

(3) Guidelines for the Completion of Doctoral Program

(Determined by the Graduate School Faculty Assembly on February 10, 1999)

(Last Updated on November 13, 2024)

1) Doctoral Research Guide

a. Determination on the System for Advising Students

Students must register the following information with the Student Affairs Division at the time of admission to the doctoral program after obtaining an approval of their research advisor.

(a) Research Advisor

- Students shall be assigned to a research advisor, and if necessary, a sub-research advisor. The research advisor will be assigned from amongst full-time graduate school faculty member.
- Research advisors must be full-time Doctoral Maru Go faculty members with a period of three years or more before retirement due to reaching the mandatory retirement age, in principle. Doctoral Go faculty members can be sub-research advisors.
- In the event that, after the determination of a research advisor, it is found that the supervised student will not complete the program within the standard length of the program, and will not complete the program before their research advisor's retirement, a sub-research advisor must be assigned immediately. The sub-research advisor in this case must be a full-time Doctoral Maru Go faculty member.
- If a sub-research advisor has been assigned, the research advisor and the sub-research advisor shall cooperate in supervising the student.

(Rules Regarding the Changing of Research Advisors)

- Based on the basic admission policies of the doctoral program, students are not allowed to change their research advisors during the enrollment period, in principle. However, in case that there are truly unavoidable reasons, student can request a change of research advisor to the Graduate School Academic Affairs Committee (GSAAC) (Chairperson : Dean of the Graduate School) by indicating the reason for the change. The GSAAC, after checking the student's wishes, can submit a proposal regarding a new research advisor to the Graduate School Faculty Assembly. The Graduate School Faculty Assembly shall then deliberate and decide whether the change is appropriate.
Until the change is authorized, the current research advisor shall remain the student's research advisor.

(b) Course Plan for the Doctoral Program

- Students shall make a course registration plan for the duration of doctoral program under the supervision of their research advisor. The course plan can be revised under the supervision of the research advisor.

(c) Special Research *Integrated into 'Research Seminar III' for students admitted in autumn AY2020 or later

- Students shall create their research theme and research plan for Special Research, under the supervision of research advisors, etc.
- Research advisors must supervise students' research progress, and give appropriate and relevant advice throughout the enrollment period of the students.

(d) Special Seminar *Integrated into 'Research Seminar III' for students admitted in autumn AY2020 or later

- Students shall schedule blocks of time for literature study related to their research during their enrollment in the doctoral program under the supervision of their research advisors.
- Students must assist faculty members in charge, etc. to create implementation plans for seminar courses of the master's program during their enrollment in the doctoral program.
- Students are strongly recommended to take the course Research Paper Writing.

(e) Special Training Program (Internship)

- Students shall consult with their research advisors regarding the participation in Special Training Program.
- To apply for Special Training Program, the relationship between the training program and the students' Special Research must

be clarified.

- Students who are dispatched to Special Training Program may be exempted from participation in Special Research and Special Seminars.
- To apply for Special Training Program, follow the procedures provided for in the “Special Training Program (Internship) (determined by the Graduate School Faculty Assembly on March 31, 1999.)”
- Upon submission of applications for Special Training Program from research advisors to the President, the GSAAC shall deliberate on students’ participation in Special Training Program. Afterwards, the approved proposals shall be submitted to the Graduate School Faculty Assembly for further deliberation.

(f) Creative Factory

- Students shall consult with their research advisors regarding participation in Creative Factory.
- To apply for a Creative Factory, follow the procedures provided for in the “Implementation Guidelines for Creative Factories at the Doctoral Program of the University of Aizu Graduate School, (determined by the Graduate School Academic Affairs Committee on January 15, 2010.)”

b. Courses *Applied to students admitted in autumn AY2020 or later

The curriculum of the doctoral program consists of regular courses, seminar courses, and research activities necessary to use broad and advanced expertise and skills to solve problems in computer science and engineering (CSE) and related areas, and to conduct research on the structure and function of information systems.

(a) Regular Courses

In regular courses, students will acquire the ability to grasp trends and solve problems in their research fields and also learn the ethics and knowledge of topics such as intellectual property they will need to conduct research. Students must obtain at least 2 credits for regular courses by the completion of the program.

(b) Seminar Courses

In seminar courses, students will acquire the ability to write papers and give presentations in English at a high level, to verify hypotheses through critical thinking, and to create, implement, and test solutions. Students must obtain at least 8 credits for seminar courses by the completion of the program.

c. Progress Checks

Students must organize a progress report presentation meeting in the first quarter of the 2nd year of doctoral program (Spring Admission: mid-May, Autumn Admission: mid-November) in order to report the annual progress made in their studies and research, etc. during the previous year.

When implementing the progress report presentation meeting, students must pay attention to the following matters.

- At the progress report presentation meeting, students are to explain 1) their review of literature of related research fields, 2) courses attended (if from a field other than the computer science and engineering), 3) the progress of their research, and 4) their future research plans, etc.
- Students must prepare and submit a Research Progress Report Presentation Implementation Report to the Dean of the Graduate School after obtaining the approval of their research advisor.

<Content to be included in the Research Progress Report Presentation Implementation Report >

- Date, starting and ending times, and place of the presentation meeting
 - Attendees (names of research advisor and planned preliminary review referees, number of other attending faculty members and students)
 - Outline of research and evaluation of progress
 - Other information (comments and advice from referees, etc.)
- *Presentation materials (slides, etc.) must be attached to the report
- Students must save a copy of the Research Progress Report Presentation Implementation Report, and they must submit it along with the other required materials for their doctoral dissertation preliminary review.

When implementing the progress report presentation meeting, research advisors must pay attention to the following matters.

- Research advisors must participate in the presentation meeting, and request two faculty members assigned to the UoA Graduate School to join the meeting as evaluators.
 - Research advisors shall invite as many faculty and students as possible to whom the research theme is relevant by giving them adequate notice.
 - Research advisors shall instruct students to review their future research plans in line with comments from relevant faculty.
 - Research advisors shall instruct students to ensure the implementation of their progress report presentation meeting and save a copy of the Research Progress Report Presentation Implementation Report, as it must be submitted along with the other required materials for their preliminary review.
- d. Research Presentation by students approved for early completion *Applied to students admitted in autumn AY2020 or later
Students who have been approved for early completion at the Graduate School Faculty Assembly must organize a Research Presentation by a Student Approved for Early Completion (hereafter, "Research Presentation").
The Research Presentation must be conducted after approval of early completion and before their preliminary review.

When implementing the Research Presentation, students must pay attention to the following matters.

- The Research Presentation is conducted as a part of Research Seminar III, from a different perspective from doctoral dissertation review, and focuses on methods and processes to achieve research goals.
- Students must prepare and submit an implementation report of Research Presentation to the Dean of the Graduate School after obtaining the approval of their research advisor.

<Content to be included in the implementation report>

- Date, starting and ending times, and place of the presentation meeting
- Attendees (names of research advisor and planned preliminary review referees, number of other professors and students)
- Outline of research and evaluation of the presentation
- Other information (comments and advice from faculty members who attended, etc.)

*Presentation materials (slides, etc.) must be attached to the report

When implementing the Research Presentation, research advisors must pay attention to the following matters.

- Research advisors must participate in the Research Presentations, and request two faculty members assigned to the UoA Graduate School to join the meeting as evaluators.
- Research advisors shall invite as many faculty and students as possible to whom the research theme is relevant by giving them adequate notice.
- Research advisors shall instruct students to review their future research plans in line with comments from the faculty members who attended.

2) Doctoral Dissertation Review

- In principle, students who have not earned the regular course and seminar course (except for Research Seminar III) credits required for the completion of the doctoral program stated in b above cannot proceed to the doctoral dissertation review. (Applied to students admitted in autumn AY2020 or later)
- Please refer to the university's website and notifications from the Student Affairs Division for details on the review schedule.

a. Degree Conferment Period

- Twice a year, in March and September, for spring and autumn admissions, respectively.
- The period of degree conferment for cases of withdrawal from doctoral program after completion of enrollment period and those who have repeated years may be considered on an individual basis.

b. Submission of Proposals on Dissertation Titles, Establishment of Dissertation Review Committees, and Preliminary Review Periods

3rd year of the doctoral program: Spring Admission: late-April to mid-May, Autumn Admission: late-October to Mid-November]

(a) Determination of chief referee

- Chief referees must be Doctoral Maru Go faculty members. Research advisors shall decide chief referees.

(b) Recommendation of members of Dissertation Review Committee (co-referees)

- Dissertation Review Committees shall consist of a chief referee and three or more co-referees.
- Chief referees shall recommend three or more co-referees. Sub-research advisors may become a co-referee.
- Two or more co-referees shall be Doctoral Maru Go faculty members.
- One of co-referees may be faculty members, etc. from other graduate schools, research institutes, etc. which conduct doctoral dissertation reviews.

(c) Determination of dissertation title

- Research advisors shall determine dissertation titles in consultation with students. In cases where a sub-research advisor has been assigned, the sub-research advisor must be included in the consultation.
- Dissertation titles must be related to the themes of Research Seminar III (Special Research for students admitted in spring AY2020 or earlier).
- Dissertation titles must be provided both in English and Japanese.

(d) Submission of proposals on dissertation titles, establishment of Dissertation Review Committees, and preliminary review period

- Chief referees shall propose dissertation titles, establishment of the Dissertation Review Committees, and the preliminary review periods to the Dean of the Graduate School by submitting the Application for Doctoral Dissertation Preliminary Review.
- The GSAAC deliberates and approve these proposals.
- In the case of a change in members of the Review Committee after an approval by the GSAAC, the prescribed request form with the reason for the change and the names and seals of the previous and new members of the Review Committee must be submitted to the GSAAC for approval. No change of members is allowed after the preliminary review.

c. Preliminary Review

Submission of preliminary review materials to notification of the result (Final Deadline)

3rd year of the doctoral program: [Spring Admission: late-May to mid-November, Autumn Admission: mid-December to early-May]

(a) Submission of preliminary review materials

[Spring Admission: late-May to two weeks prior to preliminary reviews, Autumn Admission: mid-December to two weeks prior to preliminary reviews]

- Students shall submit the following preliminary review materials to the Dean of the Graduate School with the permission of their chief referee.
 - Request for Doctoral Dissertation Preliminary Review
 - Abstract of Dissertation (Students are encouraged to submit abstracts in Japanese as well, if possible.)
 - List of publications
 - Curriculum vitae
 - Copies of publications, etc.
 - Completed dissertation
Dissertations shall be written in English. No particular number of pages is specified.
 - Copy of the Research Progress Report Presentation Implementation Report
 - Record of Change of Doctoral Dissertation Title (Only if a change of the title was made. A change of the title after this point will not be permitted. However, changes found to be minor by the GSAAC will be allowed.)

(b) Scheduling of preliminary review

- Chief referees shall prepare a preliminary review schedule falling within the period submitted to the Dean of the Graduate School through the Application for Doctoral Dissertation Preliminary Review provided for in 2.2 by coordinating the schedules

of the students and the referees.

(c) Implementation of preliminary review

- Preliminary reviews shall be conducted by Dissertation Review Committees. Students must give a fifty-minute presentation followed by a fifty-minute oral examination. Students shall give their presentations in English.

(Assessment Criteria)

- Research progress (including the Research Progress Report Presentation Implementation Report)
- Submission of academic papers
- Students are required to have one or more papers submitted to a major academic journal during the enrollment in the doctoral program with a peer review result of accepted, conditionally accepted, or requiring minor revisions. Students must be the primary author (main contributor) of the paper(s).
- Basic academic ability
- English competency

(Notes)

The student in question must be the sole primary author of papers used to satisfy doctoral degree requirements. However, if the authors of any of these papers are listed in alphabetical order or any order other than contribution level, and a sole primary author cannot be identified, students shall submit evidence that they are the sole primary author of said paper. Based on the evidence submitted, the GSAAC will determine the usability of the paper for this purpose.

- The final submission deadline of the preliminary review report falls around late October of that year (for spring completion) or late April of the following year (for autumn completion).
- If the program completion is postponed for reasons such as that students fail to submit the preliminary review report and other related documents before the deadline, they must start the process over from the point of submitting the Application for Doctoral Dissertation Preliminary Review.

(d) Judgment on preliminary review: One of the following judgements shall be made.

- In order for a student to pass the preliminary review, at least two-thirds of the Dissertation Review Committee members must give their approval.

Pass: The student is allowed to prepare for the final review.

Problems to be solved by the time of the final review and other matters pointed out in the preliminary review must be clarified to the successful student.

Fail: The student is not allowed to prepare for the final review.

Clear advice on future research must be given to the student. The student can undergo preliminary review again in six months according to the dissertation review schedule.

(e) Preliminary review result notification, etc.

- Dissertation Review Committees shall report in writing on the review results including matters pointed out and the expected date of the final review to the Dean of the Graduate School.
- The GSAAC shall deliberate on the review results and officially inform the chief referee of the deliberation results.
- If there is any doubt about the review results, the GSAAC may instruct the Dissertation Review Committee to reexamine the review results.
- The chief referee shall inform the students of the review result in writing. At that time, the chief referee also must inform the students of the problems to be solved by the final review, matters pointed out, etc.

d. Final Dissertation Review

Submission of final review materials to notification of the result (Final Deadline)

3rd year of the doctoral program: [Spring Admission: mid-December to early February, Autumn Admission: late May to mid-July]

The final review must be implemented within six months from the date indicated in the preliminary review results. If the final

dissertation review is not conducted during the period, the chief referee must again submit requests for approval of the dissertation title and the establishment of the Review Committee to the GSAAC and implement the preliminary review in accordance with the prescribed procedure.

(a) Submission of final review materials

[Spring Admission: mid-December, Autumn Admission: late May]

- Students shall submit the following final review materials to the University President with the permission of their chief referee.
 - Request for Doctoral Dissertation Review
 - Abstract of Dissertation (Students are encouraged to submit abstracts in Japanese as well, if possible.)
 - List of publications
 - Written reply to matters pointed out during the preliminary review
 - Manuscript of the doctoral dissertation (The final draft shall be English. There is no particular limit to the number of pages.)
 - Other final review materials, etc.

(b) Scheduling of final review

- Chief referees shall coordinate the schedules of referees to determine date and time for the final review. This schedule must be reported to and approved by the GSAAC.

(c) Implementation of final review

[Spring Admission: early January, Autumn Admission: mid-June]

- Final reviews are a part of review of doctoral dissertations and are the final examination for completing the doctoral program.
- Final reviews shall be conducted by Dissertation Review Committees. Students must give a fifty-minute presentation followed by a fifty-minute oral examination. Students shall give their presentations in English.
- Graduate School faculty members may attend the final review and ask questions.

(Assessment Criteria)

Based on the Diploma Policy, the following items will be assessed comprehensively.

- Content of the doctoral dissertation (Novelty, contribution to the research field, etc.)
- Response regarding matters pointed out at the preliminary review
- Presentations and answers to questions must be logical and clear
- Papers accepted for or published in academic journals or conference proceedings, and/or papers presented at academic conferences

Students must satisfy the following requirements prior to the judgement of final review.

- Doctoral dissertations must contain at least two contributions by the student on the theme correlated with the content of the doctoral dissertation. In other words, a doctoral dissertation must cite at least two papers accepted or published for major journal papers submitted during their enrollment in the doctoral program with the student in question as the primary author (main contributor), in principle.
- In the event the student is the primary author (main contributor) of only one accepted or published major journal paper, either of the requirements below ('a' or 'b') must be satisfied;
 - a) The student is also the primary author (main contributor) of at least one additional peer-reviewed non-major journal paper. In this case, the non-major journal paper(s) must contain at least one contribution distinct from that in the major journal paper.
 - b) The student is also the primary author (main contributor) of at least two peer-reviewed papers published in major conference proceedings. In this case, the conference papers must jointly contain a contribution distinct from that in the major journal paper.

In both cases, Dissertation Review Committees must clearly explain the relationship between the contributions in the doctoral dissertation and the accepted/published papers.

(Notes)

*The student in question must be the sole primary author of papers used to satisfy doctoral degree requirements. However, if the authors of any of these papers are listed in alphabetical order or any order other than contribution level, and a sole primary author cannot be identified, students shall submit evidence that they are the sole primary author of said paper. Based on the evidence submitted, the GSAAC will determine the usability of the paper for this purpose.

*Peer-reviewed non-major journals in these guidelines refer to journals listed in academic journal databases (Scopus, etc.). In addition, the two papers published in peer-reviewed major conference proceedings must share no more than one third of their content described in b) above, and the content of previously published conference papers must be cited in conference papers written later. These Notes shall apply to students who admitted in AY2019 or later.

(d) Judgment on final review / final examination: One of the following judgements shall be made.

- In order for a student to pass the final review, at least two-thirds of the Dissertation Review Committee members must give their approval.

Pass: In the case that the student's dissertation requires some modification, problems to be solved must be clarified to the successful student.

Fail: Matters pointed out must be clarified to the student. Students who failed can undergo the final review again in six months without undergoing another preliminary review according to the dissertation review schedule.

(e) Finalization of final review result [Spring Admission: early February, Autumn Admission: mid-July]

- Dissertation Review Committees shall submit a report on the review results to the Dean of the Graduate School.
- If there is any doubt about the review results, the GSAAC may instruct the Dissertation Review Committee to reexamine the review results.
- The Graduate School Faculty Assembly, at a meeting with the presence of at least two-thirds of the members, shall finalize the passing results of the review with the approval of two-thirds or more of the members in attendance.

(f) Final review result notification, etc.

- To students who have passed the final review, chief referees shall give instructions to modify their dissertations according to the matters pointed out, and to prepare an abstract of the dissertation.
- To students who have failed the final review, chief referees shall notify matters pointed out for improvement of the dissertation in writing.

e. Submission of the final version and abstract of the doctoral dissertation, dissertation presentation session, and degree conferment
3rd year of the doctoral program: [Spring Admission: mid-February to mid-March, Autumn Admission: early August to mid-September]

(a) Submission of the final version of the doctoral dissertation [Spring Admission: mid-February, Autumn Admission: mid-August]

- Students shall submit the final version and an abstract of the doctoral dissertation to the Dean of the Graduate School through their chief referees.
- Style of the dissertation abstract: The abstract shall be written in English. A Japanese version should also be prepared as handouts for the dissertation presentation session. Neither version of the abstract may exceed four A4-sized pages.
- Chief referees shall submit a summary of the review result to the Dean of the Graduate School.
- Students shall, according to the Guidelines for Management of the University of Aizu Academic Repository provided for by the Information Systems and Technology Center (ISTC), submit 1) a Consent to Use of Academic Paper/Repository Registration Request Form (Form 2) with their research advisor's confirmation seal on it and 2) their finalized dissertation to the Student Affairs Division.
- For students who cannot submit the final version of their dissertation and abstract by the deadline, their degree conferment shall be postponed accordingly.

(b) Dissertation presentation session [Spring Admission: mid-February, Autumn Admission: early August]

- Abstracts of doctoral dissertations shall be handed out for the dissertation presentation session.

- Dissertation presentation sessions shall be open to faculty members of the University of Aizu, faculty members of other universities and the students' family members, etc.

(c) Degree conferment [Spring Admission: mid-March, Autumn Admission: mid-September]

- Students shall submit an Application Form for the Degree to the University President.
- The GSAAC shall report the students to be conferred a doctoral degree who have submitted the final version of their doctoral dissertation and its abstract to the Graduate School Faculty Assembly. The Graduate School Faculty Assembly shall then finalize the conferment of degree.

3) Others

a. Handling of students who do not complete their doctoral dissertation by the deadline

- Students who do not complete their doctoral dissertation by the deadline shall be classified and handled as follows, each category of student will be allowed to withdraw at their request.

Withdrawal from Doctoral Program After Completion of Enrollment Period:

This refers to students admitted in spring AY2020 or earlier who withdrew from the doctoral program after being enrolled for the three-year standard enrollment period without completing a doctoral dissertation. Such students are allowed to undergo dissertation review under the same dissertation assessment criteria as students enrolled in the doctoral program within three years of withdrawal. The research advisor in this case shall be the same faculty member as when said students were enrolled in the doctoral program, in principle.

Withdrawal from Doctoral Program After Completion of Enrollment Period and Course Requirements:

This refers to students admitted in autumn AY2020 or later who withdrew from the doctoral program after being enrolled for the three-year standard enrollment period and completing course requirements but could not complete a doctoral dissertation. Such students are allowed to undergo dissertation review under the same dissertation assessment criteria as students enrolled in the doctoral program within three years of withdrawal. The research advisor in this case shall be the same faculty member as when said students were enrolled in the doctoral program, in principle.

Withdrawal from Doctoral Program After Completion of Enrollment Period Without Completion of Course Requirements:

This refers to students admitted in autumn AY2020 or later who withdrew from the doctoral program after being enrolled for the three-year standard enrollment period and completed neither course requirements nor a doctoral dissertation. In cases where such students apply for the conferment of the degree conferred to those completing the doctoral program, they shall follow the procedures for a Ronpaku degree.

b. Handling of degrees in the case of Withdrawal from Doctoral Program After Completion of Enrollment Period and Course Requirements or Withdrawal from Doctoral Program After Completion of Enrollment Period

- In cases of withdrawal from doctoral program after completion of enrollment period and course requirements, those who complete a doctoral dissertation, apply for a doctoral degree within three years from the day following their withdrawal from the doctoral program, and whose conferment of a doctoral degree is authorized by the Graduate School Faculty Assembly, will be conferred the degree conferred to those who complete the UoA's doctoral program (Attached Form No. 6 of the University of Aizu Regulation on University Degrees).
- In cases of withdrawal from doctoral program after completion of enrollment period, those who complete a doctoral dissertation, apply for a doctoral degree within three years from the day following their withdrawal from the doctoral program, and whose conferment of a doctoral degree is authorized by the Graduate School Faculty Assembly, will be conferred the degree conferred to those who pass the dissertation reviews, etc. without completing the UoA's doctoral program (Attached Form No. 7 of the University of Aizu Regulation on University Degrees).