National Chiao Tung University
Department of Applied Mathematics
Regulations for Graduate Students in the Master's Program in Mathematical Modeling and Scientific Computing

1. 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 notifying the original advisor without needing the original advisor's consent. 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 2 to 4 years, and for in-service students, it is 2 to 5 years. Students must complete 24 credits. Those with outstanding performance can apply for direct admission to the Ph.D. program in Applied Mathematics or for one-year graduation. Applicants for one-year graduation will be reviewed for outstanding qualifications by a special review committee organized by the Curriculum Committee, consisting of scholars in relevant fields in Taiwan. 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.

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 post-doctoral researchers, 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 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. Matters not covered by these regulations shall be handled according to the university's master's and doctoral degree conferral regulations

10. 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.