

# 材料科學工程學系博士班研究生應行注意事項

92年9月22日學術委員會會議修訂  
92年10月16日系務會議修訂  
92年11月13日系務會議確認通過  
93年9月2日系務會議修訂  
93年10月7日系務會議修訂  
93年12月2日系務會議通過  
96年1月25日系務會議修訂通過第4條第1項  
96年3月8日系務會議通過修訂第3條第1項  
97年3月19日系務會議通過刪除第2條第2,3,4項,增訂第2項  
99年10月8日學術委員會會議修訂第3條第5項  
99年11月18日系務會議修訂通過  
100年11月10日學術委員會會議修訂第4條第3項  
100年11月17日系務會議修訂及通過第4條第3項  
102年12月25日學術委員會修訂第5條第3項  
104年3月5日學術委員會修訂第3條第6項  
104年3月12日系務會議確認通過  
104年5月7日課務委員會增訂第3條第4  
104年6月25日系務會議確認通過

一、適用對象：**104**年度起入學之博士班研究生適用之。

## 二、資格考試辦法

(一)通過期限：入學三年內必須通過資格考試，否則應予退學。

(二)學生修習本系所開3科核心課程(1.材料動力學、2.固態熱力學、3.電子顯微鏡學或X光繞射結晶學)及格，或3科核心課程平均分數達75分者,即算通過資格考試。

## 三、修課規定：

除論文及書報討論外，至少須修滿十八學分，其中

(一)修讀本所課程不得少於六學分。

(二)選修本系大學部課程最多不得超過六學分或二門課。

(三)碩士班已經修過研究所課程且不在碩士班畢業學分內，可申請抵免，最多可申請抵免9學分。

(四)非理工科學領域之課程，不計入畢業18學分中。如有特殊原因，可以提出申請。

(五)書報討論必修兩學期，但不列入畢業學分。

(六)每位研究生於新生入學時須參加本校環安中心舉辦之一般安全衛生教育訓練講習並通過。

本系碩士生逕行修讀博士學位者、本系及本校其他系所研究生提供在碩士班期間之上項研習證明者(三年內)，入學時不需再參加上項講習。

在未完成上項講習之前，不得開始做研究。

(七)須於入學第一學年結束前修習本校學術研究倫理教育課程。該課程採網路教學方式實施，為0學分之必修課程。凡修習本課程之學生，須通過課程測驗成績達及格標準；未通過者，最遲須於申請學位考試前修習通過。未完成本課程之學生，不得申請學位考試。

## 四、畢業論文口試：

(一)論文點數：申請畢業論文口試必須符合下列條件之一：

1.總點數 $\geq 4$ ;(Impact factor計點以畢業生在學期間SCI所公佈之數據為準,並請提供數據資料)。

發表之期刊論文，博士生列名在第一位者全算，第二作者為50%，第三作者為25%，以此類推。

第一作者以外之共同作者論文所佔點數，以不超過1/3為原則。

2. SCI列名期刊論文三篇以上(含)，其中一篇必須是該領域之前15%。

3. SCI期刊四篇以上(含)。

4.Impact factor 4.0 以上一篇。

若學生申請適用本條文第 2,3,4 項，則該生須為第一作者。

(二)論文發表

- 1.發表的論文必須有系指導教授名字及學生需署名本系。
- 2.用以申請口試之論文需與其博士論文有直接關係。
- 3.至少有一篇論文是以申請人為第一作者(指導教授不計排名)。

(三)已通過第一外國語認定(符合下列條件之一)：

1.測驗成績

CBT-TOEFL 測驗成績 180 分以上；

IBT-TOEFL 測驗成績 80 分以上；

托益考試成績達 700(含)以上；

全民英語能力分級檢定測驗「中高級」初試通過。

- 2.選修本校英語課程，可選修 3 字頭（含）以上之語文課程 6 學分，且成績在 B(75 分)（含）以上。

(四)畢業口試之申請應在口試前三週提出。

五、其他

- (一)本系研究生不得有雙重學籍。
- (二)博士生修業年限為二至七年，在職生得延長修業年限二年。
- (三)入學後一個月內必需選定指導教授，並向系辦公室登記，繳交指導教授確認單。選課須由指導教授簽名，第二學期開始，系主任不得代為簽名。
- (四)其他未訂事項，依國立清華大學教務章則規定處理。

## Requirements for MSE Postgraduate students of Ph.D. Candidates

(Confirmed by MSE council on March 12<sup>th</sup>, 2015)

1. Eligibility : Applicable to MSE Ph.D. candidates enrolling after the academic year of 2015.

2. Regulations for Qualifying Examinations:

(1) Deadline : To be passed before the end of third school year. Otherwise, the eligibility for Ph.D. study will be dismissed.

(2) **Subjects :** "Transmission Electron Microscopy" or "X-ray Crystallography", "Thermodynamics of Solid State", "Kinetic Process of Materials".

(3) **Scores :** Pass the above three courses or get the even points of those at least 75 scores.

3. Course Requirements :

18 credits are required; thesis credits and seminars are not included.

(1) At least 6 credits must be taken in the MSE graduate courses.

(2) Undergraduate courses can be included, but limited to a maximum of 6 credits or two courses.

(3) A maximum of 9 credits of postgraduate courses taken at master's level can be considered for the credit-deduction, but only for those excluded from master's degree requirements.

(4) Two semesters of seminar credits are obligatory, but excluded from the 24 required credits.

(5) Each postgraduate student should join and pass the "Safety and Health Education discipline courses" held by Center of Environmental Protection and Safety and Health. Students who don't pass the examination are not allowed to do experiment.

(6) All doctoral students must register for the "Education on Academic and Research Ethics" course before the end of their first year of enrollment. The course is offered online. The Course is required of all students but confers zero credit. All students taking the Course must pass the exams. Students who fail the exams must re-take the tests and complete all other Course requirements before they graduate.

4. Oral Examination of the Ph.D. dissertation :

(1) A thesis with Impact Factor(IF) credits : Students who meet any of the requirements below are eligible to apply for the oral examination of the Ph.D. Dissertation.

A. Total IF credits  $\geq 4$

a. Impact factor criterions are according to the SCI standards during the student's Ph.D. Study, the applicant should provide the SCI standards of the period.

b. For published in journals, a Ph.D. candidate listed at the first place of authors takes all the IF credits, the 2<sup>nd</sup> takes half of the IF credits, the 3<sup>rd</sup>

takes quarter, the 4<sup>th</sup> takes half quarter etc..

- c. Except the first author, all the other authors' IF credits should not be more than third of all the IF credits.
- B. Three theses or above listed in the SCI index, one of the three must be published in the top 15% journal of that research field.
- C. Four theses or above listed in SCI index.
- D. A thesis with IF 4.0 or above listed in SCI index.

Students who meet any of the B~D requirements above should be the first author of the thesis.

## **(2) Dissertation Presentation :**

- A. Published theses must have the supervisor's name and the title of our department.**
- B. Research field of theses used for applying for Oral Examination should be related to Ph.D. Dissertation.**
- C. Students apply for oral examination should at least be the first author of one of the theses.**

(3) Passed the first foreign language examination (meeting one of the requirements below) :

A. Language Examinations:

CBT-TOEFL scores: at least 180 points.

I BT-TOEFL scores: at least 80 points.

TOEIC scores: at least 700 points.

GEPT : pass the first test of High-Intermediate Level.

B. Taken 6 credits in relevant language courses with course number started at 3 and above, all with grades minimum Grade B (75 points).

(4) Application for Oral Examination of Ph.D. Dissertation should be set forth three weeks before the examinations is held.

## **5. Supplementary Regulations :**

- (1) Postgraduate students in the MSE department are not allowed to have a dual school/department registration.
- (2) The period of Ph.D. study is 2 to 7 years; part-time study may up to 9 years.
- (3) The supervisor must be confirmed within one month after enrollment. Each student should submit a registration form to the MSE office confirming the choice of their supervisor. When selecting courses, one should have the supervisor's signature. Chair of the department should not fill in for the supervisor from the second semester.
- (4) Students should refer to the "Academic Regulations" of National Tsing Hua University for the regulations absent in this bulletin.