National Yang Ming Chiao Tung University Department of Transportation and Logistics Management Graduation Requirements of the Master Degree program for Foreign Students

Amended at the 6th Academic Affairs Meeting in Academic Year 2025 (26 March 2025)

1. Period of Study

- a. Time required to complete the degree is ranging from 1 to 4 years, depending on the student progress.
- b. Student, who has published papers on SCI, SSCI, TSSCI, EI, or Journal Paper with equivalent level during the course of study, can apply for early graduation.

2. Requirement for graduation

A master student must earn a minimum of 30 course credits ("Research Seminar" not included), with the following requirements:

a. A master student must earn 18 credits for required courses provided by the department, including 9 credits for Core courses, 3 credits for Statistical and Data Analysis related courses, and 3 credits for Optimization related courses. The course list is given below.

(I) Three of the following twelve core courses should be selected

	I
Transportation Projects Evaluation	Transportation Risk Management
Transportation Economics and Policy	Transportation System Analysis
Sustainable Transportation Planning	Travel Demand Analysis
Intelligent Transportation Systems	Global Supply Chain Management
Transportation Safety	Transportation and Distribution Optimization
Logistics Operation Planning Models	Maritime, Air and Intermodal Transportation Optimization

(II) Statistical and Data Analysis related courses:

One of the following five professional courses should be selected:

Transportation Econometrics	Multivariate Analysis
Stochastic Processes(IEM)	Data Science Methods

Big Data Analytics	
--------------------	--

(III) Optimization related courses:

One of the following four professional courses should be selected:

Heuristics	Network Modeling Analysis
Linear Programming(IEM)	Mathematical Programming

- b. A master student must earn 9 credits for courses provided by the College of Management.
- c. A master student must enroll "Research Seminar" for every semester during the study. Students for dual-degree programs and those who have already completed "Research Seminar" for four times are not included.
- d. A foreign student should pass the TOCFL (Test of Chinese as a Foreign Language) test basic level (Band A) before graduation. Otherwise, the student should complete at least 4 credits of Chinese language courses held by a language institute in a university, and these credits are not included in the graduation credits.
- e. A master's student must complete a thesis and successfully pass the oral defense. The thesis must be completed within the designated timeframe. Before applying for the oral defense, the thesis must undergo an originality check. After excluding previously published works related to the degree thesis, the similarity index must not exceed 20%. Upon the advisor's signed approval, the thesis and originality report should be submitted to the department office. If the similarity exceeds 20% due to special circumstances, the student must obtain the advisor's signed approval and the thesis must pass a special review by the academic committee before the oral defense application can be submitted.

3. Thesis Advisor

- a. A student has to seek a thesis advisor right after school enrollment.
- b. The thesis advisor must be a full-time professor of the department. It can be coadvised by other professors outside the department or university.
- 4. During the period of study, if a student wishes to change his/her thesis advisor, a written application should be submitted to the department. The change of thesis advisor is effective after the notification to the original thesis advisor. Agreement from the original thesis advisor is not necessary for the change to be effective.
- 5. If the thesis advisor wishes to terminate the thesis instruction relationship with the student, a written application should be submitted to the department for approval, and the results will be notified to the student by the department. After the termination of the

thesis instruction relationship, the department will assist the student to find a new thesis advisor. The research results related to the ideas or concepts of the original thesis advisor under the thesis instruction can only be used as part of the student's thesis with the agreement of the original thesis advisor.

- 6. Whenever the student would like to terminate the thesis instruction relationship with the advisor or change the thesis advisor, the student should submit an application to the departmental office. The process will be effective after the process is initiated. The relationship termination does not require any approval from the thesis advisor.
- 7. The Graduation Requirements have been approved by the departmental committee, curriculum committee of the College of Management, curriculum committee of NYCU, and approval by the meeting of Academic Affairs of NYCU. Future changes will need to be reviewed and approved by the above units.
- 8. For the details not covered in this document, please refer to the graduation requirements of the master degree program for local students.