

Summary of Rules, Regulations and Procedures for the Doctoral Course Program in Civil and Environmental Engineering

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Department of Civil and Environmental Engineering

1. INTRODUCTION

This summary has been prepared for students' easy reference to the rules, regulations, requirements and procedures for the doctoral degree in Civil and Environmental Engineering of Nagoya University. If students need additional details about requirements and procedures, they are advised to read the University Bulletin and School of Engineering Bulletin II and to consult their academic advisers and the department chairman.

It is said that obtaining doctoral degree in Japan is harder than that in other countries such as the U.S.A. That is true to a certain extent. Until recently, most doctoral course students in our department needed almost 5 years to accomplish doctoral thesis. However, the department's policy recently adopted is that the students are strongly recommended to concentrate on their study and to finish all work within three years.

2. REQUIREMENTS

(1) Course requirement

A minimum number of 8 credits is required (see University Bulletin and School of Engineering Bulletin II and consult the supervisor for details). Students are recommended to complete the course requirement within the first two years. There is no standard for performance requirement, but you should have grade A for every subject in entire graduate course works.

The students of Forefront Program (Forefront Studies Program on Civil and Environmental Engineering towards Co-Development of Asia and Japan) and NUGELP (Nagoya University Global Environmental Leaders Program) need to take additional credits (for detail, refer to "International Program Guidebook"). The other students are also expected to take these classes as much as possible.

(2) Examinations

All students are required to pass the following examinations at given moments.

- a) Qualifying examination for the maintenance of candidacy (See page 5)
- b) Midterm examination

c) Final examination (doctoral thesis defense)

(3) Publications

Three technical papers are usually required to be published in the technical journals of established reputation before submitting the first draft of the doctoral thesis. However, one of the three papers can be submitted for publication after obtaining doctoral degree, if the doctoral committee permits it. Students are advised to consult their supervisors on details.

(4) Residence requirement

Three academic years of doctoral study are usually required for doctoral course. From October to September of the following year constitutes one academic year.

(5) Shorten certificate

In the exceptional case in which a candidate can make superb work, it is possible for him/her to finish doctoral course in one year (three years including master's course). The procedures described in this summary are not applicable in this case. Students are required to consult their academic advisers.

(6) Time limitation

Six academic years for doctoral program are the maximum limitation. Typical time span, however, is supposed to be three years by the department. If students are receiving the stipend from the Japanese Government, they should know that the maximum scholarship tenure for doctoral students is three years.

(7) Doctoral thesis

A candidate is required to write a doctoral thesis under the direction of a professor in his/her department. The thesis must treat a topic related to the candidate's specialty in his/her major subject, show the results of original research, provide evidence of high level of scholarship and make a significant contribution to the knowledge in the field.

The doctoral thesis will be normally written in Japanese or in English.

3. TIME SEQUENCE AND PROCEDURES

(1) Doctoral committee

a) An academic supervisor is designated at the time of enrollment to the doctoral course. He will be the chairman of the doctoral committee in most cases.

b) Tentative doctoral committee members are organized shortly after the entry. The committee conducts qualifying examinations for the maintenance of candidacy and midterm examination at given moments.

c) Full doctoral committee is organized just after submission of the first draft of the doctoral thesis to the department. The members of this committee are the same as of the tentative doctoral committee in most cases. Review and suggestions for the revision of the doctoral thesis are conducted under the direction of the committee.

d) The formal recognition of the full doctoral committee is performed by Graduate School of Engineering after submission of the final draft to Graduate School of Engineering.

(2) Evaluation and screening

Program evaluations are continually made by the supervisor, the doctoral committee and the department's faculty besides the examinations described in 2.(2).

- a) Evaluation of the candidate's course performance and research progress by the supervisor and department faculty at the same time as qualifying examinations for the maintenance of candidacy and midterm examination.
- b) Evaluation of the candidate's achievement of requirements and research progress by the doctoral committee and department faculty at least three months before submitting the first draft of the doctoral thesis. More than two accepted technical papers with peer-review are required to initiate review and suggestions for revision.

(3) Doctoral thesis defense and final examination

Required procedures for the doctoral thesis are as follows:

- a) Approval of the first draft by the supervisor.
- b) Submission of the first draft and qualification documents to the department through the supervisor and approval by the department to start review and suggestions for revision which will be done under the direction of the doctoral committee.
- c) Distribution of the first draft to the doctoral committee members through the supervisor.
- d) Review and suggestions for revision under the direction of the committee.
- e) Submission of the final draft (usually a bounded copy) to the department under the direction of the doctoral committee and acceptance of the draft at the faculty meeting of the department.
- f) Submission of the final draft (**three** bounded copies) with the application form for the defense to Graduate School of Engineering through the department and acceptance of the draft at the professors' meeting of Graduate School of Engineering. The formal doctoral committee members are also organized at it.

g) Doctoral thesis defense and final examination

The presentation period is normally of not more than one and one-half hours' duration. The questioning session open to public is usually of a half hour. Then, the closed oral examination by the committee members is conducted for about two hours. Finally, the closed oral examination by the department faculty members takes normally less than a half hour.

- h) Approval of doctoral degree by the department and submission of the report of the decision to Graduate School of Engineering through the chairman of the doctoral committee.
- i) Evaluation of the doctoral thesis and final approval of doctoral degree in the professors' meeting of Graduate School of Engineering.

j) Conferment of degree

With the due process mentioned above, a candidate will be conferred the certification of the doctoral degree in September of the third academic year.

(4) Ethical standards in preparing doctoral thesis and journal papers

- a) A doctoral course student is a researcher who is required to maintain high ethical standards. The doctoral thesis and journal papers should have original contributions to the relevant field and should be based on a study first reported. They should not contain plagiarized materials or falsified research data. In addition, as a general rule, duplicate publication is not allowed. The student should keep a research log that can be a proof of originality and priority of his/her research findings. Furthermore, when the student quotes other papers or newspapers, consult with your advisor as there are strict rules and restrictions for quotations.
- b) It is mandatory that a student obtain permission from his/her advisor when submitting a research paper to a journal or international conference.
- c) If a student violates ethical standards written above, he/she may be punished according to the University's regulations.

Qualifying Examinations for the Maintenance of Candidacy and Midterm Examination

Each doctoral candidate must pass qualifying examinations for the maintenance of candidacy administered by the tentative doctoral committee.

OBJECTIVES OF QUALIFYING EXAMINATIONS

The objectives of the doctoral degree qualifying examinations and midterm examination are to examine whether or not a candidate has sufficient intellectual ability, strong motivation, adequate research capacity and proficiency in his/her field of study, as well as an adequate understanding of the fundamentals of Civil and Environmental Engineering in order to have a reasonable chance of successful completion of the requirements of the doctoral degree program.

TIME OF QUALIFYING EXAMINATIONS

The qualifying examinations will be held in April of the first year and October of the second year. If all work can't be finished within three years, additional qualifying examinations will be held in July of the third year and semi-annually from the fourth year on. Midterm examination will be held in April of the second year. The specific time is to be arranged by the tentative doctoral committee. The candidate is not permitted to make a second attempt.

CONTENTS OF QUALIFYING EXAMINATIONS

The examinations will consist of a written part, a presentation and an oral part.

(1) Written Examination

The written report shall be submitted to the doctoral committee.

For the qualifying examinations for the maintenance of candidacy, the report shall at least contain the following items in each qualifying examination.

- a) Motivation, background and outline of the research
- b) Progress of the research work
- c) Publications and presentations
- d) Current academic credit status

For the midterm examination, the report shall at least contain the following items in each qualifying examination.

- a) Progress of the research work
- b) Future plan of the research work
- c) Prospect of the doctoral thesis
- d) Publications and presentations
- e) Current academic credit status

(2) Presentation and Oral Examination

Each candidate is required to present objectives and outline of his/her research in the first and second qualifying examinations. Each candidate is required to present his/her research results and show the perspective of his/her doctoral thesis in qualifying examinations held in April of the second year and after July of the third year. Each candidate will be examined orally by the tentative doctoral committee members following the presentation. The candidate will be

expected to answer all the questions given by the committee members and audience.

QUALIFYING EXAMINATIONS PROCEDURES

(1) Submission of the written report to the committee

The written report shall be submitted to the doctoral committee at least one week before the presentation.

(2) Presentation

While the presentations in the first and second qualifying examinations are not needed to be open to public, the presentation of the midterm examination should be open to public.

(3) Oral Examination

The oral examinations will be given immediately following the presentation. While the oral examinations in the first and second qualifying examinations are not needed to be open to public, the oral examinations after the third qualifying examinations should be open to public.

(4) Evaluation

The performance of each candidate will be judged by the committee based on the results of the Qualifying Examination as well as on the candidate's total career up to the Qualifying Examination. The result will be reported to the department faculty members, and then the final decision will be made by them.

The candidate will be required to take an additional examination, if a clear-cut decision cannot be agreed upon.

(5) Notification

Each candidate will be informed of Faculty's decision by the supervisor as soon as feasible.

Table of Time Sequence and Procedures

The following table shows an example of time sequence and procedures for students' convenience. The schedule below is the limiting one to obtain doctoral degree within three academic years.

Time	Procedures
<i>The First Academic Year</i> October	※ Enrollment Organize the tentative doctoral committee
April	※ The first qualifying examination for the maintenance of candidacy
<i>The Second Academic Year</i> October	※ The second qualifying examination for the maintenance of candidacy
April	※ Midterm examination
<i>The Third Academic Year</i> The 1st week of May	Check of the requirements by the doctoral committee
The 4th week of June	Check of the requirements for doctoral degree by the departments' faculty and approval of preparing doctoral thesis ※ Submission of the first draft of the doctoral thesis to the department upon the permission of the supervisor. After acceptance by the department, ※ Start of review and suggestions for revision under the direction of the doctoral committee.
The 4th week of July	※ Submission of the final draft and the plagiarism check result of the thesis to the department. ※ After acceptance by the department, submission of three bounded copies to Graduate School of Engineering.
August	Acceptance of the final draft by Graduate School of Engineering.
End of August to beginning of September	※ Defense and final examination Approval of doctoral degree by the department
September	Final approval of doctoral degree by Graduate School of Engineering. ※ Conferment of doctoral degree

Procedures prefixed with a symbol ※ need candidate's performance.

Supplementary Remarks

Students are kindly requested to keep in mind the following during the doctoral course:

- (1) To concentrate on their study.
- (2) To publish as many technical papers as possible.
- (3) To consult their academic advisers not only on their academic items, but also on their personal life.
- (4) To ask their tentative doctoral committee for their widely opinions about study, life, and so on.
- (5) To have strong will and perseverance to overcome the difficulties they may face.
- (6) To have friendship with as many people as possible.

The department faculty members hope strongly that students will successfully complete the doctoral course program within three years. Students are always welcome to come to faculty members' offices to have instruction and guidance on their research and to have advice about their personal life.