Master's Degree Requirements of the Department of Communication Engineering, National Central University

(Effective from Academic Year 2024/2025)

Approved at the Institute Affair Committee meeting on September 1, 2000 Revised and approved at the Institute Affair Committee meeting on November 16, 2000 Revised and approved at the Institute Affair Committee meeting on December 27, 2001 Revised and approved at the Institute Affair Committee meeting on April 15, 2002 Revised and approved at the Institute Affair Committee meeting on September 3, 2002 Approved at the Departmental Affairs Committee meeting on August 22, 2003 Revised and approved at the Departmental Affairs Committee meeting on September 29, 2005 Approved for reference at the Academic Affairs Committee meeting on October 15, 2008 Revised and approved at the Departmental Affairs Committee meeting on January 15, 2009 Approved for reference at the Academic Affairs Committee meeting on March 25, 2009 Revised and approved at the Departmental Affairs Committee meeting on May 25, 2010 Approved for reference at the Academic Affairs Committee meeting on June 23, 2010 Revised and approved at the Departmental Affairs Committee meeting on March 30, 2011 Approved for reference at the Academic Affairs Committee meeting on June 22, 2011 Revised and approved at the Departmental Affairs Committee meeting on June 18, 2014 Revised and approved at the Departmental Affairs Committee meeting on December 3, 2014 Approved for reference at the Academic Affairs Committee meeting on June 24, 2015 Revised and approved at the Departmental Affairs Committee meeting on January 15, 2018 Approved for reference at the Academic Affairs Committee meeting on March 21, 2018 Revised and approved at the Departmental Affairs Committee meeting on December 10, 2018 Approved for reference at the Academic Affairs Committee meeting on January 9, 2019 Revised and approved at the Departmental Affairs Committee meeting on April 22, 2022 Approved for reference at the Academic Affairs Committee meeting on June 15, 2022 Revised and approved at the Departmental Affairs Committee meeting on November 8, 2024 Approved for reference at the Academic Affairs Committee meeting on January 7, 2025

- I. The requirements were formulated based on the National Central University Study Regulations and the National Central University Rules Governing the Master's and Doctoral Degree Qualifying Exam and Thesis Defense.
- II. The minimum study period for full-time master's students is 1 year, and that for part-time master's students is 2 years. Full-time master's students who have a full-time job inside or outside of the University after notifying and being approved by the Department can reduce the number of elective credits for each semester depending on circumstances, and the minimum study period for them must comply with that for part-time students (at least 2 years).
- III. Full-time master's students of the Department must not take part-time jobs inside or outside the University before notifying the Department.
- IV. According to the regulations of the University, part-time master's students and full-time master's students with full-time jobs are not allowed to receive stipends except for research subsidies for research projects.
- V. Students receiving scholarships or stipends are obligated to provide teaching assistance as arranged by the Department.
- VI. Master's students must complete 24 required graduation credits and pass in or get exempted from (e.g., by credit transfer) at least three approved courses during the study period before being recommended for graduation. The approved courses of each teaching and research group are as follows:
 - A. Digital communication, coding theory, stochastic processes, digital signal processing, adaptive signal processing for communications, digital image processing, computer communication networks, wireless network protocols, distributed networks, queuing theory,

- communication network analysis, MIMO wireless communications, data science, and advanced wireless network architecture and transmission.
- B. Passing grade: 70.
- C. If students wish to take an equivalent course (with the same course title) offered outside the department, they must apply within one week after the start of the semester. Only upon departmental approval will the credits be recognized as core courses. Without such approval, the course cannot be counted as an approved core course.
- VII. Master's students are required to enroll the course: Seminar, every semester. Students in or after the fifth semester are not governed by this regulation. Students who are unable to comply with this regulation because of other reasons must obtain the approval of the Curriculum Committee for exemption.
- VIII. Master's students are required to select advisors from the full-time faculty members of the University, at least one of whom must be a faculty member of the Department.
- IX. Master's students must obtain their advisor's approval regarding course selection and withdrawal from the University. Students who do not yet have advisors must obtain the approval of the Department Head regarding the aforementioned affairs.
- X. The degree examination is conducted in the form of an oral defense, and the passing grade is 70. Matters related to the thesis defense and graduation shall be handled in accordance with the department's "Guidelines for Thesis Quality Assurance and Evaluation" and the university's "Regulations Governing Degree Examinations for Doctoral and Master's Programs."
- XI. Other unspecified circumstances must be settled according to the relevant regulations announced by the Ministry of Education or the University.
- XII. The aforementioned requirements were approved at a Departmental Affairs Committee meeting, and will become effective after being approved for reference at an Academic Affairs Committee meeting. Revisions to the requirements must undergo the same procedure.