國立成功大學智慧半導體及永續製造學院關鍵材料學位學程博士學位候選人資格考核實施要點

Directions for Doctoral Qualifying Examination of the Program on Key Materials Under the NCKU Academy of Innovative Semiconductor and Sustainable Manufacturing

> 111 年8 月2 日 111 學年度第1 次學程會議通過 Approved by the Program on Key Materials on August 2, 2022 111 年9 月12 日 111 學年度第2 次院務會議通過 Approved at the 2nd meeting of the Academy Affairs Council on September 12, 2022 111 年10 月11 日 111 年度第6 次管理委員會通過 Approved at the 6th meeting of the Management Committee on October 11, 2022 111 年12 月14 日 111 年度第6 次監督委員會備查 Ratified at the 6th meeting of the Supervisory Committee on December 14, 2022

- 一、國立成功大學智慧半導體及永續製造學院(以下簡稱本學院)關鍵材料學位學程(以下簡稱本學程),為辦理博士學位候選人資格考核,依據國家重點領域產學合作及人才培育創新條例第23 條及本學程博士班修業辦法第5條,訂定本要點。
- In accordance with Article 23 of National Key Fields Industry-University Cooperation and Skilled Personnel Training and Article 5 of Academic Regulations for the Doctoral Program on Key Materials, these Directions are established by the Program on Key Materials (hereafter the Program) under the Academy of Innovative Semiconductor and Sustainable Manufacturing (hereafter the Academy) at National Cheng Kung University (NCKU) to regulate the administration of its doctoral qualifying examination.
- 二、本學程博士候選人資格考試科目,應自固態物理、無機固態化學、寬能隙半導體材料及元件, 三科選擇兩科應試。
- II. The Program doctoral students should choose two of the three courses, including Solid State Physics, Inorganic Solid State Chemistry, and Wide Bandgap Semiconductor Materials and Devices, as test subjects for the qualifying examination.
 - 三、本學程博士候選人資格考試通過方式及通過期限:
 - (一)本學程學科筆試每學期舉辦一次,博士班研究生須在學期開學後三個禮拜內提出,並於入學 後不含休學之四學期內通過。
 - (二)本學程博士候選人資格考核科目得以修課抵免,但暑修課程不適用之,抵免方式如下:
 - 1. 選修本學院所開設之固態物理或固態物理(一)課程者,得抵免固態物理之考試科目;選修本學院所開設之無機固態化學課程者,得抵免無機固態化學之考試科目;選修本學院所開設之 寬能隙半導體材料及元件者,得抵免寬能隙半導體材料及元件之考試科目。
 - 2. 學期成績應達修課班級的前(含)40%,始得申請抵免該考試科目。申請人應檢附成績排名,於 入學後不含休學之四學期內提出申請。
 - (三)本學程博士候選人資格考核科目得以論文抵免,但須先以學科筆試或修課抵免其中一科應試 科目,抵免條件如下:

- 1. 於入學後不含休學之六學期內發表一篇於 SCIE 相關領域、影響係數(Impact factor)前 (含)50%之期刊,排名及影響係數之認定,以論文投稿日後之任一年度所公布之 ISI 資料庫排名 及影響係數,且提出申請時該論文應已發表。
- 2. 除指導教授、共同指導教授外,研究生應為論文第一作者,隸屬單位(affiliation)應僅列 Program on Key Materials, Academy of Innovative Semiconductor and Sustainable Manufacturing, National Cheng Kung University。但論文發表前,研究生有下列各細目情形時,可增(共)列隸屬單位(affiliation):
 - (1) 與系級以上簽有正式合作備忘錄或意向書等單位合作,並有支領對方經費者;
 - (2) 與簽准共同指導教授之單位合作,並有支領對方經費者;
 - (3) 以在職生身分入學者,可共列其工作單位;
 - (4) 有支領校內各級單位、中心之經費者。
- 3. 論文通訊作者應為指導教授,且列本校為服務單位(affiliation)之一。
- 4. 論文發表在無明顯標示通訊作者之期刊時,應檢附指導教授為論文通訊作者之證明。 本點抵免之論文,可計入畢業所需論文數。但論文有多人相同貢獻第一作者時,則貢獻權重均分 之,可累計發表論文數加總貢獻權重達一篇。

III. Requirements and Deadline for the Doctoral Qualifying Examination:

- (I) The subject tests for the qualifying examination of the Program are held once every semester. Doctoral students shall submit applications for taking subject tests within three weeks after the start of a semester, and pass the examination within four semesters after admission (excluding the period of study suspension).
- (II) An applicant may apply for exemption of subject tests for the doctoral qualifying examination of the Program with completion of semester courses for the corresponding test subjects (summer courses are not applicable).
 - Test subjects and courses eligible for exemption designated by the Program:
 Solid State Physics: <u>Solid State Physics</u> or <u>Solid State Physics</u> (1) offered by the Academy
 Inorganic Solid State Chemistry: <u>Inorganic Solid State Chemistry</u> offered by the Academy
 Wide Bandgap Semiconductor Materials and Devices: <u>Wide Bandgap Semiconductor Materials</u>
 and <u>Devices</u> offered by the Academy
 - 2. Only with the designated course completed with a semester grade ranked among the top 40% of the class can an application for waiving the subject test be submitted. The applicant shall submit the transcript with the grade ranking information about the course within four semesters after admission (excluding the period of study suspension).
- (III) After completion of a subject test or a course study for exemption of a subject test, applicants are allowed to use one published paper for exemption of the other subject test for the qualifying examination:
 - 1. The paper authored by the doctoral student should be published in a SCIE-related journal, ranked (JCI) Q2 and above by impact level within six semesters after admission. The ranking and impact level of the journal can be referred to by the annual ISI database releases in or after the submission year. When an application is submitted for exemption, the paper must be one already published.
 - 2. In addition to the advisor and co-advisors, the applicant should be identified as the first author of the paper. The paper should be identified as one published in affiliation solely with the Program on

Key Materials, Academy of Innovative Semiconductor and Sustainable Manufacturing, National Cheng Kung University. However, students can list other affiliation units, in addition to NCKU, if they cooperate with other institutions on the paper before publication under the following circumstances:

- (1) They cooperate with a unit on or above the department level of the university with a signed cooperation memorandum or letter of intent, and receive funds from the unit.
- (2) They cooperate with an institution that their approved co-advisors are affiliated with, and receive funds from that institution.
- (3) Those who enroll as in-service students can list their employment affiliation.
- (4) Those who receive funds from units of all levels or centers of NCKU.
- 3. The corresponding author of the paper should be the advisor, with NCKU listed as one of the author affiliations.
- 4. In case of a paper published in a journal that does not clearly indicate the corresponding author, an application shall be submitted with a document certifying the advisor as the corresponding author.

The paper used for subject test exemption may be counted among the papers required for graduation. However, if several authors are identified as the first author of the paper, the applicant's contribution weight of the paper will be divided by the number of first authors. The applicant may cumulate his/her contribution weights of several papers to be one paper to meet the one paper requirement for exemption.

- 四、經本校核准至境外大學修讀博士雙聯學位之博士班研究生,於該境外大學通過之博士資格考試得 以全數抵免本學程之資格考試。
- IV. Doctoral students approved by NCKU to pursue a dual PhD degree at an overseas university can apply to waive the qualifying examination for the Program if they pass the doctoral qualifying examination at the overseas university.
- 五、本要點經院務會議、管理委員會通過後實施,報監督委員會備查,修正時亦同。
- V. The Directions shall be approved by the Academy Affairs Council and the Management Committee and ratified by the Supervisory Committee before taking effect. Amendments shall be processed accordingly.

These regulations were translated from the original Chinese. In the event of discrepancies between the two versions, the Chinese always takes precedence.