

II-iii Guideline for the Doctoral Program

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

(Updated on March 13, 2019)

1. Registration for the Doctoral Research

(Revised by the Graduate School Faculty Assembly on March 13, 2019)

(1) Determination on the System for Advising Students

Students must have information regarding the items listed below registered with the Graduate School Academic Affairs Committee in the 1st year of the Doctoral Program (Spring admission: by the middle of April, Autumn admission: by the middle of October) after obtaining approval of relevant research advisor.

- A. Research Advisor
- B. Special Research
- C. Special Seminar
- D. Whether or not the student intends to participate in special training programs (internship)
- E. Whether or not the student intends to participate in Creative Factory

Upon registration of the items A to E above, relevant research advisors must pay attention to the matters described below.

A. Research Advisors

- A research advisor and a sub-research advisor (optional), both must be full-time faculty members assigned to the UoA Graduate School, shall be assigned to each student.
- A research advisor must be a full-time "Doctoral Maru Go" faculty member who has his/her term of office for three years or more, in principle, before the "DAY OF RESIGNATION BY RETIREMENT." Full-time "Doctoral Go" faculty members can be sub-research advisors.
- When a student advisee finds out that he/she has to extend the enrollment period to complete the program beyond his/her 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.
- A research advisor shall cooperate with sub-research advisor, if assigned, in supervising the student.

(Principle for changing research advisors)

- Based on the admission policies of the Doctoral Program, students are not eligible to change their research advisors during the enrollment period, in principle. However, in case that there are unavoidable reasons, the student may be able to request a change of the research advisor to the Graduate School Academic Affairs Committee (Chairperson: Dean of the Graduate School) by indicating reason for change. The Graduate School Academic Affairs Committee can submit a proposal regarding a research advisor newly selected after consultation with the relevant student to the Graduate School Faculty Assembly. The Graduate School Faculty Assembly shall then deliberate and make a decision on whether the change is appropriate. Until the change is authorized, the current research advisor shall remain as his/her research advisor.

B. Special Research

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

C. Special Seminars

- Students shall schedule blocks of time for literature study related to their research during their enrollment in the Doctoral Program by following their research advisor's supervision.
- Students must assist faculty members in charge, etc. to create implementation plans for the seminars of the Master's Program during their enrollment in the Doctoral Program.
- Students are strongly recommended to join the course, "Research Paper Writing."

D. Participation in the Special Training Program (Internship)

- Students shall consult with their research advisors regarding participation in the Special Training Program.
- To apply for the Special Training Program, the relation 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 the 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 the Special Training Program from research advisors to the President, the Graduate School Academic Affairs Committee shall deliberate on students' participation in the Special Training Program. Afterwards, the approved proposals shall be submitted to the Graduate School Faculty Assembly for further deliberation.

E. Participate in the Creative Factories

- Students shall consult with their research advisors regarding participation in Creative Factories.
- To apply for a Creative Factory, follow the procedures provided for in the "Implementation Guideline 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.)

(2) Progress Checks

Students must organize a progress report presentation meeting in the primary quarter of the 2nd year of Doctoral Program (Spring admission: mid-May, Autumn admission: mid-November) in order to report the annual progress made on study and research during the previous year.

Upon a progress report presentation meeting, students must pay attention to matters described below.

- At a progress report presentation meeting, students are required to explain about 1) review of literature related to their field, 2) courses that the students attended (only those who are from fields other than the computer science and engineering, 3) up-to-date progress, and 4) plans of their research thereafter.
- Students must prepare and submit a progress report on their research to the Dean of the Graduate School after obtaining the approval of their research advisor.

Contents to be included in the progress report:

- Date and time of the presentation meeting (implemented date, starting and ending time, venue)
 - Attendees (name of research advisor and assumed referees of preliminary review, number of other attending professors and students)
 - Outline of research and evaluation result of the presentation
 - Other information (comments and advices of referees, etc.)
- * Presentation materials (slides, etc.) must be attached to report

- Students must save a copy of progress report on their research, and they must submit it along with other required materials upon implementation of their preliminary review.

Upon a progress report presentation meeting, relevant research advisors must pay attention to matters described below.

- Research advisors must participate in these meetings, and request two or more faculty members assigned to the UoA Graduate School to join these meetings as evaluators.
- Research advisors shall invite as many participants as possible to the meetings by giving adequate notice to faculty members and students who are interested in the research themes.
- Research advisors shall instruct students to review their future research plans in line with comments from faculty evaluators.
- Research advisors shall instruct students to attach photocopy of a progress report together with materials for the preliminary review of doctoral dissertations. Make sure that your student keeps a photocopy of progress report after hosting progress report presentation.
- Research advisors shall instruct students to implement their progress report presentation meeting appropriately and save a copy of progress report on their research. Students must submit their progress report along with other required materials upon implementation of their preliminary review.

2. Dissertation Reviews

(1) Degree Conferment Period

- Twice a year, in March and September, to correspond to spring and autumn admissions
- Those completed the Doctoral Program without dissertation, and those enrolled in the program longer than the three-year standard period may be considered separately.

(2) Submission of Dissertation Titles, Etc.

3rd year of the Doctoral Program [Spring admission: late August, Autumn admission: late February]

A. Determination of chief examiners

- Chief examiners must be "Doctoral Marugo" faculty members. Research advisors are eligible to decide chief examiners.

B. Recommendation of members of the Dissertation Review Committees (co-examiners)

- Dissertation Review Committees shall consist of a chief examiner and three or more co-examiners.
- The chief examiner shall recommend three or more co-examiners. A sub research advisor may become a co-examiner.
- Two or more examiners shall be "Doctoral Marugo" faculty members.
- One of co-examiners may be faculty members, etc. from other graduate schools or research institutes where doctoral reviews are held.

C. Determination of dissertation titles

- Research advisors shall determine the dissertation titles in consultation with relevant students. In cases where a sub research advisor is assigned to a student, the sub research advisor must be included to the consultation.
- The dissertation titles must be related to the themes of Special Research.
- The dissertation titles must be provided both in English and Japanese.

D. The dissertation titles and the establishment of Dissertation Review Committees

[Spring admission: mid-September, Autumn Admission: mid-March]

- Chief examiners shall propose dissertation titles and establishment of the Dissertation Review Committees to the Dean of the Graduate School.
- The Graduate School Academic Affairs Committee (GSAAC) shall deliberate and make decisions on these proposals.
- In the case of a change in members of the Review Committee after the GSAAC decision, the prescribed request form must be submitted to the GSAAC with reason for the change, signatures and seals of members of the Review Committee of both pre- and post- revision, and this request must be approved by GSAAC. No change is allowed in members of the Review Committee after the preliminary review.

(3) Preliminary Review

Preliminary review is held in the 3rd year of the Doctoral Program

[Spring admission: late September to mid-November, Autumn admission: late March to mid-May]

A. Submission of materials for the preliminary review

[Spring admission: late September, Autumn admission: late March]

- Students shall submit the following materials to the Dean of the Graduate School for the preliminary reviews, based on the approval by the chief examiners.
 - Request for Doctoral Dissertation Preliminary Review
 - Dissertation abstract (Encouraged to submit abstract in Japanese as well.)

- List of publications
- Curriculum vitae
- Copy of publications
- Finished dissertation

The dissertations shall be written in English. The number of pages is not specified.

- Copy of progress report
- Record on a Change of a Doctoral Dissertation Title (Only if a change of the title made. A change of the title thereafter is not permitted. However, permission to make minor change shall be given by the Graduate School Academic Affairs Committee.)

B. Scheduling of the preliminary reviews

- The chief examiner shall set date and time for the preliminary reviews by adjusting co-examiners' schedules. The chief examiner has obligation to report the finalized schedule to GSAAC for approval.

C. Implementation of the preliminary reviews

- The preliminary reviews shall be conducted by the Dissertation Review Committees. Each student must complete presentation for fifty minutes which is followed by fifty minutes oral examination. Students shall make their presentations in English.

<Assessment Criteria>

- Research progress (Copy of progress report)
- Submission of academic papers (Students are required to submit one or more papers to major academic journals based on the achievements during the enrollment in the Doctoral Program. Students must be the first author (primary contributor) to the paper(s).)
- Basic scholastic achievements
- English competency

D. Judgment for the preliminary review: Either one of the judgments below shall be made.

In order to pass the preliminary review, two-thirds or more of the Dissertation Review Committee members must approve.

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

Problems to be solved by the time of the final review and items pointed out must be clearly shown to the successful student.

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

Advice on the research thereafter must be clearly given to the student. The student who failed is allowed to have another preliminary review which will be held based on the dissertation review schedule six months later.

E. Notification, etc. of the result of the preliminary reviews

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

(4) Final Dissertation Review

3rd year of the Doctoral Program:

[Spring admission: late December to early February, Autumn admission: early June to late July]

The final dissertation review must be implemented within six months from the date indicated in results of the preliminary review. If a final dissertation review is not conducted during the period, the chief examiner must once again submit requests for approval of the dissertation title and the establishment of the review committee by GSAAC to implement the preliminary review in

accordance with the procedure.

A. Submission of material for the dissertation review

[Spring admission: late December, Autumn admission: early June]

- Students shall submit material for the dissertation reviews described below to the University President, upon the approval of the chief examiners.
- Items to be submitted:
 - Request for Doctoral Dissertation Review
 - Dissertation abstract (Encouraged to submit Japanese abstract as well.)
 - List of publications
 - Written reply regarding the issues pointed out at the preliminary review
 - Final draft of the doctoral dissertation (The final draft shall be English. The number of pages is not specified.)
 - Other material

B. Scheduling of the review day

- Chief examiners shall request co-examiners concerned to adjust their schedules to determine date and time for the final dissertation reviews. The determined schedule must be reported and approved by GSAAC.

C. Implementation of the dissertation review

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

- The presentation is a part of review of the dissertation and the final examination for completing the Doctoral Program.
- The final dissertation reviews shall be conducted by the Dissertation Review Committees. Fifty minutes for presentation followed by about fifty minutes oral examination shall be allotted per student. Students shall make their presentations in English.
- Faculty members assigned to the UoA Graduate School are eligible to participate in the dissertation review.
- Items to be examined:

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

- Details of the dissertation (Novelty, and contributions to the relevant research field, etc.)
- Papers accepted or published by academic journals and conference proceedings

The student must satisfy following requirements prior to the final dissertation review.

The doctoral dissertation must contain at least two contributions by the student on the same theme correlated with the contents of the doctoral dissertation. This, in principle, requires the student to be the first author (primary contributor) of two or more accepted or published major journal papers.

In case the student is the first author (primary 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 first author (primary 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 first author (primary contributor) of at least two peer-reviewed papers published in proceedings of major conference. In this case, the conference papers must jointly contain a contribution distinct from that in the major journal paper.

In both cases, the committee must clearly explain the correlation between the contribution(s) to the dissertation and the accepted/published paper(s).

(Note)

Non-major journals in this guideline shall refer to journals listed in academic journal databases (Scopus, etc.). In addition, contents commonly used in at least two peer-reviewed conference papers described in b) must be less than one-third, and the contents previously published in the conference paper must be cited in the conference paper(s) written later. Items described here in "Note" shall apply to students who enrolled in AY2019 and after.

- Response regarding the issues raised at the preliminary review
- Logical and clear presentations and answers to the questions

D. Judgment for the dissertation review and the final examination: either one of the following judgments shall be made.

In order to pass a dissertation review, two-thirds or more of the Dissertation Review Committee members must approve.

Pass: In the case that the student's dissertation requires some modification, document indicating items to be modified must be prepared.

Fail: The items pointed out must be clearly shown to the student. Students who failed can undergo a dissertation review again six months later without undergoing another preliminary review according to the dissertation review schedule.

E. Determination of the review result

[Spring admission: early February, Autumn admission: late July]

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

F. Notification of results of the dissertation reviews

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

(5) Submission of the final version and abstract of the dissertation, dissertation presentation and degree conferment

Period: 3rd year of the Doctoral Program

[Spring admission: late February - mid-March, Autumn admission: late August - mid-September]

A. Submission of the final version of the dissertation

[Spring admission: late February, Autumn admission: late August]

- Students shall submit the final version of the dissertation and the abstract to the Dean of Graduate School through their chief examiners.
- Style of the dissertation abstract: The dissertation abstract shall be written in English. A Japanese version must also be prepared to be handed out at the opening of the presentation session. Each version of the abstract must not exceed four A-4 size pages.
- Chief examiners shall submit a summary of the review result to the Dean of the Graduate School.
- Students shall, according to the Guideline for Management of the University of Aizu Academic Repository provided for by the ISTC, submit 1) Consent to Use of Academic Paper/Repository Registration Request Form (Form 2) with their research supervisor's confirmation seal on it and 2) finalized dissertation to the Student Affairs Division.
- Students who cannot submit the final version of their dissertation and abstract by the deadline, conferment of a degree certificate shall accordingly be postponed.

B. Dissertation Presentation

[Spring admission: early February, Autumn admission: mid-July]

- The abstract of the dissertation shall handed out for the dissertation presentation.
- The dissertation presentation shall be open to faculty members of the University of Aizu, faculty members of other universities and the students' family members, etc.

C. Conferment of Degree

[Spring admission: mid-March, Autumn admission: mid-September]

- Students shall submit the "Application Form for the Academic Degree" to the Dean of the Graduate School.
- The Graduate School Academic Affairs Committee shall report on students to be conferred a doctoral degree, who have submitted the final version of their dissertation and abstract, to the Graduate School Faculty Assembly. The Graduate School Faculty Assembly shall decide on conferment of degree.

3. Other

- (1) Handling of a student who cannot complete his/her dissertation by the deadline
 - A. Handling of withdrawal from the doctoral program after fulfilling the three-year standard enrollment period
 - Students who cannot complete dissertations during the three-year standard enrollment period of the doctoral program, withdraw from the doctoral program may be approved upon application by the students.
 - B. Submission of a dissertation by the student withdrew from the doctoral program after the three-year standard enrollment period
 - The student withdrawing from the doctoral program after the three-year standard enrollment period is allowed to undergo the dissertation review with the equivalent dissertation review criteria as the students enrolled in the doctoral program within three years after the withdrawal.
 - The research advisor at this time shall be the same faculty member as when the student was enrolled at the Graduate School, in principle.

- (2) Handling of diplomas for students who withdraw from the doctoral program after the three-year standard enrollment period
(Determined by the Graduate School Faculty Assembly on March 4, 2005)
 - In cases where individuals, who withdrew from the doctoral program of the University of Aizu Graduate School after the three-year or longer enrollment period, during which they received necessary guidance on research (hereinafter referred to as "individuals withdrawing from the doctoral program after the standard enrollment period"), complete their doctoral dissertations and apply for doctoral degree within three years counting from the day following their withdrawal from the doctoral program, and conferment of doctoral degree is authorized by the Graduate School Faculty Assembly, diplomas which are conferred to those who have completed the Doctoral Program (Attached Form No. 6, the University of Aizu Regulation on University Degrees) shall be conferred to those individuals.
 - This handling above will apply to individuals admitted to the Doctoral Program of the University of Aizu Graduate School in and before October, 2004.
 - Individuals admitted to the doctoral program in or after April, 2005 and withdrew from the said program after the standard enrollment period shall be conferred diplomas for those who pass the review of dissertations, etc. without completing the Doctoral Program (Attached Form No. 7, the University of Aizu Regulation on University Degrees). It requires authorization by the Graduate School Faculty Assembly after completing the individuals' doctoral dissertations and applying for doctoral degrees are submitted within three years counting from the day following their withdrawal from the said program.

- (3) Handling of a student who has attained distinguished achievements
 - Concerning a student who has attained distinguished achievements, a dissertation review committee can be organized in prior to completion of two-years enrollment.

4. Special Training Program (Internship)

(Determined by the Graduate School Faculty Assembly on March 31, 1999)

- (1) Position
 - The Special Training Program (Internship) (hereinafter referred to as "TRAINING") shall be positioned as a form of "research guidance" in the doctoral program and should be closely related to a student's research theme.
 - Therefore, enrollment in the TRAINING shall be regarded as enrollment in the "Special Seminar" and "Special Research."
- (2) Host of the TRAINING:
 - Companies, governmental bodies and public-service corporations (hereinafter referred to as "COMPANIES, ETC.")
- (3) Timing and Period of the TRAINING:
 - Timing: preferably carry out the TRAINING between the 2nd quarter of the 1st year and the end of the 2nd year.
 - Period: not specifically fixed. Students must decide on the training period with consideration for the schedule of their doctoral dissertation.
- (4) Roles of Research Advisors:
 - Research advisors shall make proposals to the University President regarding sending their students to COMPANIES, ETC. after confirming sufficient capability of COMPANIES, ETC. to supervise students on the internship program.
 - Their research advisors shall be responsible for supervising the students on the TRAINING. The research advisors shall give

- adequate guidance when the students decide on TRAINING themes, the COMPANIES, ETC. and the TRAINING period, etc.
- In cooperation with the personnel of the COMPANIES, ETC., in charge of the TRAINING, the research advisor shall give the student proper guidance based on the TRAINING PROGRESS REPORTS submitted by the student during the TRAINING.
 - The research advisor shall report the summary of the TRAINING results to the Graduate School Academic Affairs Committee after completion of the TRAINING.
- (5) Roles of the Person in Charge of the TRAINING:
- The person of the COMPANIES, ETC. in charge of the TRAINING shall give the student guidance in cooperation with the research advisor concerned. When the TRAINING is completed, the person in charge shall prepare a TRAINING EVALUATION REPORT to submit to the University President.
- (6) Report on the TRAINING:
- A student implementing the TRAINING shall submit a TRAINING PROGRESS REPORT to his/her research advisor every month.
 - The student shall also submit a TRAINING OVERVIEW REPORT to his/her research advisor upon completion of the TRAINING.
- (7) Who to Bear the Expenses of the TRAINING:
- The COMPANIES, ETC. shall bear expenses of the TRAINING, in principle.
- (8) Working Conditions, Wages, Etc.:
- Working conditions, wages, etc. shall be determined through discussion among the COMPANIES, ETC., the research advisor and the student concerned.
- (9) Damage Compensation:
- In addition to the "Disaster/Accident Insurance for Students in Education and Research" which every student enrolls in upon admission to the graduate school, enrollment in the "Insurance for Compensation for Damages in Internship/Care Experience Activities/Volunteer Activities" is required for TRAINING.
 - In the case that the student is requested to buy an insurance for compensation individually by the COMPANIES, ETC., he/she shall buy the insurance concerned.
- (10) Confidentiality Obligation, etc.:
- The student to take part in the TRAINING and his/her research advisor have the confidentiality obligation of COMPANIES, ETC.'s trade secrets which the student has come to know during the TRAINING.
 - The following points should be noted within the University.
 - (a) Only the research advisors are permitted to read the TRAINING PROGRESS REPORT and the TRAINING OVERVIEW REPORT.
 - (b) In cases where content of the TRAINING will be described in paper, etc., prior approval by the COMPANIES, ETC. must be obtained.
- (11) Committee in Charge
- The Graduate School Academic Affairs Committee shall be in charge of the TRAINING.

5. Implementation Guideline for Creative Factory in the Doctoral Program of the University of Aizu Graduate School

(Determined by the Graduate School Academic Affairs Committee on January 15, 2010)

Article One

(Purpose)

1.1 This guideline provides for necessary matters pertaining to implementation of the "Creative Factory," a virtual laboratory, a system formed in line with the research interests of individual doctoral students, in which multiple advisors can be involved in provision of advice.

Article Two

(Objective)

2.1 The objective of the "Creative Factory" shall be to create quality and timely research achievements, enhance competitiveness of research and education of the Graduate School, support interdisciplinary research and collaborative research with other institutions, and provide education with both industrial and academic directivities.

Article Three

(Structure)

3.1 Respective creative factories shall consist of one organizer (a research advisor for a doctoral student), who establishes a creative factory, and multiple creative factory advisors (faculty members assigned to the UoA Graduate School or external specialists, etc. equivalent to the faculty members).

3.2 At least two advisors of a creative factory must be faculty members qualified with Doctoral Maru Go, in principle.

Article Four

(Application for Establishment)

4.1 Research advisors requested to be an organizer of a factory by students shall, in line with the students' research content and plans, select other research advisors to organize the creative factory by making due arrangements with the relevant advisors and submit the form, "Application for Establishment of Creative Factory" (Form No. 1) to the Dean of the Graduate School.

Article Five

(Students' Application)

5.1 Students who wish to have research advice provided through a creative factory shall consult with his/her research advisor on admission to the Graduate School, and submit the form, "Application for Participation in a Creative Factory" (Form No. 2) to the Dean of the Graduate School along with the submission of Form No.1 mentioned 4.1 by the organizer of the factory.

5.2 One student may participate in per factory, in principle. However, only in the cases approved at the Graduate School Academic Affairs Committee, multiple students may participate in one and the same factory. In this case, research of respective students must be conducted independently.

Article Six

(Determination of Establishment and Participation in a Creative Factory)

6.1 Upon reception of "Application for Establishment of Creative Factory" and "Application for Participation in Creative Factory," the Dean of the Graduate School shall have the Graduate School Academic Affairs Committee discuss the content of the applications and take a vote, and notify the relevant organizer and his/her student regarding a result of the discussion.

Article Seven

(Period)

7.1 A period for duration of a Creative Factory shall be, in principle, the same as the enrollment period of the student in the doctoral program who participate in the relevant factory. The factory shall be terminated when the relevant student completes the program or withdraws from the university.

Article Eight

(Changes)

8.1 Member advisors of an established creative factory shall not be, in principle, changed during the duration of the factory.

8.2 In cases where a change in member advisors is needed due to inevitable reasons, the relevant organizer may apply for the change to the Dean of the Graduate School with a clear statement of the reasons.

8.3 When acceptance of application for 8.2 mentioned above, the contents shall be discussed and put them to a vote at the Graduate School Academic Affairs Committee, and the Dean of the Graduate School shall notify the relevant organizer regarding the results of the deliberation.

Article Nine

(Clerical Matters)

9.1 Clerical matters related to the Creative Factory shall be conducted by the Student Affairs Division, the Department for Student Affairs.

Attached forms (omitted)