# National Taiwan Normal University Department of Industrial Education Master’s Program Coursework and Degree Examination Regulations

Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2004–05

Amendment passed during the 5th Department Affairs Meeting, Academic Year 2004–05

Amendment passed during the 2nd Department Affairs Meeting, Academic Year 2005–06

Amendment passed during the 1st Department Affairs Meeting, Academic Year 2007–08

2010.4.29 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2009–10

2013.6.19 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2012–13

2014.5.14 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2013–14

2015.1.7 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2014–15

2016.2.24 Amendment passed during the 4th Department Affairs Meeting, Academic Year 2015–16

2017.1.4 Amendment passed during the 5th Department Affairs Meeting, Academic Year 2016–17

2017.11.27 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2017–18

2020.3.18 Amendment passed during the 4th Department Affairs Meeting, Academic Year 2019–20

2021.5.19 Amendment passed during the 5th Department Affairs Meeting, Academic Year 2020–21

2022.1.5 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2021–22

Article 1 The following regulations have been formulated in accordance with the University’s *Degree Conferral and Graduate Degree Exam Regulations*.

Article 2 The title of degrees conferred to graduates of the Technical and Vocational Education Division shall be Master of Education (M.Ed.), whereas the title of degrees conferred to graduates of all other divisions shall be Master of Engineering (M.Eng.).

Article 3 Thesis advisor appointments:

1. Upon admission, new students shall have a temporary supervisor assigned to them by the Department Chair based on their specialization and interests.

2. Graduate students shall select a thesis advisor by the end of June of the second semester of their first year of study.

3. The Department Chair shall provide assistance and recommendations for graduate students who are unable to select a thesis advisor.

4. In principle, a thesis advisor shall be a full-time faculty member in the Department with a rank of assistant professor or higher.

5. Graduate students whose thesis topics are outside of the fields of expertise of faculty members in the Department may seek the approval of the Department Chair to appoint an external thesis advisor with the required expertise, with a full-time faculty member in the Department serving as co-advisor.

6. In the event that a thesis advisor is unable to perform their duties for any reason, students may apply for a replacement with the approval of the Department Chair.

7. Graduate students who wish to change their thesis advisor shall obtain the approval of the original advisor, the new advisor, and the Department Chair; only one change of thesis advisor may be made. In principle, requests for a change of thesis advisor should be made in the semester prior to the oral thesis defense.

8. Each faculty member may advise up to three regular master’s program students per academic year (including no more than one student in another graduate program of the Department and co-advising duties). Faculty members with two or more active research projects may serve as advisor to an additional student.

Article 4 Course selection and coursework requirements:

1. Graduate students shall obtain the approval of their temporary supervisor or thesis advisor, or the Department Chair before enrolling in any courses.

2. Graduate students must take and complete Seminar (I)–(IV) (4 credits) before applying for the oral thesis defense.

3. Graduate students in each division shall complete 32 course credits before graduation, including at least 12 credits of professional courses in their specialization that must be completed before they may apply for the oral thesis defense. Please refer to the Department’s *Master’s Program Curriculum Framework* (Appendix I) for details.

4. Each graduate student may take up to 18 course credits per semester.

Article 5 Credit transfers:

1. Matters related to credit transfers shall be subject to the University’s *Student Credit Transfer Guidelines*.

2. Each student may transfer up to 10 credits.

3. Credits for compulsory courses may not be transferred.

4. The titles of courses to be transferred shall be similar to those of the professional elective courses in the students’ field of specialization or those of common elective courses.

Article 6 Degree examination and thesis:

1. Graduate students in the Department may submit a technical report detailing technical achievements for consideration in lieu of a master’s degree thesis with the approval of their thesis advisor. A technical report must meet one of the following recognition criteria:

1) The topic or contents of the technical report must be of an innovative nature.

2) The technical report must contain tangible achievements such as patents, innovations, inventions, and R&D results that have received recognition.

3) Targets of technology transfers shall preferably be major companies.

4) Competition achievements must be from international invention exhibitions and skills competitions.

5) Case studies for professional technologies and management must contain holistic analyses and unique insights.

6) Industry-academia collaboration project reports must detail exemplary contributions that have resulted in material improvements or R&D results..

2. For technical achievements, a comprehensive technical report shall be submitted, the contents of which shall be written in accordance with Article 10 of the *Regulations Governing the Conferral of Degrees and Alternatives to Submission of a Master’s Degree Thesis or Doctoral Dissertation*.

3. For students pursuing a Master of Engineering degree, the thesis advisor may decide whether a thesis proposal defense is necessary. All other students must undergo the thesis (or technical report) proposal defense process.

4. Thesis proposal defense:

1) Eligibility: Master’s program students in their second year of study or above are eligible to apply.

2) Application deadline: The thesis proposal defense may be requested in any month of any semester during a student’s period of study. However, a request must be submitted by the end of April or November for a thesis proposal defense to be held in the same semester.

3) Application procedures:

a. Submission of a thesis proposal defense application

b. Submission of a recommendation letter signed by the thesis advisor

4) Time: The thesis proposal defense shall be held by the end of July or January each year.

5) A thesis proposal defense committee shall be composed of three to five members selected by the Department Chair from among a list of five candidates of an assistant professor rank or above recommended by the thesis advisor.

6) The result of a thesis proposal defense may be either of the following:

a. Pass: Students who pass the thesis proposal defense may begin writing their thesis.

b. Revision required: Students who are required to revise their thesis proposal shall submit the revision to their thesis advisor for review and approval before they may begin writing their thesis.

5. Oral thesis defense:

1) Eligibility:

a. Having passed the thesis proposal defense at least four months prior

b. Having published at least one article as the first or corresponding author (not counting a co-author who is a faculty member of the Department) in an international or domestic scholarly journal or at a scholarly conference

c. Having participated in at least one research project hosted by faculty members of the Department

d. Meeting the course selection and coursework requirements set forth under Article 4 herein

2) Application deadline: The oral thesis defense may be requested in any month of any semester during a student’s period of study. However, requests must be submitted by the end of April or November for the oral thesis defense to be held in the same semester.

3) Application procedures:

a. Submission of an oral thesis defense application

b. Submission of a recommendation letter signed by the thesis advisor

c. Submission of a transcript of the student’s cumulative academic record

d. Submission of a typewritten copy of the thesis

4) Time: The oral thesis defense shall be held by the end of July or January each year.

Article 7 Pursuant to the applicable teacher education regulations, graduate students must pass the Teacher Education Program screening process and be formally admitted as teachers-in-training in order to take courses offered by the Teacher Education Program. Each student may take no more than nine teacher education credits per semester.

Article 8 Students must meet the provisions set forth in the Department’s *Regulations Governing the Foreign Language Proficiency Criteria Required for Graduation and Supporting Remedial Measures* (Appendix II) before graduation.

Article 9 Matters unaddressed herein shall be subject to the University’s *Degree Conferral and Graduate Degree Exam Regulations*, *School Regulations*, and other applicable regulations.

Article 10 Provisions herein involving graduation eligibility and the conferral of degrees shall require the passage of the Department Affairs Meeting and the competent college-level meeting before submission to the Academic Affairs Meeting for review. All other provisions shall require the passage of the Department Affairs Meeting before submission to the Office of Academic Affairs for recordation. The same shall apply to any amendments hereto.



Appendix I

**National Taiwan Normal University  
Department of Industrial Education (Graduate Institute)**Master’s Program Curriculum Framework

**(Applicable to students admitted in or after Academic Year** 2021–22**)**

Master’s students in the Department shall complete the following courses:

|  |  |  |  |
| --- | --- | --- | --- |
| Effective from | Compulsory credits | Elective credits | Minimum credits required for graduation |
| Academic Year 2021–22 | 14 | 18 | 32 |

**1. Departmental common courses: at least 8 credits**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course code | Course title | Year of study | Credits | | Remarks |
| Fall | Spring |
| IEM0001 | Educational Statistics | 1 | 2 |  |  |
| IEM0002 | Research Methods in Industrial Education (I) | 1 | 2 |  |  |
| IEM0084 | Research Methods in Industrial Education (II) | 1 |  | 2 |  |
| IEM0179 | Theories and Methods in Vocational Technical Education | 1 |  | 2 |  |

**2. Divisional courses:**

**A. Compulsory courses for the Technical and Vocational Education Division: at least 6 credits**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course code | Course title | Year of study | Credits | | Remarks |
| Fall | Spring |
| IEM0004 | Seminar on Vocational Technical Education (I) | 1 | 1 |  |  |
| IEM0178 | Seminar on Vocational Technical Education (II) | 1 |  | 1 |  |
| IEM0377 | Seminar on Vocational Technical Education (III) | 2 | 1 |  |  |
| IEM0378 | Seminar on Vocational Technical Education (IV) | 2 |  | 1 |  |
| IEM0095 | Advanced Educational Statistics (I) | 2 |  | 2 |  |

**A. Students in the Technical and Vocational Education Division shall select at least 10 credits of courses based on their research needs from among the available elective courses each semester.**

**B. Compulsory courses for the Energy Applications and Vehicle Technology Division: at least 4 credits**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Course code | Course title | Year of study | | Credits | | Remarks | |
| Fall | Spring |
| IEM0397 | Seminar–Energy Applications and Vehicle Technology Division (I) | 1 | 1 | |  | |  |
| IEM0398 | Seminar–Energy Applications and Vehicle Technology Division (II) | 2 |  | | 1 | |  |
| IEM0389 | Seminar–Energy Applications and Vehicle Technology Division (III) | 1 | 1 | |  | |  |
| IEM0390 | Seminar–Energy Applications and Vehicle Technology Division (IV) | 2 |  | | 1 | |  |

**B. Students in the Energy Applications and Vehicle Technology Division shall select at least 15 credits of courses based on their research needs from among the available elective courses each semester.**

**C. Compulsory courses for the Technology Application and Management Division: at least 13 credits**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Course code | Course title | Year of study | Credits | | Remarks |
| Fall | Spring |
| IEM0395 | Seminar on Technological Application Management (I) | 1 | 1 |  |  |
| IEM0396 | Seminar on Technological Application Management (II) | 1 |  | 1 |  |
| IEM0387 | Seminar on Technological Application Management (III) | 2 | 1 |  |  |
| IEM0388 | Seminar on Technological Application Management (IV) | 2 |  | 1 |  |
| IEM0095 | Advanced Educational Statistics (I) | M |  | 2 |  |
| IEM0086 | Technology Management | M/D |  | 2 |  |
| IEC0021 | Strategic Management | M/D | 2 |  |  |
| IEC0029 | Creativity Application and Innovation Management | M/D | 2 |  |  |
| IEM0334 | Enterprise Practice | M | 1 |  |  |

* **Note: M = master’s level courses; D = doctoral level courses**

**C. Students in the Technology Application and Management Division shall select at least 11 credits of courses based on their research needs from among the available elective courses each semester.**



Appendix II

**National Taiwan Normal University Department of Industrial Education**

**Regulations Governing the Foreign Language Proficiency Criteria Required for Graduation and Supporting Remedial Measures**

2010.1.15 Passed during the 2nd Department Affairs Meeting, Academic Year 2009–10

2014.10.1 Passed during the 2nd Department Affairs Meeting, Academic Year 2014–15

2015.10.21 Passed during the 2nd Department Affairs Meeting, Academic Year 2015–16

2018.12.16 Amendment passed during the 3rd Department Affairs Meeting, Academic Year 2018–19

2019.10.23 Amendment passed during the 2nd Department Affairs Meeting, Academic Year 2019–20

2020.3.18 Amendment passed during the 4th Department Affairs Meeting, Academic Year 2019–20

## Article 1 Students in the Department shall submit proof of foreign language proficiency obtained in or after the academic year in which they are admitted in order to apply for graduation.

Article 2 Undergraduate students in the Department shall meet one of the following criteria in order to apply for graduation:

1. Passing the GEPT Intermediate Level reading and listening tests
2. Scoring 50 or higher in TOEFL iBT
3. Scoring 510 or higher in TOEIC
4. Obtaining Tier 5 or better in PVQC Specialist and Tier 3 or better in PVQC Spelling
5. Obtaining Specialist Tier 1 or better in the PELC Listening Test
6. Scoring a 650L Lexile Score or higher

Article 3 Master’s program students in the Department shall meet one of the following criteria in order to apply for graduation:

1. Passing the GEPT Intermediate Level speaking and writing tests
2. Scoring 57 or higher in TOEFL iBT
3. Scoring 550 or higher in TOEIC
4. Obtaining Tier 1 or better in PVQC Expert and Tier 1 or better in PVQC Spelling
5. Obtaining Specialist Tier 3 or better in the PELC Listening Test
6. Scoring a 750L Lexile Score or higher

Article 4 Doctoral students in the Department shall meet one of the following criteria in order to apply for graduation:

1. Passing the GEPT High-Intermediate Level reading and listening tests
2. Scoring 76 or higher in TOEFL iBT
3. Scoring 700 or higher in TOEIC
4. Obtaining Tier 5 or better in PVQC Expert and Tier 5 or better in PVQC Spelling
5. Obtaining Specialist Tier 5 or better and Writing Tier 2 or better in the PELC Listening Test
6. Scoring a 900L Lexile Score or higher

Article 5 As a remedial measure, undergraduate students who are unable to meet the department’s foreign language proficiency criteria may still apply for graduation after taking the University’s online English grammar course with difficulty level equivalent to a 400L Lexile Score, passing the course examination, and producing the relevant proof.

Article 6 As a remedial measure, master’s program students who are unable to meet the department’s foreign language proficiency criteria may still apply for graduation after taking the University’s online English grammar course with difficulty level equivalent to a 600L Lexile Score, passing the course examination, and producing the relevant proof. Alternatively, students who have presented at least two papers written in English at an international conference organized by a foreign organization or who have published at least one high-quality paper in an English language journal as first author (not counting their thesis advisor) may also apply for graduation.

Article 7 Students who have completed the required credits but who fail to meet the foreign language proficiency requirement must defer their graduation until they either obtain proof of foreign language proficiency or complete the remedial course.

Article 8 These criteria shall apply to students admitted in or after Academic Year 2010–11.