

# Regulations Governing the Doctoral Program of Chemical Engineering and Materials Science

(Applicable to Those Admitted in Academic Year 2011)

94.9.5(94-01) Ratified in the departmental meeting  
95.1.19(94-06) Revised and ratified in the departmental meeting  
95.3.22(94-08) Revised and ratified in the departmental meeting  
96.5.3(95-10) Revised and ratified in the departmental meeting  
96.6.14(95-12) Revised and ratified in the departmental meeting  
99.9.9(99-01) Revised and ratified in the departmental meeting

Article 1. For the admission details, please refer to the pamphlet for recruiting doctoral students at YZU.

Article 2. The span of study ranges from two to seven years.

Article 3. Curriculum and credits of study:

In addition to 12 credits of dissertation and 4 semesters of Seminar Report with zero credit, the doctoral students should take at least 21 credits after starting their programs at YZU. Among the 21 credits, the credits offered by the department should not be fewer than 15 credits. Please refer to the list for the mandatory and elective courses of the admission year. For those doctoral students who are in the fast-track program, they should take at least 30 credits and the credits offered by the department should not be fewer than 24. Foreign and oversea Chinese students have the option of taking two 3-credit courses to waive the 4 semesters of Seminar Report.

Article 4. Before the end of their first year, all doctoral students have to finalize their dissertation advisors, choosing one from the full-time professors in the department. If the doctoral students fail to finalize their advisors, the department will make the arrangement on their behalf and no dispute should be raised.

Article 5. Qualification reviews of doctoral students:

I. The doctoral students should submit the research plans to arrange public oral defenses. The research plan will be reviewed by a committee which consists of three to five committee members; then an oral defense will be held. The committee members should have received PhD degrees and have made accomplishments academically. If a doctoral student fails to pass the oral exam, he/she can arrange another oral defense a month later.

II. First foreign language: Doctoral students should reach one of the following criteria listed from 2.2 to 2.5.

1. A first foreign language can be one of the following languages: English, German, Japanese or French.
2. Doctoral students should pass one of the following exams: a) 500 points or more in traditional written TOEFL exam, b) 173 points or more in Computer-based Test (CBT), c) 61 points or more in Internet-based Test (IBT), d) 590 points or more in TOEIC, e) intermediate level or above in General English Proficiency Test (GEPT). Moreover, the students should submit valid proofs or verifications within the indicated timeline.
3. If the students take related language courses, they have to take at least 4 credits of the same language. The language selection is based on the courses offered at YZU. Moreover, the passing score is set to be 70 or higher.
4. Those who have received a bachelor degree or higher can receive a waiver on this requirement.
5. Those who choose to use the above-listed foreign languages to write their dissertations which have been signed by their advisors to verify the contribution to their specific fields can apply for a waiver or exempt of language courses.

Those students who choose to fulfill the first and second conditions listed above should do so before their third semester after being admitted into the program. Otherwise, they will have to withdraw from the program.

III. In order to broaden the students' horizons, they should meet one of the following requirements before they submit their dissertations.

1. The students should read one paper in an international conference or symposium.
2. The students should visit foreign universities or research institutes (not including those in China) or become exchange students for at least a month.

IV. The doctoral students have to complete their dissertations under the supervision of their advisors and their research should have originality. The students should at least publish one article on SCI-level journals (including dissertation submission for publication) before they apply for dissertation defenses. The students should also make a public speech in the department before the review of their dissertations and their defenses.

V. Before the doctoral students apply for the dissertation defenses, they have to submit required documents for the review of their doctoral qualifications. The purpose is to verify the students have acquired the ability to work independently during their doctoral studies. The review will also make sure the students have met all the requirements and their works have originality as well as make contributions to their specific fields. The review of qualifications will be held by the Academic

Review Committee organized by three committee members from the Teaching Evaluation Committee of the department. If their advisors are on that committee, the advisors should not be involved in the review process and the committee chair should appoint another committee member instead.

Article 6. Regulations on dissertation defense:

Before graduation, doctoral students should undertake their oral defense in public by a committee which consists of 5 to 9 committee members from YZU as well as other universities. 1/3 of the committee members should be from YZU and another 1/3 from other universities. The committee members should meet one of the following criteria:

- I. The committee members should have been professors.
- II. The committee members should be or have been academicians or researchers at the SINICA.
- III. The committee members should be or have been associate professors or deputy researchers at the SINICA with excellent achievement academically.
- IV. The committee members should have received PhD degrees and have made excellent achievements academically.
- V. The committee members should come from rare or special areas of study and have made excellent achievements academically.

Once the students have passed the oral defenses, they will be regarded as those who have completed their degrees. If a student fails to pass the oral defense, he/she can schedule another one three months later. If the student fails the oral defense for the second time, he/she will be expelled from the program.

Article 7. For other matters not stipulated in this set of details, please refer to the General Guidelines and the Exam Details for Master's and Doctoral Students.

Article 8. This set of details is ratified in the departmental meeting before implementation. All amendments require the same procedures.