亞洲大學資訊工程學系博士班修業要點

95.4.25 資訊工程學系 94 學年度第 2 學期第 1 次系務會議訂定通過 96.05.15 資訊工程學系 95 學年度第 2 學期第 1 次系務會議修定通過 97.10.23 資訊工程學系 97 學年度第 1 學期第 2 次系務會議修定通過 102.03.22 資訊工程學系 101 學年度第 2 學期第 1 次系務會議修定通過 105.06.01 資訊工程學系 104 學年度第 2 學期第 7 次系務會議修正通過 106.07.04 資訊工程學系 105 學年度第 2 學期第 3 次系務會議修正通過

一、亞洲大學資訊工程學系(以下簡稱本系)為規範博士班研究生修業事項,依 據本校博士學位授予作業規章及相關規定,特訂定本修業要點。

二、入學資格:

- 1. 凡於國內經教育部立案之大學或獨立學院碩士班畢業取得碩士學位, 或於符合教育部採認之國外大學或獨立學院碩士班畢業取得碩士學 位,經本校博士班研究生入學考試通過者,得進入本系博士班修讀博 士學位。
- 2. 符合教育部訂定之「外國學生來華留學辦法」修讀博士學位者,得進入本系博士班修讀博士學位。
- 3. 新生因重病或接獲兵役單位徵集令而不能按時入學者,經檢具有關證明於註冊前申述理由,向本校申請保留入學資格者,得延後進入本系博士班修讀博士學位。

三、修業年限:二至七年。

四、修課規定:

- 1. 入學後前三年每學期都必須修習「論文研討」課程,或畢業前每學期 的「論文研討」課程都必須修讀通過。
- 2. 資格考試通過後至畢業前,至少選修「博士論文」六學分。
- 3. 所定選修至少須修滿二十四學分並滿足修課規定,詳細請參見本系博士班課程規劃。

五、資格考試:

- 1. 資格考試每學期舉行一次,參加資格考試必須於資格考試四週前提出申請(附表一)。
- 2. 資格考試科目合計須選四科做為評分科目。考試科目包含:演算法 (Algorithms)、作業系統(Operating Systems)、計算機網路(Computer Networks)、資料庫系統(Database Systems)、人工智慧 (Artificial Intelligence)、影像處理(Image Processing)。
- 3. 考試方式以口試進行,每科目以三位口試委員為原則,口試委員由本 系助理教授以上教師擔任,指導教授應迴避,並擇一委員為口試召集 人,口試時間以一小時為原則。口試方式、口試內容及時間分配由學 術委員會協調制定並通知考生。
- 4. 考試後召開學術委員會進行成績審議,出席人員包括授課教師與口試委員,會議結束後擇期公佈成績。各科成績評定分為『通過』、『有條件通過』及『不通過』三級,其中『有條件通過』則必須修習通過該考試科目之課程。考生如對成績有異議,可提請學術委員會審議。
- 5. 學生應於四年內通過資格考試。如達四年未通過同學,可於最後一學期提出原因申請延長博士班資格考試期限(附表二),經指導教授審核通過後,得予延長資格考試期限一學期。未達到此項規定者,即予退學。

6. 學生如獲得本校或公費補助出國進修研究,進修研究期間不列入資格 考年限計算。

六、論文指導:

- 1. 博士生應於入學後至第二學年開學後 30 日內提出論文指導教授同意書 (附表三),指導教授可多於一位。
- 2. 指導教授由資訊電機學院助理教授以上之專任教師擔任,如有多於一位教師,可由資訊電機學院、其它學院或校外之助理教授以上教師共同指導,並經系主任同意。
- 3. 在論文研究進行中不得任意變更論文指導教授。如因故確需更換,須 填寫指導教授變更申請表(附表四)向本系提出申請,經原指導教授、 新指導教授及系主任簽字同意後始得變更,並須重新提出論文指導教 授同意書(附表三)。

七、論文計畫書審查:

- 1. 博士生通過資格考試後於提出畢業資格審查前,必須向本系提出論文計畫書審查(附表五),審查以口試方式進行,由指導教授推薦符合博士學位考試委員資格之校內教師,含指導教授共計二名(含)以上,經本系聘請組成論文計畫書審查委員會審查通過(附表六),論文計畫書審查結果將作為畢業資格審查條件之一。
- 2. 博士生通過資格考試、論文計畫書審查且符合修課規定修滿學分者即 為博士候選人。

八、 畢業資格審查:

- 1. 博士生通過論文計畫書審查於預定提出博士學位考試日期一個月以前,必須向本系學術委員會提出畢業資格審查(附表七至九)。
- 2. 申請畢業資格審查所發表論文條件:
 - (1)發表 SSCI、SCI(含 SCIE)之期刊論文 1 篇或 EI、SCOPUS 期刊論文 2 篇,排除指導教授後必須為學生第一作者。
 - (2)EI、SCOPUS 會議論文 1 篇,排除指導教授後必須為學生第一作者, 且符合以下三項其中之一:
 - (2.1)收錄於 EI、SCOPUS 資料庫;
 - (2.2)收錄於 Springer 出版之 Lecture Notes 系列或 IEEE 會議論文;
 - (2.3)可用 SSCI、SCI、EI、SCOPUS 期刊論文 1 篇抵免 EI、SCOPUS 會議論文 1 篇。
- 3. 論文是否收錄 SSCI、SCI、EI 及 SCOPUS 資料庫以論文刊登時間認定。
- 4. 發明專利由本系學術委員會審核認定抵免期刊或會議論文。
- 發表之論文或專利須為博士論文研究範圍內,並與研究主題有密切關聯,且發表之論文須刊載本系全銜。

九、博士學位考試:

- 1. 博士生通過畢業資格審查並提出論文初稿者,得備妥書面資料(附表 九之後的文件)於預定考試日期三週以前申請博士學位考試。
- 2. 博士學位考試委員會置委員五至九人,由本系就校內外學者專家中對博士生所提論文有專門研究,並具備下列資格之一者,校內外委員均各須佔三分之一(含)以上。
 - (1) 曾任教授者。
 - (2) 擔任中央研究院院士或曾任中央研究院研究員者。
 - (3) 曾任副教授、助理教授或擔任中央研究院副研究員或助研究員,在 學術上著有成就者。
 - (4) 獲有博士學位,在學術上著有成就者。

- (5) 屬於稀少性或特殊性研究領域,在學術或專業上著有成就者。 前項第三款至第五款之提聘資格認定,由本所規定之委員會為之。 博士生之配偶或三等親內之血親、姻親,不得擔任其博士學位考試委員。
- 3. 博士學位考試依下列程序施行之:
 - (1) 以公開舉行口試為原則,須於事前公佈口試時間、地點及論文題 目,並將論文初稿送達口試委員。
 - (2) 博士學位考試委員會至少應有五位委員出席且校外委員三分之一 以上參加時,始得舉行。由考試委員互相推舉一人為召集人,由召 集人主持口試,但指導教授不得擔任召集人。學位考試委員應親自 出席委員會,不得委託他人為代表。
 - (3) 學位考試成績以七十分為及格,一百分為滿分,評定分數以一次為 限。考試成績以出席委員評定分數平均決定之。出席委員如有逾三 分之一以上委員評定不及格者即以不及格論。
 - (4) 指導教授應詳實審核博士班研究生提出之論文初稿,嚴禁涉有抄襲、剽竊、造假或其他違反學術倫理之情事,必要時得借助「抄襲比對系統〔Turnitin〕」進行判定。論文有抄襲或舞弊情事,經學術委員會審查確定者,以不及格論。
- 4. 學位論文(含摘要)以中文或英文撰寫為原則,並須符合「亞洲大學學位論文格式規範」。學位考試通過後一個月內應依國家圖書館規定將論文摘要電子檔上網建檔,並繳交論文五冊(三冊本校圖書館、二冊本系辦陳列)。
- 5. 學位考試成績評定不及格,而其修業年限尚未屆滿者,得於次學期或 次學年申請重考,重考以一次為限,重考不及格者,應令退學。逕讀 博士學位之研究生,未通過博士學位考試,經博士學位考試委員會認 定合於碩士學位標準者,得授予碩士學位。
- 6. 博士班研究生在規定修業年限內未能通過博士學位考試或未能完成應 修課程者,應令退學。
- 7. 本校對已授予之博士學位,如發現論文有抄襲或舞弊情事,經調查屬實者,則撤銷其學位,追繳其已發之學位證書。

十、修訂及實施:

1. 本修業要點修訂時需經本系系務會議通過後實施。

Essential points to the study of doctoral program of the Department of Computer Science & Information Engineering of Asia University

I. The Department of Computer Science & Information Engineering of Asia University (hereinafter referred to as the Department), has formulated the essential points to this study in accordance with the rules and regulations conferred by the university's doctoral degree so as to regulate the study of postgraduates in the doctoral program.

II. Admission Qualifications:

- 1. Those who have obtained a master's degree from a domestic university or independent college registered by the Ministry of Education and obtained a master's degree, or graduated from a master's degree of a foreign university or independent college approved by the Ministry of Education and obtained a master's degree, and have passed the postgraduate entrance examination for the doctoral program of our school. Those who have passed the doctoral program examination of this department shall enter the department of the university to study for a doctoral degree.
- 2. Those who meet the "Regulations for Foreign Students Studying in Taiwan" stipulated by the Ministry of Education to study for a doctoral degree shall enter the department of the university to study for a doctoral degree.
- 3. Freshmen who are unable to enroll on time due to serious illness or receiving a military service unit recruitment order, who have applied to the school to retain their admission qualifications after checking the reasons for their representation before registration, may postpone their admission to the department's doctoral program to study for a doctoral degree.

III.Duration of study: two to seven years.

IV. Course requirements:

- 1. The "Dissertation Seminar" course must be taken every semester for the first three years after admission, or that one must pass the "Dissertation Seminar" course every semester before graduation.
- 2. After passing the qualification examination and before graduation, at least 6 credits of "PhD dissertation" are required.
- 3. The selected electives must have at least 24 credits and meet the course requirements. For details, please refer to the department's doctoral program curriculum planning.

V. Qualification examination:

- 1. The qualification examination is held once in every semester, and the application for the qualification examination must be submitted four weeks before the qualification examination (Appendix 1).
- 2. A total of four subjects in the qualifying examination must be selected as the grading subjects. Exam subjects include: Algorithms, Operating Systems, Computer Networks, Database Systems, Artificial Intelligence, and Image Processing.
- 3. The examination method is conducted by oral examination. There should be three oral examination members for each subject. The oral examination members are the assistant professors of the department or those above. The advisor should be avoided, and select one member as the oral examination convener. The duration of the oral test should be one hour long. The method, content and time allocation of the oral test will be adjusted and formulated by the Academic Committee and its finalization will be notified to the students taking the test.
- 4. After the exam, an academic committee will be held to review the results. The attendees include teaching teachers and oral exam committee members. The results will be announced at a scheduled time after the meeting. The results of each subject are graded into three levels: "Pass", "Conditional Pass" and "Fail". For "Conditional Pass", you must study and pass the course of the test subject. Candidates who have any

objection to the results may submit it to the Academic Committee for consideration.

- 5. Students should pass the qualifying examination within four years. Students who have not passed the exam for four years can apply for an extension of the qualification examination period for the doctoral program (Appendix 2) in the last semester. After the examination and approval by the advisor, the qualification examination period can be extended for one semester. Those who do not meet this requirement will be dismissed.
- 6. If a student has obtained the school or public subsidy to study abroad, the period of study and study will not be included in the calculation of the qualification test period.

VI. Thesis guidance:

- 1. Doctoral students should submit a letter of consent from the thesis advisor (Appendix 3) within 30 days after admission to the start of the second academic year. There can be more than one advisor.
- 2. The supervisor is a full-time teacher above the assistant professor of the School of Information and Electrical Engineering. If there is more than one teacher, it can be jointly instructed by the teachers of the School of Information and Electrical Engineering, other colleges or outside the school, with the approval of the department chair.
- 3. The dissertation advisor shall not be arbitrarily changed during the dissertation research. If it is necessary to change for some reason, you must fill in the application form for change of advisor (Appendix 4) and apply to the department. Changes can only be made after the original advisor, new advisor and the department head sign and agree, and the thesis advisor must be re-submitted. Consent (Appendix 3).

VII.Seven, thesis plan review:

- 1. After passing the qualification examination, doctoral students must submit a thesis proposal review (Appendix 5) to the department before submitting the qualification examination for graduation. The examination will be conducted by oral examination, and the supervisor will recommend teachers who meet the qualifications for the doctoral examination committee. , including a total of two (inclusive) or more supervisors, and approved by the thesis proposal review committee hired by the department (Appendix 6), and the review result of the thesis proposal will be one of the qualifications for graduation.
- 2. Doctoral candidates are those who have passed the qualification examination, the review of the thesis plan and have completed the credits in compliance with the course requirements.

VII. Graduation Qualification Examination:

- 1. Doctoral students who pass the examination of the thesis plan must submit a graduation qualification examination (Appendix VII to IX) to the academic committee of the department one month before the scheduled date of the doctoral examination.
- 2. Requirements for papers published in applying for graduation qualification review:
 - (1) Publish 1 SSCI, SCI (including SCIE) journal paper or 2 EI, SCOPUS journal papers, and must be the first author of the student after excluding the advisor.
 - (2) 1 EI and SCOPUS conference paper, which must be the first author of the student after excluding the supervisor, and one of the following three items:
 - (2.1) Included in EI and SCOPUS databases:
 - (2.2) Included in the Lecture Notes series or IEEE conference papers published by Springer;
 - (2.3) 1 SSCI, SCI, EI, SCOPUS journal paper can be credited for 1 EI, SCOPUS conference paper.
- 3. Whether the paper is included in SSCI, SCI, EI and SCOPUS databases is determined by the time of publication of the paper.
- 4. The invention patent is reviewed and recognized by the academic committee of the department to be credited for journals or conference papers.

5. The published thesis or patent must be within the research scope of the doctoral dissertation and be closely related to the research topic, and the published thesis must be published in the full title of the department.

IX. Doctoral degree examination:

- 1. Those who pass the graduation qualification examination and submit the first draft of the dissertation must prepare the written materials (documents after Schedule 9) and apply for the doctoral degree examination three weeks before the scheduled examination date.
- 2. The Doctoral Degree Examination Committee consists of five to nine members. Those who have specialized research on the dissertations proposed by doctoral students among scholars and experts inside and outside the school, and who have one of the following qualifications, must have one-third of the members both inside and outside the school. (inclusive) above.
 - (1) Former professors.
 - (2) Those who are academicians of Academia Sinica or former researchers of Academia Sinica.
 - (3) Those who have been associate professors, assistant professors, or associate research fellows or research assistants at the Academia Sinica, with academic achievements.
 - (4) Those who have obtained a doctorate degree and are academically accomplished.
 - (5) Those who belong to the rare or special research field and have achieved academic or professional achievements.

Qualifications for nomination in subparagraphs 3 to 5 of the preceding paragraph shall be determined by the committee specified by the SZSE. The spouse of a doctoral student or a relative by blood or marriage within the third degree of relatives shall not serve as a member of the doctoral degree examination committee.

- 3. The doctoral degree examination shall be carried out according to the following procedures:
 - (1) Based on the principle of holding the oral examination in public, the time, place and thesis title of the oral examination shall be announced in advance, and the first draft of the thesis shall be sent to the oral examination committee.
 - (2) The doctoral degree examination committee shall be held only when at least five members are present and more than one third of the external members are present. One person shall be elected by the examination committees as the convener, and the convener shall preside over the oral examination, but the supervisor shall not serve as the convener. Degree examination committee members shall attend the committee in person and shall not entrust others to be their representatives.
 - (3) For the degree examination, the passing score is 70 points, and the full score is 100 points. The evaluation score is limited to one time. The test results are determined by the average of the scores of the attending members. If more than one-third of the attending members fail to pass the assessment, they will be deemed to have failed.
 - (4) Advising professors should carefully review the first draft of the dissertation submitted by postgraduates in the doctoral program. Plagiarism, plagiarism, falsification or other violations of academic ethics are strictly prohibited. If necessary, the "plagiarism comparison system (Turnitin)" can be used to determine. If the paper has plagiarism or fraud, it will be considered as a failure if it is confirmed by the academic committee.
- 4. The dissertation (including the abstract) should be written in Chinese or English, and must comply with the "Asia University Dissertation Format Specifications". Within one month after passing the degree examination, the electronic file of the thesis abstract should be archived online according to the regulations of the National Library, and five volumes of the thesis should be submitted (three volumes are displayed in the school library, and two volumes are displayed in the department).
- 5. Those who fail the degree examination results and whose study period has not expired may apply for re-examination in the next semester or academic year. The re-examination is limited to one time. Those who fail the re-examination should be withdrawn from the school. Postgraduate students who are directly studying for a doctoral degree, who have not passed the doctoral degree examination and have been recognized by the Doctoral Degree Examination Committee as meeting the standards for a master's degree, may be awarded a master's degree.
- 6. Graduate students in doctoral programs who fail to pass the doctoral degree examination or complete the required courses within the prescribed period of study shall be dismissed.
- 7. If the university finds that the thesis has plagiarism or fraud in the awarded doctoral degree, if it is true after investigation, the degree will be revoked and the degree certificate issued will be recovered.

X. Amendment and implementation:

1. The revision of the main points of this study must be approved by the departmental affairs meeting.