元智大學工業工程與管理學系

博士班修讀辦法（112學年度入學新生適用）

112.10.11 一一二學年度第三次系務會議通過

# 修課規定

本所博士班最低畢業總學分數必須滿足選修課程27學分與論文6學分，共計33學分。

# 基礎資格考試

博士班研究生基礎資格考試相關規定如下：

1. 博士班研究生必須完成下列五門課程中的任三門(含大學部修業或碩士班修業期間)，以通過基礎資格考試。五門課程可由下列對應課程替代。

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| --- | --- |
| **基礎資格考試課程名稱** | **對應替代課程** |
| 生產計劃與管制（一） | 高等生產管制、生產排程、生產計劃 |
| 品質管制（含實驗） | 高等品質管制 |
| 工程統計 | 實驗設計、機率分析 |
| 作業研究 | 數學規劃（一） |
| 設施規劃（含實驗） | 高等設施規劃 |

1. 資格考試之對應替代課程若為博士班修業期間完成，皆可承認至博士班畢業學分。
2. 通過基礎資格考試後，即應選定指導教授，並繳交「論文指導同意書」。

# 進階考試

必、選修課程修畢暨通過基礎資格考試後方得提出進階考試申請，進階考試相關規定如下：

1. 入學研究生須依本校學術研究倫理教育課程實施要點規定，於入學第一學期結束前完成學術研究倫理教育課程，最遲須於申請進階考試前補修完成，未完成本課程不得申請進階考試。
2. 博士班研究生應於入學四年內(不含休學期間)通過進階考試。
3. 進行進階考試前，博士班研究生必須繳交「博士生進階考試申請表」。
4. 博士班研究生以口頭或/及書面方式進行報告，並由系上老師至少三名(含指導教授)組成委員會，其中至少三分之一應為副教授職級以上教師，委員依個人專長及要求出題進行測驗。
5. 通過基礎資格考試及進階考試者，為博士候選人。

# 博士論文提案考試

博士班研究生通過進階考試三個月後，始得提出論文提案考試申請，並申請成立論文委員會，委員(含指導教授)至少五名，其中校內外委員均各須佔三分之一以上，論文提案考試相關規定如下：

1. 論文提案考試之系上委員應與進階考試之系上委員相同，若更換系上委員必須提出申請並經論文委員會同意後，送系所核備。
2. 論文委員會委員得針對提案進行審查口試及專業領域相符性檢核，必要時得由論文委員會指定與論文研究相關之一專業科目進行筆試。
3. 進行提案考試前，博士候選人必須繳交「申請博士論文提案口試檢查表」、「博士班論文指導教授推薦函」與「博士論文提案申請書」，並于提案口試通過後，繳交「博士論文提案同意書」。

# 博士學位考試

博士班研究生通過論文提案考試三個月後，並滿足期刊論文與會議論文之發表規定，始得提出博士論文學位考試申請。期刊論文與會議論文之發表規定以及學位口試相關規定如下：

1. 發表於著名學術期刊論文二篇，其中至少一篇為SSCI/SCI期刊，或是二篇皆為EI類期刊。期刊論文內容必須與博士論文有直接相關。期刊論文在取得接受證明文件時，即滿足發表規定。發表的期刊論文除了指導教授外，博士班學生須為第一順位之作者，若有下列情形者，其篇數另計：

* 有非委員會委員之排名，篇數為0.5篇。
* 有其他學生排名，篇數為0.5篇。
* 若同時有上述兩種情況者，篇數為0.25篇。

1. 至少一篇發表於國內或國際學術會議論文，並於修業期間於「書報討論」課程中或「國際會議」進行英文專題報告至少一次。
2. 學位考試之委員應與提案考試之委員相同，若更換委員必須提出申請並經論文委員會同意後，送系所核備。
3. 博士生應於學位考試前完成論文原創性比對作業，比對報告標準以不超過20%為原則，並於學位考試當日進行專業領域相符性檢核並將「學位論文原創性比對報告書」送交指導教授及學位考試委員參考，進行畢業論文口試及專業領域相符性檢核。完成學位考試後，研究生需再次將最終定稿的論文進行原創性比對作業，並由指導教授確認無誤後，將「學位論文定稿原創性比對檢核表」、「學位論文原創性比對報告書」、及論文送交系辦公室備查。
4. 進行博士學位考試前，博士候選人必須繳交「申請博士論文畢業口試檢查表」，並于論文口試通過後，繳交「畢業論文口試評分表」與「博士論文口試委員審定書」。

# 本辦法經系(所)務會議通過後實施，修正時亦同。

**PhD Program**

**Industrial Engineering and Management Department, Yuan Ze University**

(Applicable for the students enrolled in the academic year 2023/2024)

Passed by the 3th IEM Department Meeting, Academic Year 2023, on October 11, 2023

* **Course Requirements**

A minimum of 33 credit hours are required for graduation, which includes 27 credit hours for elective courses and 6 credit hours for dissertation.

* **Fundamental Qualifying Examination**

1. Graduate students are required to complete three out of the following five courses (taken in undergraduate or master period can be counted) in order to pass the Fundamental Qualifying Exam. The corresponding substitutes are also listed below:

|  |  |
| --- | --- |
| **Fundamental Qualifying Course Name**  **(Undergraduate Level)** | **Substitute Course Name**  **(Graduate Level)** |
| Production Planning and Control (I) | Advanced Production Planning and Control  Production Scheduling  Production Planning |
| Quality Control (with lab) | Advanced Quality Control |
| Engineering Statistics | Experimental Design  Probabilistic Analysis |
| Operations Research | Mathematical Programming (I) |
| Facilities Planning (with lab) | Advanced Facility Planning |

1. The abovementioned substitute courses can be counted toward the elective courses requirement if they are taken while studying during the IEM PhD program.
2. The ”Dissertation Adviser Agreement” must be completed and turned in after passing the Fundamental Qualifying Exam signed by the dissertation adviser.

* **Advanced Examination**

Student is required to complete the Fundamental Qualifying Examination and the course requirements before applying for the Advanced Examination. TheAdvanced Examination related rules are as follows:

1. Graduate student must complete the Academic Research Ethics Education Course according to the regulations of Yuan Ze University Academic Research Ethics Education Course Implementation Highlights, before the end of the first academic semester. At the latest, the course must be completed and passed before the Advanced Examination application. The student will not be allowed to proceed the Advanced Examination without completing the Academic Research Ethics Education Course completion.
2. PhD Graduate students should complete the Advanced Examination within the first 4 academic years (not including temporary leaves).
3. Prior to the Advanced Examination, the student must turn in the Application Form of the PhD Advanced Examination.
4. In accordance with the specialty and requests of dissertation committee members, the examination may be conducted in written, oral or both formats. The committee must be comprised of a minimum of three members (include the dissertation advisor), at least 1/3 of which should be associate (or above level) professor.
5. Upon completions of the Fundamental Qualifying Examination and Advanced Examination, the student becomes a PhD candidate.

* **Dissertation Proposal Defense**

Three months after passing the Advanced Examination, the PhD candidate can apply for the Dissertation Proposal Defense and form the dissertation committee comprising at least 5 members (including dissertation advisor) from in and outside of YZU with 1/3 or above from each. The related rules are as follows:

1. The committee members from the IEM department shall be the same as in the Advanced Exam. If any changes are needed, the PhD candidate must apply and obtain the committee agreement with IEM approval.
2. The committee is responsible for conducting oral examination with respect to the proposal and its relevance to the Industrial Engineering and Management professional field. A written examination of a specialized subject related to the proposed research may be requested by the committee.
3. Prior to the Proposal Defense, the PhD candidate must turn in ”Dissertation Proposal Check List”, ”Dissertation Advisor’s Recommendation” and ”Dissertation Proposal Form”. The student must turn in ”Dissertation Proposal Approval Form” after passing the Dissertation Proposal Defense.

* **Dissertation Defense**

Dissertation Defense can only be applied after three months of the Dissertation Proposal Defense and the completion of publication requirements. The related rules and regulations are as follows:

1. Two or more articles must be published in renowned journals, with at least one in SSCI/SCI class journals or two in EI class journals. The published articles must originate from and directed related to the dissertation and must be accepted with proven acceptance letters to satisfy publication requirements. Other than student’s dissertation adviser, the student needs to be the first author of the published articles. If the following situations occur, the number of papers will be counted differently:
   1. Articles with author(s) who is (are) not the student’s committee member(s): can only be counted as one-half paper.
   2. Articles with authors of other students: can only be counted as one-half paper.
   3. Articles with both cases i.) and ii.): can only be counted as one-fourth paper.
2. One or more conference papers are published in domestic or international conference proceedings and presented in international conference.
3. Committee members should be the same for both the Dissertation Proposal Defense and the Dissertation Defense. If not, the student must apply and obtain the committee agreement with IEM approval.
4. PhD students should complete the originality check for their dissertation before the defense, with a standard no higher than 20% for the comparison report. On the day of the defense, students should submit the "Dissertation Originality Comparison Report" to the advisor and the committee for review, and undergo an oral examination and a professional field conformity check. After completing the defense, students need to conduct another originality check on the final version of the dissertation and have it confirmed by the advisor. The final version of "Dissertation Professional Field Conformity Check Form," "Dissertation Originality Comparison Report," and the dissertation should be submitted to the department office for record.
5. Prior to the Dissertation Defense, the PhD candidate must turn in the ”Dissertation Defense Check List”. After the Dissertation Defense, the ”Final Defense Grading Report” and the ”Dissertation Defense Report Form” must be turned in to the IEM office.

**◎This regulation has been implemented with the approval of IEM departmental meeting.**

**Any amendment will also be implemented with the same process.**