

# DEPARTMENT OF INDUSTRIAL AND INFORMATION MANAGEMENT

## PH.D PROGRAM

To get the degree students need to meet all requirements below:

- **Prerequisite requirement:** at least 5 courses

Students will be required to pass the prerequisite courses during their Master and undergraduate period, or students have to take the courses provided in our school to fulfill the prerequisite requirement.

<b>Management</b> (at least 2 courses)	<b>Quantitative Methods</b> (at least 2 courses)	<b>Information Technology</b> (at least 1 course)
1. Human Resource Management 2. Production and Operation Management 3. Marketing Management 4. Quality Management 5. Financial Management 6. Management 7. Resource and Development Management	1. Statistics 2. Operation Research 3. Probability 4. Linear Algebra	1. Introduction of Computer Science 2. Computer Programming and Application

### Note:

- (1) The prerequisite courses can be taken from other departments.
- (2) The prerequisite courses do not count as part of the credits required for graduation.
- (3) The prerequisite course may be waived for that students have teaching experience of the related courses, or students who have taken belong to the undergraduate or master program for more than 1 semester (3 credits) with an average mark of 60 or above.
- (4) The course waiver application needs to be submitted before Oct. 31st in the first semester.
- (5) Prerequisite requirements for the doctoral program should be fulfilled in four years after admission. Students who fail to fulfill these requirements will be dismissed from the University.

- **Minimum credits required for graduation: 31 credits**

Including core courses: 12 credit hours; elective courses: 15 credit hours; Seminar:4 credit hours.

➤ **Core courses:** At least four courses from the specialized courses required.

<b>Research Methods</b> (at least two courses)	<b>Management</b> (at least two courses)
1. <b>Mathematic Programming (full English course)</b> 2. System Simulation 3. <b>Scheduling Theory (full English course)</b> 4. <b>Business Research Methods (full English course)</b> 5. <b>Empirical Model-Building Methods (full English course)</b> 6. Advanced Production and Operations Research 7. <b>Optimization in Network Management (full English course)</b> 8. <b>Nonlinear Programming (full English course)</b> 9. <b>Dynamic Programming (full English course)</b>	1. Leadership 2. Strategic Management 3. Global Quality Management 4. Project Management 5. <b>Supply Chain Management (full English course)</b> 6. <b>Strategic Game Theory (full English course)</b> 7. <b>Optimization Models and Application (full English course)</b> 8. <b>Sustainable Operations Management (full English course)</b>

➤ **Seminars for 4 semesters:** 4 credit hours

For PH.D. students, you have to take seminars 1, 2, 3, and 4: 1 credit hour each; And students are not allowed to take Seminars from other departments.

➤ **Elective courses:** 15 credit hours

For elective courses, students can take courses inside or outside the department. If students take more than four courses from the core course list, that will automatically become the elective courses. Or students can take the courses from other departments as the elective course, but each semester at most two courses (6 credit hours), and at most three courses (9 credit hours) can be admitted in entire doctoral program.

- **English Proficiency Verification Prior to Graduation**

For the doctoral program, passing one of the English proficiency tests should be fulfilled.

- First stage of high-intermediate level of GEPT
- CBT-TOEFL 173/ Paper-based TOEFL 500
- TOEIC 590
- IELTS 4.5

- **Qualified exam for the doctoral program:**

- Publishing one full-text paper on an international journal or conference with Scopus index.

- **Other Requirements for the doctoral program :**

- **Passing the qualified exam**

- **Proposal**

The proposal should be held one semester before the thesis dissertation. Students should invite the Doctoral Thesis Committee and all of the professors in the department to attend the presentation.

- **Journal paper publication requirement:** (one of the following options)

- Publishing at least two papers on SCI- or SSCI-ranked journals that have the name of our department on them. For students enrolling in the seventh year, publish one SCI- or SSCI-ranked journal paper and one full-text paper on an international journal or conference with Scopus index.
- Publishing one paper on **high-quality journals**. (see Table 1)

Note:

The rules for the above journal paper publication

- (1) The published papers should be the research that are studied, submitted and published after enrolled in the doctoral program of our department. The thesis advisor should be named on the paper. Also, at least one paper should be related to the doctoral thesis.
- (2) The corresponding author of the published papers should be the student or his/her advisor.
- (3) If the student is not the corresponding author, he/she should be the first priority author except for the full-time teacher of our department.

- (4) All of the co-authors of the published papers should be full-time teacher or students in our department or an international scholar. If some of the co-authors had graduated from our department, the study period of the student and the co-authors should be overlapping.
- (5) If there is more than one student listed on the published journal paper, it could be applied for only one student's graduation requirement.
- (6) If the thesis advisor had retired or registered from our department, he/she could still be named on the paper.

➤ **Dissertation**

Students can apply for thesis dissertation when the above requirements of the published papers were fulfilled and also got the approval of his/her thesis advisor.

**Table 1: High-quality Journals List**

<b>No</b>	<b>Industrial and Information Management</b>
1	MANAGEMENT SCIENCE
2	MATHEMATICAL PROGRAMMING
3	MATHEMATICS OF OPERATIONS RESEARCH
4	OPERATIONS RESEARCH
5	M&SOM-MANUFACTURING & SERVICE OPERATIONS MANAGEMENT
6	JOURNAL OF OPERATIONS MANAGEMENT
7	PRODUCTION AND OPERATIONS MANAGEMENT
8	TRANSPORTATION SCIENCE
9	TRANSPORTATION RESEARCH PART B-METHODOLOGICAL
10	IIE TRANSACTIONS
11	NAVAL RESEARCH LOGISTICS
12	INTERFACES
<b>No</b>	<b>Information Management</b>
1	MIS QUARTERLY
2	INFORMATION SYSTEM RESEARCH
3	COMMUNICATIONS OF THE ACM
4	JOURNAL OF MANAGEMENT INFORMATION SYSTEMS
5	DECISION SUPPORT SYSTEMS
6	INFORMATION AND MANAGEMENT
7	EUROPEAN JOURNAL OF INFORMATION SYSTEMS
8	INTERNATIONAL JOURNAL OF ELECTRONIC COMMERCE
9	INFORMATION SYSTEMS JOURNAL
10	INFORMS JOURNAL ON COMPUTING
11	IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING