

# 長庚大學醫學影像暨放射科學系博士班研究生修業辦法

101年10月11日經系務會議通過

103年11月15日經系務會議修正通過

104年3月12日經系務會議修正通過

109年11月12日經系務會議修正通過

112年5月11日經系務會議修正通過

113年4月18日經系務會議修正通過

113年10月17日經系務會議修正通過

114年10月9日經系務會議修正通過

**一、名稱：**本博士班依教育部核定為「長庚大學醫學影像暨放射科學系博士班」（以下簡稱本系），英文為 (PhD Program, Department of Medical Imaging and Radiological Sciences, College of Medicine, Chang Gung University)。

I. Program title: The doctoral program is officially recognized by the Ministry of Education as the "PhD Program, Department of Medical Imaging and Radiological Sciences (MIRS), College of Medicine, Chang Gung University".

**二、入學考試及有關規定：**詳見當學年度招生簡章。

II. Entrance Examination and Related Regulations: Please refer to the admission brochure for each academic year for details.

**三、新生報到及註冊：**依學校規定辦理。

III. Orientation & Registration: Please follow the procedures outlined by the university regulations.

**四、修業期限：**博士班修業期限依學校規定辦理。

IV. Duration of Study: The duration of doctoral studies is administered according to the regulations of the university.

**五、學分：**

(一) 畢業學分：33學分，包含論文6學分、(共同)必修15學分、選修(至少)12學分。

(二) 遷行修讀博士學位研究生至少須修滿 30 學分(含碩士班期間所修學分數)，不含論文 6 學分。

V. Degree Requirement (Courses):

(1) Graduation: A minimum of 33 credits of courses including 6 credits of dissertation work, 15 credits of core courses, and at least 12 credits for elective courses.

(2) Students for the Direct Pursuit of the Ph.D. Degree must complete at least 30 credits (including credits earned during master's program) but excluding 6 credits for dissertation.

**六、課程：**

(一) 必選修科目：依該入學年度公布之博士班必選修科目表規定辦理。

(二) 選課、加退選課悉依本校學則及相關規定辦理。

(三) 若於碩士班修業期間，曾修讀本系必修課程並及格者，經授課老師同意者，得予免修。

#### VI. Courses:

- (1) Compulsory and elective courses: follow the regulations stipulated in the doctoral program's compulsory and elective course list announced for the corresponding starting academic year.
- (2) Course registration, adding, dropping, and withdrawing are all conducted in accordance with the university regulations and related provisions.
- (3) Courses that students have successfully completed and passed, including compulsory courses in the MIRS department during their master's program, can be waived with the consent of the course instructors.

#### 七、論文指導：

- (一) 本系對每一博士班研究生均個別成立論文指導委員會。
- (二) 研究生確定指導教授後，指導教授應向所長推薦二至四位助理教授、助理研究員或同等資歷以上教學研究人員，共同擔任論文指導委員，經所長同意後組成論文指導委員會，指導教授為該委員會之當然召集人，直接負責指導該研究生有關學業與論文研究、撰寫事宜。

#### VII. Dissertation Supervision:

- (1) A dissertation supervision committee will be established by the department for each doctoral student.
- (2) After a doctoral student has chosen his/her supervisor, the supervisor should recommend two to four committee members (above the level of assistant professors or assistant researchers) to the department chair. Together, they will serve as the dissertation supervision committee. Upon approval by the department chair, the dissertation supervision committee is formed, with the supervisor acting as the convenor. The supervisor is responsible for guiding the student in academic matters, dissertation research, and writing.

## 八、指導教授：

- (一) 每一博士班研究生均有一位主要指導教授，直接負責指導該研究生有關學業與論文研究、撰寫事宜。
- (二) 博士班研究生入學後第一個學期結束前必須選定主要指導教授並繳交指導教授選定同意書。選定後未經該指導教授同意，不得擅自更換。
- (三) 主要指導教授需為本系專任老師。

## VIII. Supervisor:

- (1) For each doctoral student, there is one primary supervisor who is responsible for guiding the student in academic matters, dissertation research, and writing.
- (2) A PhD student is expected to identify an adviser by the end of his/her first year in the Ph.D. program and submit a consent form from the supervisor. Once selected, changing supervisor without the consent of the chosen supervisor is not permitted.
- (3) The primary supervisor must be a full-time faculty member of the department.

## 九、博士班候選人資格考核：

- (一) 目的：確認醫學影像暨放射科學系博士生應具備之論文研究的學識基礎。
- (二) 資格：醫學影像暨放射科學系博士班研究生。
- (三) 方式：口試。
- (四) 口試科目細則：

1. 口試及格標準：每一位口試委員以無記名方式勾選口試結果：(1)通過(2)不通過，二分之一(含)以上委員勾選通過者口試及格，未達二分之一委員勾選通過者口試不及格。
2. 口試考試內容：學生需事先準備「個人專長簡介及研究計畫綱要」，作為口試委員發問之參考。
3. 口試委員會組成辦法：口試委員會由至少三人組成，指導教授為當然口試委員，但不得擔任口試委員會召集人。校外人士擔任口試委員至少1人。口試委員中須至少包含一位正教授。

### (五)「個人專長簡介及研究計畫綱要」之撰寫規定：

1. 報考口試科目考試之同學，於報名時須繳交 A4 大小之至多五頁打字「個人專長簡介及研究計畫綱要」。
2. 「個人專長簡介及研究計畫綱要」之內容，須包括以下各項資料：
  - (1) 個人學經歷簡介(大學、研究所、及相關工作)
  - (2) 學科專長簡介(相關專長及曾修習之專長課程)
  - (3) 研究計畫綱要(指導教授、研究摘要、主要研究內容)
  - (4) 其他有關個人專長及研究計畫之資料

### (六)博士學位資格考核委員資格依本校相關規定辦理。

### (七)通過資格考核者為博士學位候選人，並得以參加學位考試。

## IX. Qualifying Exam for Doctoral Candidacy:

- (1) Purpose: To confirm the academic knowledge foundation required for dissertation research for doctoral candidates in the Department of MIRS.
- (2) Eligibility: Doctoral students in the Department of MIRS.
- (3) Method: Oral exam.
- (4) Detailed Regulations for the Oral Exam:

1. Passing Standard for Oral Exam: Each committee member anonymously votes the examination result as either (1) Pass or (2) Fail. The oral exam is considered passed if at least half (including half) of the votes are “Pass”, and otherwise the oral examination is considered “failed”.
2. Required Documents of the Oral Exam: A student is required to prepare in advance “curriculum vitae, research proposal outline and other information related to the student’s research” to serve as a reference for the questions posed by the oral exam committee.
3. The Oral Exam Committee: The oral examination committee is composed of at least three members, with the supervisor serving as an ex officio member (but not as the convener of the committee) and at least one **external member**. The committee must include at least one full professor among the members.

(5) Requirement for the "Personal Expertise Overview and Research Proposal Outline":

1. A student applying for the oral exam must submit a typed "Personal Expertise Overview and Research Proposal Outline" of up to five A4-sized pages at the time of registration for oral exam including:
  - i. Brief introduction of personal academic background (undergraduate, graduate, and relevant work experience).
  - ii. Introduction to academic specialties (relevant specialties and courses taken).
  - iii. Outline of the research proposal (supervisor, research abstract, main research content).
  - iv. Other relevant information about personal expertise and the research proposal.

(6) The Qualifications of the Doctoral Degree Examination Committee members must follow the regulations of the university.

(7) Those who pass the qualifying oral exam are doctoral degree candidates and are eligible to participate in the degree exam.

## 十、學位考試：

(一) 博士學位候選人，應於本校行事曆規定期限內，填妥申請表格，附歷年成績單、資格考核及格證明及完成本辦法中第五、六項中所有學分與修課要求證明，向本系提出學位考試申請，由指導教授及碩博士學位考試

委員會審核後，一併交教務處辦理。

(二) 其他應考條件：

1. 於學位考試前，應就論文相關之研究題目，於國內外 SCI 列名期刊發表至少兩篇（含）以上之論文，並達以下任一要求，方可申請：
  - (1) 第一作者之期刊論文兩篇(其中一篇可為共同第一作者)，且每篇 SCI論文點數(Impact Factor)至少一分或佔專業領域前50%。
  - (2) 第一作者之期刊論文一篇與第二作者且指導教授列名第一作者之期刊論文一篇，每篇SCI論文點數(Impact Factor)至少一分或佔專業領域前50%。
  - (3) 其中一篇期刊論文為第一作者，且SCI論文點數(Impact Factor)至少五分或佔專業領域前10%。
  - (4) 國內外發明專利或技轉金達10 萬元以上可等同一篇SCI 論文點數一分之論文，同一專利限一人抵用，最多以一篇為限。且指導教授須為共同發明人。
  - (5) 在職生入學七年後，得限以一篇經指導教授及碩博士學位考試委員會認可之期刊論文，取代一篇SCI論文點數(Impact Factor)至少一分之期刊論文。
2. 指導教授或共同指導教授需為期刊論文通訊或第一作者。
3. 期刊論文需掛上長庚大學醫學影像暨放射科學系之正式英文名稱『Department of Medical Imaging and Radiological Sciences, College of Medicine, Chang Gung University』。  
註：文章需於博士班就讀期間發表，並以長庚大學學生的名義發表、或長庚大學的老師共同掛名發表，不得為該生碩士論文之內容。
4. 論文初稿經指導教授初審通過。
5. 論文考試之前半部為公開發表，應於一週前在院內張貼公告，歡迎任何人員出席並提出問題或表示意見，後半部為不公開考試，僅由口試委員出席。

(三) 學位考試委員：

1. 學位考試委員人數五人以上(含)，校外委員須佔三分之一(含)以上，並由其中一位委員擔任召集人，指導教授不得擔任召集人。
2. 博士學位考試委員資格依本校相關規定辦理。

(四) 論文初稿撰寫：初稿之撰寫必需依照格式，經指導教授審查認可後，至少於學位考試舉行兩週前，印妥需要份數(同學位考試委員人數)，交各考試委員。

(五) 論文考試：

1. 考試成績以全體出席考試委員所評定分數平均計算之。如有三分之

一(含)以上委員評定不及格者，即以不及格論。

2. 論文考試成績以一百分為滿分，七十分為及格。
3. 論文考試成績不及格者，如修業期限尚未屆滿，得申請重考一次，申請重考學生，需於修業期限內，依本校與本系相關規定辦理。

#### X. Degree Examination:

- (1) Doctoral candidates should, within the deadline specified by the university calendar, complete and submit an application form along with their transcript of records, proof of passing the qualification assessment, and proof of meeting all credit and coursework requirements specified in Sections 5 and 6 of these regulations. The application for the degree examination should be submitted to the department, and after review by the supervising professor and the Master's and Doctoral Degree Examination Committee, it should be forwarded to the Office of Academic Affairs for processing.
- (2) Other Examination Requirements:
  1. Prior to the degree examination, candidates must have published at least two papers (inclusive) in domestic or international SCI-indexed journals on research topics related to their dissertation. Additionally, candidates must meet one of the following requirements before applying:
    - i. Two journal papers as the first author (one of which can be as co-first author), each with an SCI Impact Factor of at least 1.0 or ranking within the top 50% of their field.
    - ii. One journal paper as the first author and one as the second author where the supervising professor is listed as the first author, each with an SCI Impact Factor of at least 1.0 or ranking within the top 50% of their field.
    - iii. One journal paper as the first author with an SCI Impact Factor of at least 5.0 or ranking within the top 10% of their field.
    - iv. Domestic or international patents or technology transfer income of at least 100,000 NTD can be equivalent to one journal paper with an SCI Impact Factor of 1.0. Each patent can only be used by one person and is limited to one paper. The supervising professor must be a co-inventor.
    - v. For part-time students who have been enrolled for seven years, one (and only one) journal paper approved by the supervising professor and the Master's and Doctoral Degree Examination Committee may replace one SCI-indexed paper with an Impact Factor of at least 1.0.
  2. The supervising professor or co-supervisor must be the corresponding author or the first author of the journal papers.
  3. The official English name of the department, "Department of Medical Imaging and Radiological Sciences, College of Medicine, Chang Gung University," must be listed on the published journal papers.

Note: The papers must be published during the doctoral program and must be published under the name of Chang Gung University students or jointly authored with Chang Gung University professors. They should not contain content from the student's master's dissertation.

4. The initial draft of the dissertation must be preliminarily approved by the supervising professor.

5. The first part of the dissertation examination should be public, with an announcement posted within the university one week in advance, inviting all interested parties to attend and pose questions or provide feedback. The latter part of the examination is not open to the public and is attended only by the oral examination committee members.

(3) Degree Examination Committee:

1. The committee must consist of at least five members (inclusive), with at least one-third (inclusive) being **external members**. One of these members shall act as the convener, and the supervising professor may not serve as the convener.
2. The qualifications of the doctoral degree examination committee members are subject to the relevant regulations of the university.

(4) Dissertation Draft Preparation:

The initial draft of the dissertation must be written in the required format and approved by the supervising professor. At least two weeks before the degree examination, the draft must be printed in the number of copies equal to the number of examination committee members and distributed to each member.

(5) Dissertation Examination:

1. The examination score is calculated based on the average of the scores awarded by all attending committee members. If one-third (inclusive) or more of the committee members assign a failing grade, the candidate is considered to have failed the dissertation examination.
2. The maximum score for the dissertation examination is 100, with 70 as the passing mark.
3. If a candidate fails the dissertation examination and the study period has not yet expired, he/she may apply for a re-examination once, provided that it is done within the stipulated academic period and in accordance with the relevant regulations of the university and the department.

**十一、畢業及離校手續：**

- (一)依本校規定辦理完成手續。
- (二)繳交論文數目除學校規定外，另需繳交一本精裝本於系上。

**XI. Graduation and Departure Procedures:**

- (1) Procedures are to be conducted in accordance with the university's regulations.
- (2) In addition to the number of dissertation copies required by the university, one additional hardbound copy must be submitted to the department.

**十二、其他未盡事宜，悉依本校其他有關規定辦理。**

**XII. Any other matters not covered herein shall be handled in accordance with other relevant regulations of the university.**

**十三、本辦法經本系系務會議通過後核定。**

**XIII. These regulations are approved and finalized after being passed by the departmental affairs meeting of the MIRS department.**