National Yang Ming Chiao Tung University Department of Applied Mathematics

Regulations for Graduate Students in the Master's Program in Mathematical Modeling and Scientific Computing

Established in 2006
Revised in November 2007
Revised in October 2008
Revised in February 2011
Revised in April 2012
Revised in January 2013
Revised in April 2014
Revised in September and November 2015

Revised in October 2017, April 2018, March 2019, March 2020, March 2021, March 2022

- 1. Admission qualifications for the master's program are handled according to the relevant admission regulations of the university. Graduate students must select their advisor before the start of the second semester after admission and must continue their registration after the advisor is approved by the Curriculum Committee. Advisors should be faculty members from the department or be joint co-advisers from other departments (including other schools) and the department's faculty, with assistance from the class director if necessary. If a graduate student wishes to change their thesis advisor during their study period, they must submit a written application to the department, and it will take effect after completing the relevant procedures. If an advisor wishes to terminate the advising relationship, they must submit a written application to the department, and the department will notify the student of the review result. After the termination of the advising relationship, the department will assist the student in finding another advisor. Research results obtained under the original advisor's guidance and based on their original ideas or concepts can only be used for the degree thesis with the original advisor's consent.
- 2. The study period for graduate students is 1 to 4 years, and for in-service students, it is 2 to 5 years. Students must complete 24 credits. General students should be full-time, while in-service students may have their study time reduced with the agreement of their thesis advisor and class director, but it should not be less than half of the full-time requirement. Additionally, during the study period, students must serve as teaching assistants for courses offered by the department (including calculus) for at least two semesters. If there are special reasons preventing a student from serving as a teaching assistant, an exemption can be applied for by the thesis advisor to the Curriculum Committee.
- 3. Credits from graduate-level courses taken before admission that are not counted towards the undergraduate graduation credit requirements may be considered for credit transfer. The number of transferable credits is determined by the Curriculum Committee, but courses not taught by full-time faculty members of the department may not exceed 6 credits.
- 4. Graduate students who have completed the required courses and master's thesis and passed the final academic research ethics education test may apply for the master's degree examination. Students taking the degree examination must complete the "Thesis Originality Comparison" for reference by the examination committee. The master's degree examination committee members are recommended by the thesis advisor and must include 3 to 5 members with qualifications of assistant professors or higher, or assistant research fellows at Academia Sinica, with at least one-third being external members from other departments or schools. The committee members are approved by the Curriculum Committee and appointed by the university president.

- 5. Graduate students who pass the master's degree examination and complete the master's thesis will be recommended for the award of a master's degree according to the regulations. Those who fail the degree examination and have not exceeded the maximum study period may retake the examination before the end of the study period, with only one retake allowed. Students who fail the retake will be dismissed.
- 6. Master's students who wish to be directly admitted to the Ph.D. program in Applied Mathematics must apply to the department during the Ph.D. program admission exam registration period and participate in the same exam items (document review, oral exam, written exam) as other candidates. Upon passing, they must apply to the university following the procedure.
- 7. Students directly admitted to the Ph.D. program in Applied Mathematics may transfer back to the master's program upon review and approval by the Curriculum Committee and the university.

8. Course Requirements:

- i. Required courses: Introduction to Scientific Computing (3 credits), Methods of Applied Mathematics (3 credits), and passing two semesters of Colloquium and completing the academic research ethics education course by the end of the first semester.
- ii. Additionally, students must select one 3-credit graduate course from the department and two interdisciplinary courses totaling 6 credits. Students must complete a course recognition form signed by the class director or advisor before the course credits are recognized.
- 9. After passing the degree examination, students must submit the "Degree Examination Score Sheet" to the Registration Division during the exam semester. For the first semester, it must be submitted by January 31; for the second semester, by July 31. The deadline for submitting the hard copy of the thesis is the last working day before the start of the next semester after the degree examination. Students who fail to submit the hard copy of the thesis on time and have not exceeded the study period must register for the next semester. If the study period is exceeded and the "Degree Examination Score Sheet" is not submitted by the end of the period or the hard copy of the thesis is not submitted by the last working day before the start of the next semester, the student will be dismissed.
- 10. Applications from graduate students of other departments for transfer to the master's program in this department are handled according to the university's regulations for department transfer.
- 11. Matters not covered by these regulations shall be handled according to the Degree Conferral Act and the university's graduate degree conferral regulations.
- 12. These regulations are established by the department's Curriculum Committee and implemented after review and approval by the college and university Curriculum Committees and the Academic Affairs Meeting. Amendments follow the same procedure.