equivalent to Humanities and Social Science Courses can be counted as Humanities and Social Science Courses. (Refer to "Japanese Language and Culture Courses" under the section of "Liberal Arts and Basic Science Courses" in the Guide to Graduate Education and International Graduate Program.)

5-5 Classification of Credits

Courses are prescribed with a set number of credits. These credits are divided into three components: lectures, exercises, and experiments. For example, a "2-1-0" credit course is a course in which 2 credits are for lectures, 1 credit for exercises, and 0 credits for experiments (i.e., the course doesn't have any experiments). When course credits are written in this format, the left number is always the number of credits for lectures, the middle number is always the number of credits for exercises, and the right number is always the number of credits for experiments.

5-6 Course Registration Period

In each graduate major, courses, and in particular those that have a prescribed period in which to take the courses, must be taken in the specified quarter and/or sequence. However, if a student wishes to take a course in a different quarter and/or sequence due to unavoidable circumstances, Course Administration Form No. 2, approved by the academic supervisor, must be submitted to the Student Division Office during the course registration period in each semester.

5-7 Required Courses

Research Seminars are required courses for master's degree, doctoral degree, and professional master's degree students (Article 2 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies), and as a general rule, the students' academic supervisor is in charge of the courses. Moreover, somegraduate majors have other courses set as required courses. Students must check IGP (A) or IGP (C) Completion Requirements and Courses in the Guide to Graduate Education and International Graduate Program.

5-8 Special Lectures

Course and credit details of Special Lectures for each graduate major will be decided and announced through notices and other means of communication every time a Special Lecture course is offered.

5-9 Courses That Do Not Count Toward Completion Requirements

Among the Liberal Arts and Basic Science Courses, the liberal arts courses for special graduate degree programs do not count toward completion requirements of a graduate major.

6. Learning Plan and Course Registration

6-1 Learning Plan

Students must thoroughly consult with their academic supervisor when designing their learning plan for the duration of their study.

As a general rule, master's degree and professional master's degree students are required to select courses from among the 400- and 500-level courses that are part of the completion requirements when designing their study plan.

Master's degree and professional master's degree students who intend to advance to a doctoral degree program are permitted to register 600-level courses after passing the Research Plan Presentation for their graduate major. (Credits earned from 600-level courses, excluding Humanities and Social Science Courses, Entrepreneurship Courses, and Research Seminars can be transferred to the doctoral degree program after entrance, and if approved by a committee in charge of the graduate major.)

However, credits earned from 600-level courses cannot be counted as part of the current degree program's completion requirements.

Furthermore, 100- to 300-level undergraduate courses can be taken as part of a graduate minor, but credits from these courses cannot be counted as part of the master's degree or professional master's degree program's completion requirements.

6-2 Course Registration

Course registration is mandatory to attend courses. Even if the student only takes Research Seminars or is not going to take any courses, registration procedures must be completed.

6-3 Course Registration Procedures

Students are required to register courses for each quarter through the Web System for Students and Faculty. Registration must be completed during the specified registration period after getting approval from the academic supervisor. This also applies to bachelor's level courses. (Article 4of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

If courses that have overlapping class days and periods are selected on the Web System, an error message stating "Overlapping Registration not approved" will appear, and one of the two courses must be deselected. Overlapping registration will not occur for courses such as Research Seminars, intensive courses, internships, etc. as their class days and periods are not indicated on the Web System.

For master's degree and professional master's degree students to count graduate level course credits, attained during their undergraduate, towards the completion of their degree, registering the completed courses onto the Web System is required. Submit Course Administration Form No. 8 along with the course registration. (Refer to sections 8-4 and 10-4 of the Exceptions to Accreditation for Master's Degree Programs and Professional Master's Degree Program, respectively.) The "overlapping" error message can be disregarded if the conflicting courses include one that has been completed and is awaiting accreditation, and one that has not yet been taken. In such cases, select and save the two courses, and submit Form No. 8 via "Submitting Course Registration" on the Web System. An overlapping error will not occur if the application status is either "Awaiting Approval" or "Approved".

To register graduate courses offered at universities with exchange agreements, students are required to fill out the Application to Register a Course at a Partner University (available at the Student Division Office) and submit this application to the Student Division Office. This application must be submitted by the specified deadline of each semester. (Article 10 of the Rules on Graduate Learning) Submission periods and deadlines are announced on the Student Service's bulletin board.

6-4 Measures to Take When a Student Fails to Register Courses within the Specified Course Registration Period

If a student fails to complete course registration within the specified period due to sickness, leave of absence, study abroad, or other reasons, please consult the Student Division Office as soon as possible.

6-5 Additional Course Registration

If additional courses need to be registered after the course registration deadline due to unavoidable circumstances, an application for course addition is needed. If approved by the instructor, the course addition must be done by the fifth scheduled class for every course offered in that quarter. The exact date can be found on the timetable (Article 4 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies).

Unavoidable circumstances mean the following.

i. When the student wishes to register courses that are offered in the middle of the semester (e.g., Special Lectures)
ii. When the academic supervisor deems it necessary

6-6 Course Cancellation

If registered courses need to be canceled after the course registration deadline, it must be done by the third scheduled class for every course offered in that quarter. The exact date can be found on the timetable. Regardless of reason, students will not be able to cancel courses after this deadline. If a student is unable to complete course cancellations within the specified period due to sickness or other unavoidable circumstances, be sure to consult the Student Division Office before the cancellation deadline. (Article 4 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

6-7 Addition and Cancellation of Intensive Courses

For intensive courses, the additional registration and cancellation deadlines are the final class day of the intensive course, irrespective of the provisions in 6-5 and 6-6 above. However, students must note that deadlines for intensive courses can become earlier than the deadlines for regular courses if the intensive courses are offered during the regular academic quarter or semester.

6-8 Maximum Number of Credits That Can Be Registered

The maximum number of credits that can be registered by professional master's degree program students is twenty-two per semester. (Article 6 of the Rules on Graduate Learning)

7. Grades

7-1 Course Evaluation

Courses are evaluated comprehensively through evaluations, such as final exams, which are based on the objectives, forms, and contents of the courses. Credits for courses are awarded by semester.

Course grades are shown as scores from 0 to 100, where 60 is the passing score, and signifies accreditation of course credits. Students cannot cancel nor retake courses once credits have been awarded. (Article 7 of the Rules on Graduate Learning)

7-2 Checking Grades

Credits are awarded by semester, but grades are released every quarter on the specified dates on the Web System for Students and Faculty.

7-3 Confirming Grades and Filing a Complaint over Issued Grade

Students can directly consult faculty members (or go through the Student Division Office) if they wish to confirm or ask questions

about the issued grade.

Additionally, students can file a complaint if they feel the explanation provided is insufficient. Grade confirmation must be requested within ten days of grade issuance, and within three days for matters pertinent to graduation or degree completion. If a student chooses to file a complaint, it must be done within three days of grade confirmation. Refer to the Institute of Science Tokyo Detailed Regulations on Course Grade Confirmation and Appeal for details.

However, complaints are only processed when they are deemed rational and are supported by evidence. The system has not been put in place to offer salvation or accept pleas from students who simply seek re-evaluation or to deal with complaints that lack specific details. The following are examples of acceptable and unacceptable complaints.

1. Acceptable complaints
   i. Apparent human error (e.g., faculty member recording a wrong grade)
   ii. Grade clearly fails to adhere to the evaluation criteria stated in the course syllabus

2. Unacceptable complaints
   i. Personal pleas made by a student to a faculty member (e.g., the issued grade will affect my chances of graduation.)
   ii. Comparing scores with classmate* (e.g., why did I get 70 when my classmate got 80?)
   iii. Questioning the issued grade while lacking rationale or evidence* (e.g., why did I only get 60 when I tried really hard?)

*For cases ii and iii in 2 above, a student can request grade confirmation or file a complaint if it is a rational claim and supported by evidence.

8. Master's Degree Program

8-1 Completion Requirements

Completion of the master's degree program requires the student to have (1) been enrolled in a master's degree program for at least two years, (2) attained thirty credits or more, (3) received adequate research supervision, and (4) passed the master's thesis review and defense. (Article 43 of the Graduate School Regulations)

Provisions regarding completion are outlined in 8-2 to 8-4 and 8-6 below. In addition, students who show outstanding academic performance are subject to the provisions under 8-5, which stipulates exceptions to the enrollment period.

8-2 Limit on Enrollment Period

The standard duration of a master's degree program is two years but can be extended to a maximum of four years (excluding periods under leave of absence). (Article 8 of the Graduate School Regulations)

8-3 Accreditation

Students must attain a minimum of thirty credits (Article 43 of the Graduate School Regulations) while fulfilling the completion requirements specified for the graduate major as well as those listed below to complete their master's degree program. (Article 14 of

the Rules on Graduate Learning)

1. At least eighteen credits must be attained from among the 400- and 500-level Core Courses of the standard curriculum of the graduate major.
2. At least two credits must be attained from 400-level Humanities and Social Science Courses of the Liberal Arts and Basic Science course category, and one credit from 500-level Humanities and Social Science Courses. (This includes courses that are recognized as Humanities and Social Science Courses under Article 10 of Institute of Science Tokyo Detailed Regulations on Graduate School Studies .)
3. At least two credits must be attained from among the 400- or 500-level Entrepreneurship Courses of the Liberal Arts and Basic Science course category. (This includes courses that are recognized as Entrepreneurship Courses under Article 10 of Institute of Science Tokyo Detailed Regulations on Graduate School Studies .)
4. The remaining credits, which are not specified in the preceding three provisions, must be attained from other graduate level courses (400 or 500-level).

Students need to be aware that course credits that do not comply with the aforementioned provisions are not counted as credits that fulfill degree completion requirements.

8-4 Exceptions to Accreditation

Students who advanced from a bachelor's to a master's degree program within the Institute, who were permitted to register graduate level courses and attained credits for these during their bachelor's studies, may count these credits toward their master's degree program completion requirements if the courses are still offered at the Institute.

In order to receive approval for accreditation, students must submit Course Administration Form No. 8 and their registration for the courses in the semester in which they are offered to the Student Division Office.

8-5 Exceptions to Enrollment Period

Master's degree students may shorten their duration of study from the standard two years to a minimum of one year on the condition that (1) the Institute recognizes that they have demonstrated exceptional academic achievements or (2) the Institute permits them to count credits attained during their bachelor's studies toward their master's degree program completion requirements and determines that their duration of study can be shortened based on the number of those credits, the time taken to attain them, etc.

Students to whom this exception applies will be exempted from acquiring course credits that must be attained from Research Seminars. However, they are required to complete the Research Seminars they are taking in their final semester. If a student intends to complete his or her master's degree program in the middle of a semester, completion of the Research Seminars taken in the prior semester will be sufficient. (Article 13 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

Research Seminar course credits not acquired due to the shortened study period cannot be waived from credit requirements, i.e., thirty credits or more required to complete the master's program (8-3 Accreditation). However, they may be waived from the credit requirements, i.e., eighteen credits or more, to be attained from the Core Courses of the standard curriculum of the graduate major (8-3 Accreditation, item 1).

8-6 Master’s Thesis Review

Master's students who expect to fulfill the master’s degree program completion requirements and wish to have their thesis reviewed must apply for this process. Application documents for thesis review must be submitted while the student is enrolled in the degree program. The deadline to submit the documents is as follows. (Article 2 of the Detailed Regulations on Degree Examination)

December (for those intending to complete their studies in March)

March (for those intending to complete their studies in June)

June (for those intending to complete their studies in September)

September (for those intending to complete their studies in December)

The Student Division Office informs details regarding the procedures and schedule for degree completion to the student's academic supervisor, who then notifies the student. For further details on the master’s thesis review, refer to the Institute of Science Tokyo Degree Regulations and the Institute of Science Tokyo Detailed Regulations on Handling of Master’s, Doctoral, and Professional Master’s Degree Program Examinations .

8-7 Independent Research Project

Students who have chosen the seamless degree program have the option to submit a master’s thesis or an Independent Research Project, which is decided by the graduate majors (Independent Research Projects may not always be accepted). Independent Research Projects require students to select a research topic for a doctoral dissertation and prepare, for example, the introduction and subsequent chapters. This project assesses whether the student has acquired the research skills expected of a master’s student, as well as to evaluate whether he or she is capable of conducting independent research to complete a dissertation at the doctoral level.

8-8 Advancement Assessment for Doctoral Degree Program

Those who reside in a master's degree program of the Institute and intend to advance to a doctoral degree program must submit a Doctoral Degree Internal Application Form by the specified deadline to the Student Office of the school at which enrollment is desired. The deadline is announced by the academic supervisors as well as by bulletins, etc.

Students are required to pass the advancement assessment held by the respective schools in order to be accepted to a doctoral degree program. (Article 15 of the Rules on Graduate Learning) Furthermore, depending on which graduate major they wish to enroll in, students may be required to take an additional foreign language examination. (Refer to Foreign Language Examination for Advancing to a Doctoral Degree Program in the Guide to Graduate Education and International Graduate Program.)

8-9 Awarded Degree and Field of Study

Students who have completed the master's degree program are awarded a master's degree. (Article 47 of the Graduate School Regulations)

For each graduate major, the field of study that is stated on the degree certificate is determined by the student’s affiliated department. If the graduate major encompasses multiple fields of study, the student must decide a specific field of study that is to be stated on his or her degree certificate, as only one field of study can be stated on the degree certificate. Students are advised to consult with their academic supervisor before deciding their field of study.

Additionally, a student may specify Master of Arts as the degree title if he or she engaged in interdisciplinary research that was approved by the school. (Article 47 of the Graduate School Regulations)

9. Doctoral Degree Program

9-1 Completion Requirements

Completion of the doctoral degree program requires the student to have (1) resided in a graduate school for over five years (Of these, at least two years must be spent in a master's degree or professional master's degree program. For those who have completed an aforementioned program, two years enrolled in the program is included.), (2) attained fifty-four credits or more (of which at least twenty-four are from the doctoral degree program), (3) received adequate research supervision, and (4) passed the doctoral dissertation review and defense. (Article 44 of the Graduate School Regulations)

Provisions regarding completion are outlined in 9-2, 9-3, and 9-5 below. In addition, students who show outstanding academic performance are subject to the provisions under 9-4, which stipulates exceptions to the enrollment period.

9-2 Limit on Enrollment Period

The standard duration of a doctoral degree program is three years but can be extended to a maximum of six years (excluding periods under leave of absence). (Article 8 of the Graduate School Regulations)

9-3 Accreditation

Students must attain a minimum of fifty-four credits (Article 44 of the Graduate School Regulations) while fulfilling the completion requirements specified for the graduate major as well as those listed below to receive a doctorate (i.e., complete a master's degree or professional master's degree program, and a doctoral degree program). (Article 12 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

1. Twelve credits must be attained from 600-level Research Seminars of the Core Courses of the standard curriculum of the graduate major.
2. At least two credits must be attained from 600-level Humanities and Social Science Courses of the Liberal Arts and Basic Science course category. (This includes courses that are recognized as Humanities and Social Science Courses under Article 12 of theInstitute of Science Tokyo Detailed Regulations on Graduate School Studies .
3. At least four credits must be attained from 600-level Entrepreneurship Courses of the Liberal Arts and Basic Science course category. (This includes courses that are recognized as Entrepreneurship Courses under Article 12 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies .) However, credits for these courses can be replaced with credit for courses that are regarded as equivalent to Career Development Courses of the Liberal Arts and Basic Science Courses under Articles 12.3, of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies .
4. The remaining credits, which are not specified in the preceding three provisions, must be attained from other graduate level courses (600-level).

9-4 Exceptions to Enrollment Period

The completion of a doctoral degree program requires a minimum of five years of enrollment, which includes the period enrolled in a master's degree program. However, students who show outstanding academic performance can shorten their duration of study to three years, including the period enrolled in a master's degree program.

Students who have been admitted to a doctoral degree program upon being recognized as possessing the knowledge and skills equivalent to or greater than that of a master's degree holder must remain in the program for a minimum of three years. However, a student may shorten this duration to a minimum of one year if he or she shows outstanding academic performance and gets approval from the school to which he or she is affiliated.

Refer to the Handling of Completion of Doctoral Degree Program by Students Who Show Outstanding Academic Performance as Stipulated in the Provisions of Articles 44.1 and 44.3 of the Graduate School Regulations for further details.

Students to whom this exception applies will be exempted from acquiring course credits that must be attained from Research Seminars. However, they are required to complete the Research Seminars they are taking in their final semester. If a student intends to complete a doctoral degree program in the middle of a semester, completion of the Research Seminars taken in the prior semester willbe sufficient. Research Seminar course credits not acquired due to the shortened study period can be waived from credit requirements,i.e., fifty-four credits or more, of which at least twenty-four are from the doctoral degree program, notwithstanding the provisions in 9-3. (Article 14 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

9-5 Doctoral Dissertation Review

Doctoral students who expect to fulfill the doctoral degree program completion requirements and wish to have their dissertation reviewed must apply for this process. Application documents for dissertation review must be submitted while the student is enrolled in the degree program. The deadline to submit the documents is as follows. (Article 13 of the Detailed Regulations on Degree Examination)

- December (for those intending to complete their studies in March)
- March (for those intending to complete their studies in June)
- June (for those intending to complete their studies in September)
- September (for those intending to complete their studies in December)

The Student Division Office informs details regarding the procedures and schedule for degree completion to the student's academic supervisor, who then notifies the student. For further details on the doctoral thesis review, refer to the Institute of Science Tokyo Detailed Regulations on Handling of Master's, Doctoral, and Professional Master's Degree Program Examinations .

9-6 Awarded Degree and Field of Study

Students who have completed the doctoral degree program are awarded a doctoral degree. (Article 47 of the Graduate School Regulations)

For each graduate major, the field of study that is stated on the degree certificate is determined by the student's affiliated department. If the graduate major encompasses multiple fields of study, the student must decide a specific field of study that is to be stated on his or her degree certificate, as only one field of study can be stated on the degree certificate. Students are advised to consult with their

academic supervisor before deciding their field of study.

Additionally, a student may specify Doctor of Philosophy as the degree title if he or she engaged in interdisciplinary research that was approved by the school. (Article 47 of Graduate School Regulations)

9-7 Exceptions to Degree Conferment

The exceptions below apply to doctoral students who could not complete or did not apply for dissertation review while enrolled in the degree program. However, those who seek to complete their doctoral degree program after the application period for the exceptions has expired must apply for Degree Conferment by Dissertation Submission. (Articles 24 and 25 of the Detailed Regulations on Degree Examination)

i. A doctoral student who withdraws from the Institute after having (1) resided in a doctoral degree program for over three years, (2) attained the necessary credits for degree completion, and (3) applied to have their dissertation reviewed is awarded a doctoral degree if he or she passes the dissertation review. (Article 24 of the Detailed Regulations on Degree Examination)

ii. A doctoral student who withdraws from the Institute after having resided in a doctoral degree program for over three years and attained the necessary credits for degree completion is awarded a doctoral degree if the following conditions are met: the student has submitted his or her dissertation and has begun procedures to have it reviewed within four years* of his or her withdrawal, and then passes the dissertation review and academic ability assessment. (Article 25 of the Detailed Regulations on Degree Examination)

*This four-year period only applies to doctoral students affiliated to a school who withdraw from the Institute under the aforementioned circumstances on or after May 10, 2019. In all other cases, the period is two years.

9-8 Dual Degree Program

Doctoral students (excluding those of the Department of Innovation Science, School of Environment and Society), who are also enrolled in the professional master's degree program can attain both degrees under the dual degree program.

Students can join the dual degree program at the start of each semester.

10. Professional Master's Degree Program

10-1 Completion Requirements

Completion of the professional master's degree program requires the student to have (1) been enrolled in the program for at least two years, (2) attained forty or more credits, and (3) take courses from other degree programs. (Article 46 of the Graduate School Regulations)

Provisions regarding completion are outlined in 10-2, 10-3, and 10-6 below.

Students who transferred credits attained before enrolling in the professional master’s degree program are subject to the provisions under 10-4, which stipulates exceptions to the enrollment period.

10-2 Limit of Enrollment Period

The standard duration of the professional master's degree program is two years but can be extended to a maximum of four years (excluding periods under leave of absence). (Article 8 of the Graduate School Regulations)

However, the duration of enrollment can be shortened to between one and under two years if the student has practical work experience prior to enrollment and furthermore, is able to attend and do, in addition to standard daytime education, lectures and coursework in the evenings or other times and successfully demonstrate his or her academic competence. (Article 6 of the Graduate School Regulations)

10-3 Accreditation

Students must attain a minimum of forty credits (Article 46 of the Graduate School Regulations) while fulfilling the completion requirements specified for the affiliated degree program as well as those listed below to complete their professional master's degree program. (Article 11of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

1. At least twenty-five credits must be attained from among the Core Courses of the standard curriculum of the Graduate Major in Technology and Innovation Management.

2. At least two credits must be attained from 400-level Humanities and Social Science Courses of the Liberal Arts and Basic Science course category, and one credit from 500-level Humanities and Social Science Courses.

(This includes courses that are recognized as Humanities and Social Science Courses under Article 11 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies .)

3. At least two credits must be attained from among the 400- and 500-level Entrepreneurship Courses of the Liberal Arts and Basic Science course category. (This includes courses that are recognized as Entrepreneurship Courses under Article 11 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies .)

4. The remaining credits, which are not specified in the preceding three provisions, must be attained from other graduate level courses (400 or 500-level).

Students need to be aware that course credits that do not comply with the aforementioned provisions are not counted as credits that fulfill degree completion requirements.

10-4 Exceptions to Accreditation

Students who advanced from a bachelor's to the professional master's degree program within the Institute, who were permitted to register graduate level courses and attained credits for these during their bachelor's studies, may count these credits toward their professional master's degree program completion requirements if the courses are still offered at the Institute.

In order to receive approval for accreditation, students must submit Course Administration Form No. 8 and their registration for the courses in the semester in which they are offered to the Student Division Office.

10-5 Exceptions to Enrollment Period

The standard duration of a professional master's degree program is two years. However, a student can be approved as having been enrolled in the professional master's degree program for up to one year if the school accepts the course credits attained by the student before enrolling in the program, and furthermore, if the faculty council considers these courses to be equivalent to courses offered by the professional master's degree program. The number of credits that are accepted, the duration of the courses, as well as other factors are considered to determine the length of time by which enrollment is reduced. (Article 46 of the Graduate School Regulations)

Students to whom this exception applies will be exempted from acquiring course credits that must be attained from Research Seminars. However, they are required to complete the Research Seminars they are taking in their final semester. If a student intends to complete his or her professional master's degree program in the middle of a semester, completion of the Research Seminars taken in the prior semester will be sufficient. (Article 13 of the Institute of Science Tokyo Detailed Regulations on Graduate School Studies)

Research Seminar course credits not acquired due to the shortened study period cannot be waived from credit requirements, i.e., forty credits or more required to complete the professional master's degree program (10-3 Accreditation). However, they may be waived from the credit requirements, i.e., twenty-five credits or more, to be attained from the Core Courses of the standard curriculum of the Graduate Major in Technology and Innovation Management (10-3 Accreditation, item 1).

10-6 Project Report Review

Professional master's degree students who expect to fulfill the professional master's degree program completion requirements and wish to have their project report ("report") reviewed must apply for this process. Application documents for report review must be submitted while the student is enrolled in the degree program. The deadline to submit the documents is as follows. (Article 40 of the Detailed Regulations on Degree Examination)

- December (for those intending to complete their studies in March)
- March (for those intending to complete their studies in June)
- June (for those intending to complete their studies in September)
- September (for those intending to complete their studies in December)

The Student Division Office informs details regarding the procedures and schedule for degree completion to the student's academic supervisor, who then notifies the student. For further details on the report, refer to the Institute of Science Tokyo Detailed Regulations on Handling of Master's, Doctoral, and Professional Master's Degree Program Examinations.

10-7 Advancement Assessment for Doctoral Degree Program

Those who reside in the professional master's degree program of the Institute and intend to advance to a doctoral degree program must submit a Doctoral Degree Internal Application Form by the specified deadline to the Student Office of the school at which enrollment is desired. The deadline is announced by the academic supervisors as well as by bulletins, etc. Students are required to pass the advancement assessment held by the respective schools in order to be accepted to a doctoral degree program. (Article 15 of the Rules on Graduate Learning) Furthermore, depending on which graduate major they wish to enroll in, students may be required to take an additional foreign language examination. (Refer to Foreign Language Examination for Advancing to a Doctoral Degree Program in the Guide to Graduate Education and International Graduate Program.)

10-8 Degree Awarded and Field of Study

Students who have completed the professional master's degree program are awarded a Master of Management of Technology. (Article 47.1 of the Graduate School Regulations)

11. Courses Taken and Credits Attained at Other Universities

11-1 Special Audit Students

Students can earn course credits offered at graduate schools of other domestic universities as special audit students. (Article 10 of the Rules on Graduate Learning) Furthermore, when the Institute has exchange agreements with other universities, students can attend courses at the graduate schools of these universities and earn credits that can be counted as part of the completion requirements of their degree program. (Refer to Exchange Agreement [Section 14])

Registration procedures can be found under Course Registration Procedures (6-3) and Exchange Agreement (Section 14).

11-2 Study Abroad

Students who intend to study abroad to fulfill the completion requirements of their enrolled school's curriculum must receive approval from their academic supervisor and the head of graduate studies of their graduate major, and submit the specified form, along with the Study Abroad Plan and the notification of acceptance from the overseas university, to the Student Division Office. (Article 26 of the Graduate School Regulations)

There are other means by which a student can study abroad. Exchange programs are offered by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and there are programs offered by foreign embassies in Japan. Students can also choose to study abroad at their own expense.

The duration a student can study abroad is as follows, which is in accordance with the Graduate School Regulations as well as the Institute of Science Tokyo Rules on Study Abroad for Graduate Students .

i. The duration a student can study abroad must not exceed one year. However, exceptions can be made for master's degree and professional master's degree students, who may extend their study abroad to up to eighteen months, and for doctoral degree students, who may extend their study abroad to up to twenty-four months, upon approval.
   Master's degree and professional master's degree students who have studied abroad for over a year are required to submit a document, written by their academic supervisor, which outlines the objectives of and what was achieved from the study abroad, and how this contributed to the students' degree completion.
   The period a student spends studying abroad is counted as part of his or her enrollment period at the Institute.
ii. Upon returning to Japan, the student must promptly submit a Study Abroad Completion Report as well as the certificate issued by the overseas university showing his or her academic activities and accomplishments during his or her time at the university to the Student Division Office.
iii. The student's academic achievements during his or her time at the overseas university can, in some cases, be recognized as fulfilling graduate-level course requirements. This may require submission of a request as specified by the Institute along with academic transcripts issued by the overseas university. Upon approval, the student will be awarded credits for the respective courses.
iv. Procedures to have course credits that were attained at an overseas university while the student was on leave accredited at the

Institute will follow the procedures for accreditation of credits earned while studying abroad. A student who wishes to have course credits attained while on a leave of absence accredited at the Institute must submit a study plan that indicates the courses he or she plans to take in advance.

11-3 Accreditation of Graduate Level Credits Attained before Enrolling at the Institute

Students who wish to have graduate level course credits attained at another university before they enrolled at the Institute accredited must obtain the Accreditation Approval Form from the Student Division Office and submit this together with the academic transcript and course syllabi of the courses in which credits were attained to their academic supervisor by the end of April. (For students who enrolled in September, these documents must be submitted by the end of October.)

11-4 Limit on Accreditation of Attained Course Credits

Accreditation for the master's degree and doctoral degree program is limited to fifteen credits in total for 11-1 and 11-2, and fifteen creditsfor 11-3, however, limited to twenty credits in total for 11-1, 11-2, and 11-3. Accreditation for the professional master's degree program is limited to fifteen credits in total for 11-1, 11-2, and 11-3.

12. Interdisciplinary Learning

12-1 Progressive Graduate Minors

Progressive graduate minors, which can be taken by master's degree, doctoral degree, and professional master's degree students, are transversal and flexible programs that address the latest technological and social challenges. Multiple graduate majors collaborate to offer progressive graduate minors, which aims to equip students with practical skills through the latest educational methods.

For details on progressive graduate minors that are offered, refer to Progressive Graduate Minors (Chapter V of the Japanese version of this Guide).

A certificate of completion is issued to students after they satisfy all requirements for the completion of relevant minors.

12-2 Graduate Minors

Graduate minors are generally aimed for master's degree and professional master's degree students. In addition to acquiring specialized knowledge through graduate majors, through graduate minors, students can either choose to study a field different from their major to broaden their knowledge and skills or choose to grasp the essence of multiple graduate majors.

For details on graduate minors that are offered, refer to Graduate Minors (Chapter VII of the Japanese version of this Guide).

A certificate of completion is issued to students after they satisfy all requirements for the completion of relevant minors.

13. Leave of Absence, Re-Enrollment, and Withdrawal

13-1 Leave of Absence

If a master's degree, doctoral degree, or professional master's degree student needs to take a leave of absence due to unavoidable circumstances, such as sickness, he or she is permitted to take leave for a period of two months to up to a year. However, exceptions

can be made to extend the period of leave of absence: master's degree and professional master's degree students can extend the leave of absence to up to two years, and doctoral degree students can extend the leave of absence to up to three years. (Article 25 of the Graduate School Regulations)

The period a student is on leave of absence will not be counted toward his or her attendance at the Institute. A student wishing to take a leave of absence is required to submit Course Administration Form No. 9, approved by his or her academic supervisor and the head of graduate studies of the graduate major he or she has chosen, to the Student Division Office.

13-2 Re-Enrollment

Students wishing to re-enroll while still on leave of absence are permitted to do so after submitting Course Administration Form No. 10.

13-3 Long-Term Absence

If a student expects to be absent from the Institute for a period of two weeks to two months due to sickness or other unavoidable circumstances, he or she is permitted to take a long-term absence. To take a long-term absence, the student must submit Course Administration Form No. 11, approved by his or her academic supervisor, to the Student Division Office.

13-4 Withdrawal

If a student wishes to withdrawal from the Institute due to sickness or other unavoidable circumstances, he or she must get approval from the Institute. (Article 27 of the Graduate School Regulations)

To make a request to withdrawal from the Institute, the student must submit Course Administration Form No. 12, approved by his or her academic supervisor and the head of graduate studies of the graduate major he or she has chosen, to the Student Division Office.

13-5 Long-Term Study System

Those eligible are doctoral degree and professional master’s degree students. For inquiries, contact the Student Division Office.

14. Exchange Agreements

14-1 Exchange

The Institute has exchange agreements with graduate schools of multiple universities. These agreements enable students of the Institute to take courses at other universities and vice versa. Refer to List of Student Exchange Agreements (Chapter XI of the Japanese version of this Guide) for further details.

Procedures to take these courses are outlined below. However, the number of courses that can be taken may be restricted depending on the content of the agreement. Students should also note that the exchange agreement may vary for each school.

Moreover, requests for course registration may be rejected due to unavoidable reasons (e.g., course has reached its maximum number of registrants).

14-2 Student Exchange Agreements

For courses labelled Student Exchange in List of Student Exchange Agreements (Chapter XI of the Japanese version of this Guide),

students may take corresponding graduate level courses at another university after carefully considering the points below. However, students should consult the Student Division Office as all courses are not always offered.

i. Refer to Course Registration Procedures (6-3) for course registration procedures.
ii. The attained course credits are counted toward the completion requirement of the master's degree, doctoral degree, or professional master's degree program. (Article 10 of the Rules on Graduate Learning)
These credits are recognized as equivalent to those attained from graduate level courses conducted by other Schools. For details on credits, refer to the Accreditation sections. (Refer to 8-3.4 for the master's degree program, 9-3.4 for the doctoral degree program and, 10-3.4 for the professional master's degree program.)
However, students must note that not all courses count toward the completion requirements.
iii. Refer to Limit on Accreditation of Attained Course Credits (11-4) for the maximum number of credits that can be accredited.
iv. Those who have been permitted to take courses outside of the Institute must follow the instructions of the departments, graduate schools, and/or universities at which they take the courses. (Article 10 of the Rules on Graduate Learning)
v. Only lecture-based courses can be registered. Courses that are exercise, experiment, or training based cannot be taken.

14-3 Educational Research Exchange Agreement and Academic Cooperation Agreement

For courses categorized as Educational Research Exchange and Academic Cooperation Agreement in List of Student Exchange Agreements (Chapter XI of the Japanese version of this Guide), students are permitted to register the aforementioned courses in accordance with 14-2, as the exchange agreements include academic supervision. Moreover, item v of 14-2 does not apply in this case and students are permitted to take exercise courses, etc., as academic supervision is given for these courses under the agreements.

Additional applications are required to receive academic supervision. Refer to Commission of Academic Supervision (Section 15) below for further details.

15. Commission of Academic Supervision

When seeking academic supervision from outside the Institute, students are required to receive approval from their academic supervisor and the Student Division Office. (Article 2 of the Institute of Science Tokyo Rules on the Commission and Consignment of Academic Supervision of Graduate Students ["Commission and Consignment Rules"])

Commission of academic supervision is limited to one year for both master's degree and doctoral degree students. However, this period may be extended for doctoral degree students when an extension can be recognized as being beneficial for educational purposes. (Article 4 of the Commission and Consignment Rules)

The period while under commissioned academic supervision is recognized as part of the enrollment period at the Institute, and thus counted toward the degree program's completion requirements. However, students are still required to pay tuition. (Articles 5, 7, and 8 of the Commission and Consignment Rules)

Students must promptly submit a research report and an Academic Supervision Status Report, issued by the commissioned academic supervisor, to the Student Division Office on completion of the commissioned supervision. (Article 6 of the Commission and Consignment Rules)

Take note that professional master's degree students cannot receive commissioned academic supervision.

16. Changing Schools, Departments, and Graduate Majors

Changing schools, departments, and graduate majors is possible when there is a special reason and when both schools approve the change. (Article 29 of the Graduate School Regulations and the Institute of Science Tokyo Rules on the Change of Schools, Departments, and Graduate Majors)

Consult the Student Division Office if needed.

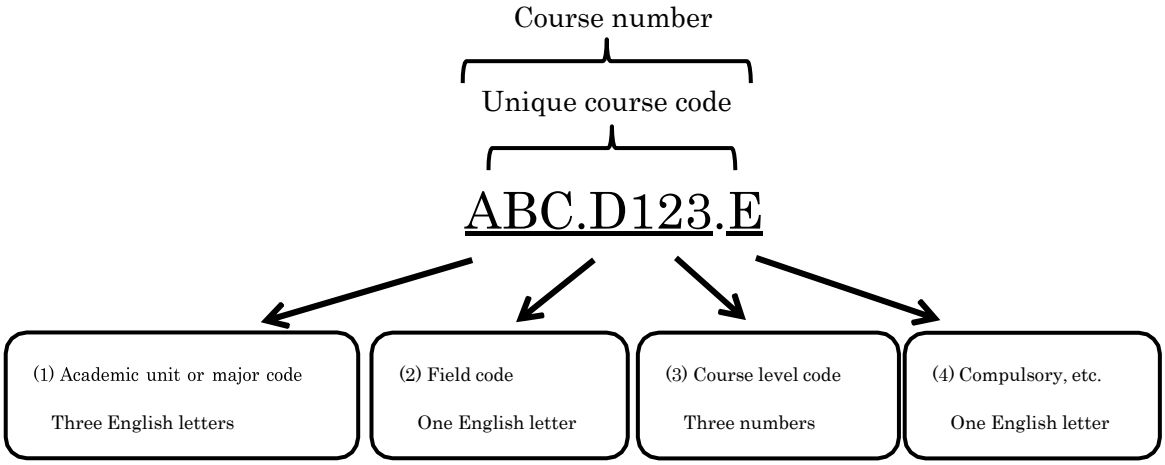
17. Course Numbering System

1. What are course numbers?

Course numbers are numbers that indicate the fields of study and levels of the courses. All courses are assigned course numbers, which allow students to create a systematic study plan.

2. Course number overview

Course numbers are composed of four distinct codes. Codes (1) to (3) of the course number below make up the unique course code.



(1) Academic unit or major code

This code indicates the department, graduate major, or course category of the Liberal Arts and Basic Science Courses. See Attached Tables 1 and 2 below.

(2) Field code

This code indicates the field within the academic unit or major. Information regarding field codes that are specified by departments and graduate majors is available in the standard curriculum of each department.

(3) Course level code

Course levels at the Institute are indicated by three digit numbers.

Courses whose last two digits range from 01 to 29 are basic courses and those whose last two digits are 30 and above are advanced and developmental courses. However, larger numbers do not necessarily mean higher level courses.

Course level	Competencies that will be developed	Target
100-level courses	● Acquire knowledge and develop the mindset that is essential to study at the Institute for science/engineering graduate students, irrespective of school or department.	Bachelor's Degree Program
200-level courses	● Acquire basic knowledge, receive education, and develop linguistic skills that are generally required at the student's affiliated school and department. ● Develop the creativity and imagination based on the student's field of expertise. ● (+) Understand the relationship between required courses and acquire specialized knowledge using the English language.	
300-level courses	● Acquire knowledge, receive education, and develop linguistic and expressive skills that are required at the student's school or department. ● Acquire knowledge related to the student's field of expertise and in other fields of study. ● (+) In addition to the major, acquire basic knowledge of a minor field in a systematic manner.	
400-level courses	● Acquire a deep understanding and knowledge of the major field in English. ● Receive education essential for graduate students	

500-level courses	● Acquire a deep understanding and knowledge of fields related to the major as well as in other fields of study in English. ● (+) In addition to the major, acquire specialized knowledge of a minor field in a systematic manner.	Master's Degree Program Professional Master's Degree Program
600-level courses	● Carry out research on advanced topics in specialized fields and present findings in an international stage. ● Acquire skills to form research questions.	Doctoral Degree Program

(4) Compulsory, etc.

This code indicates whether a course is a required, restricted elective, or elective course for the specified department or graduate major.

Code	Meaning
R	Required
A-K	Restricted Elective
L	Elective

3. Recommended course numbers

Course numbers offer information regarding the academic unit or major of the respective schools and departments. In addition, it indicates recommended courses to students who are affiliated with other schools and departments. Recommended course numbers are course numbers that systematically indicate a course outside the academic unit or major to which it belongs. Recommended course numbers use the same course number structure as course numbers.

For instance, if Department A's XXX Course, whose course number is AAA.X111.R, is also a recommended course for students in Department B, the recommended course number might be BBB.Y125.E.

Note: Recommended course numbers are always shown together with the unique course code in the following way.

Recommended course number (Unique course code)

In the case of the above example, the recommended course number would be BBB.Y125.E (AAA.X111).

Table 1: Core Courses

School, etc.	Department and Graduate Major	Academic unit or major code
Science	Department of Mathematics Graduate major in Mathematics	MTH
	Department of Physics Graduate major in Physics	PHY
	Department of Chemistry Graduate major in Chemistry	CHM
	Department of Earth and Planetary Sciences Graduate major in Earth and Planetary Sciences	EPS
Engineering	Department of Mechanical Engineering Graduate major in Mechanical Engineering	MEC
	Department of Systems and Control Engineering Graduate major in Systems and Control Engineering	SCE
	Department of Electrical and Electronic Engineering Graduate major in Electrical and Electronic Engineering	EEE
	Department of Information and Communications Engineering Graduate major in Information and Communications Engineering	ICT
Interdisciplinary Graduate Majors	Graduate major in Engineering Sciences and Design	ESI
	Graduate major in Engineering Sciences and Design	ESD
	Graduate major in Science and Technology for Health Care and Medicine	STM
	Graduate major in Nuclear Engineering	NCL
	Graduate major in Artificial Intelligence	ART
	Graduate major in Urban Design and Built Environment	UDE
	Graduate major in Earth and Life Sciences	ELS
	Graduate major in Materials and Information Sciences	MIS
Specially offered degree programs for graduate students	Academy forLeadership (ToTAL)	TAL
	Academy for Global Leadership (AGL)	AGL

	Department of Industrial Engineering and Economics Graduate major in Industrial Engineering and Economics	IEE
Materials and Chemical Technology	Department of Materials Science and Engineering Graduate major in Materials Science and Engineering	MAT
	Department of Chemical Science and Engineering Graduate major in Chemical Science and Engineering	CAP
Computing	Department of Mathematical and Computing Science Graduate major in Mathematical and Computing Science	MCS
	Department of Computer Science Graduate major in Computer Science	CSC
Life Scienceand Technology	Department of Life Science and Technology Graduate major in Life Science and Technology	LST
Environmen tand Society	Department of Architecture and Building Engineering Graduate major in Architecture and Building Engineering	ARC
	Department of Civil and Environmental Engineering Graduate major in Civil Engineering	CVE
	Department of Transdisciplinary Science and Engineering Graduate major in Global Engineering for Development, Environment and Society	GEG
	Academy for Super Smart Society	SSS
	Academy of Energy and Informatics	ENI
Common courses	School of Science	XIP
	School of Engineering	XEG
	School of Materials and Chemical Technology	XMC
	School of Computing	XCO
	School of Environment and Society	XES
University-wide education program	Center for Data Science and Artificial Intelligence Education	DSA

* Interdisciplinary Graduate Majors use the same course number irrespective of the school or department.

	Department of Social and Human Sciences Graduate major in Social and Human Sciences	SHS
	Department of Innovation Science	ISC
	Department of Technology and Innovation Management	TIM

Table 2: Liberal Arts and Basic Science Courses

Course subcategory	Academic unit or major code	Further course subcategory	Field Code
Humanities and Social Science Courses	LAH	———	
English Language Courses	LAE	———	
Second Foreign Language Courses	LAL	———	
Japanese Language and Culture Courses	LAJ	———	
Teacher Education Courses	LAT	———	
Entrepreneurship Courses	ENT	———	
Breadth Courses	LAW	Wellness Courses	W
		Global Awareness and Other Breadth Courses	X
Liberal arts courses for specially offered degree programs for graduate students	TAL	———	

18. Competencies That Will Be Developed

The Institute, in accordance with its policy on education, has set forth five “competencies that will be developed” by students. These five competencies are outlined in the attached table of each department’s standard curriculum as well as in the course syllabi.

Master's Degree Program

1. Specialist skills

   Broad specialist skills

   Wide-ranging expertise to conduct in-depth research and development

2. Liberal arts skills

   General intercultural skills and developed independent study

   - Broad knowledge and language skills necessary to grasp matters from a comprehensive and international perspective.
   - Ability to continue learning and thinking for oneself with a purpose in mind.
   - Willingness to try anything
   - Understanding of ethical issues

3. Communication skills

   Various communicative methods using logic

   - Skills necessary to provide logical explanations, responding to various circumstances
   - Ability to integrate diverse ideas

4. Applied skills (inquisitive thinking and/or problem-finding skills)

   Passion for exploration:

   - Ability to organize phenomena from a multifaceted perspective and analyze them logically
   - Enthusiasm to explore the mysteries of science and technology

5. Applied skills (practical and/or problem-solving skills)

   Application of problem-solving skills

   Ability to solve practical problems, making full use of broad knowledge, skills, and creativity

Doctoral Degree Program

1. Specialist skills

   Superior specialist skills

   Superior expertise to promote research and development and generate and systematize new knowledge

2. Liberal arts skills

   Developed intercultural skills and independent study, and self-motivated action

   - Systematic and broad knowledge and language skills necessary to understand matters from a comprehensive and international perspective
   - Ability to learn, consider, and take concrete actions to generate new knowledge and create value
   - Willingness to take on new challenges without setting limits
   - Understanding of ethical issues

3. Communication skills

   Social leadership

   - Skills necessary to provide logical explanations to society, responding to various circumstances
   - Ability to exhibit leadership

4. Applied skills (inquisitive thinking and/or problem-finding skills)

   Investigative work and new challenges

   - Ability to organize phenomena from a multifaceted perspective and analyze them logically
   - Skills necessary to explore the mysteries of science and technology
   - Ability to perceive the true essence and universality of matters in order to identify and investigate problems and set new challenges

5. Applied skills (practical and/or problem-solving skills)

   Advanced problem solving and making a positive impact

   - Ability to solve advanced and practical problems, making full use of broad and deep knowledge and skills, initiative, and creativity
   - Ability to inspire others

Professional Master's Degree Program

1. Specialist skills

   Practical specialist skills

   Practical expertise in science, technology and socioeconomic systems

2. Liberal arts skills

   General intercultural skills and developed independent study

   - Broad knowledge and language skills necessary to grasp matters from a comprehensive and international perspective
   - Ability to continue learning and thinking for oneself with a purpose in mind
   - Willingness to try anything for practical innovation
   - Understanding of ethical issues

3. Communication skills

   Various communicative methods using logic

   - Skills necessary to provide logical explanations, responding to various circumstances
   - Ability to integrate diverse ideas

4. Applied skills (inquisitive thinking and/or problem-finding skills)

   Vision and innovation

   - Ability to organize phenomena from a multifaceted perspective and analyze them logically
   - Ability to pursue the true essence and universality of matters
   - Ability to establish a vision and to innovate in science, technology and industry

5. Applied skills (practical and/or problem-solving skills)

   Application of problem-solving skills

   Ability to solve practical problems, making full use of broad knowledge, skills, and creativity

19. GPA (Grade Point Average)

In 2016, the Institute introduced the Grade Point Average ("GPA") system to objectively indicate and evaluate the students' academic performance. The GPA system, which is a stringent and transparent system, fosters proactive learning in students and enhances the quality of supervision by faculty, both of which improve the overall quality of learning at the Institute. GPA scores are provided in academic transcripts.

The Web System for Students and Faculty provides, in addition to the GPA score per quarter, GPA scores per semester, per year, and the overall score throughout the enrolled period.

However, Research Seminars, Research-Related Courses, courses that are not counted toward the completion requirements, that are graded by either a Pass or Fail, and that grant credits counted toward the completion requirements of other courses are not included in the GPA score. Additionally, when a student passes a course that he or she previously failed, the GPA is modified accordingly (i.e., the old score is replaced with the newly attained score).

The following equations are used to calculate scores. Decimals are rounded off at the third decimal place.

Course grades less than 60 are counted as 0 (GP = 0).

$$\mathrm{GP} = \frac{(\text{Course grade} - 55)}{10}$$

$$\text{Cumulative GPA} = \frac{\text{Sum of all (GP of registered course while enrolled} \times \text{number of credits the course awards)}}{\text{Total number of credits attained while enrolled}}$$

$$\text{Yearly GPA} = \frac{\text{Sum of all (GP of course registered in an academic year} \times \text{number of credits the course awards)}}{\text{Total number of credits attained in an academic year}}$$

$$\text{Semester GPA} = \frac{\text{Sum of all (GP of course registered in a semester} \times \text{number of credits the course awards)}}{\text{Total number of credits attained in a semester}}$$

$$\text{Quarter GPA} = \frac{\text{Sum of all (GP of course registered in a quarter} \times \text{number of credits the course awards)}}{\text{Total number of credits attained in a quarter}}$$

20. Student Division Related Systems

Various Student Division related systems have been developed to meet the needs of students during their time at the Institute. Unless otherwise stated, most of these systems can be accessed from Science Tokyo Portal . Details of these systems can be found on Science Tokyo Portal (https://isct.ex-tic.com/auth/session).

A user ID and password are necessary to use the systems. These are provided together with the student ID card.
As communication from the Institute are sent through the Institute's email system, students are advised to log into the Portal and register their email address soon after receiving their user information. Instructions on how to use the Portal (including how to log in and set up an email account) can be found on the Science Tokyo Portal home page under "Online guides" (http://portal.titech.ac.jp/new-en/ezguide/index.html).

Details of Student Division related systems are listed below.

20-1 Web System for Students and Faculty

The Web System for Students and Faculty can be used to register courses, check grades and GPA, confirm lecture cancellations, change contact details, etc. Details of the system are available under the Online Guide and FAQ menus, which can be accessed after logging into Science Tokyo Portal.

20-2 Science Tokyo Syllabus

Course materials, such as lecture notes and course syllabi, can be accessed by both internal and external visitors.These can be used as study references as well as to help you decide which courses to register.

20-3 Science Tokyo LMS

This is learning management system for Science Tokyo students. It allows for syllabus viewing, class cancellation information, lecture video viewing, lecture material download, and assignment submission.

20-4 Learning Portfolio

The Learning Portfolio records the learning process and academic achievements of students and can be used for self-reflection. The content is also reviewed and commented on by academic advisors. The Learning Portfolio can be accessed after logging into Science Tokyo Portal.