



The Petroleum and Petrochemical College
Chulalongkorn University

Ph.D. Students Handbook



The Office of Academic Affairs

www.ppc.chula.ac.th/ppcademic

Summary of requirements for Ph.D. students

Suggested Year to be taken		Requirement	Remarks
Bachelor Degree	Master Degree		
1 - 2	1	Coursework	36/12 credits, GPA \geq 3.00
2 - 3	1 - 2	Qualifying exam	Must obtain grade "S" in 3 core subjects
3	2	Preliminary exam with submission of the Thesis Proposal	A Prelim Committee to be set-up
3 - 4	2 - 3	Set-up of a Thesis Committee	The Thesis Committee comprises at least 4 members with 1 external member
3 - 4	2 - 3	Apply for Ph.D. candidacy	Requirements; (i) Complete of coursework, Qualifying exam and Preliminary exam (ii) A CU TEP \geq 80 or TOEFL (ITP) \geq 550 or IELTS (Academic) \geq 6.5
4th year onwards	3rd year onwards	Thesis Committee meeting once a year	
		Data meeting	To be held prior to writing up
		Final exam	
		Submission of the Final Thesis + 2 accepted papers + 2 publishable papers and Certifying letter	

Requirement for Graduation

International Doctoral of Philosophy Programs

Students must fulfill the following requirements to be eligible for graduation in the International Doctor of Philosophy Programs;

Credit Requirements

Students must complete an approved program of coursework and thesis work, and attain a minimum number of credits with a **GPA of not less than 3.00** within the time frame as follows:

Requirements	Bachelor Graduates	Master Graduates
Coursework	36	12
Thesis	48	48
Total credits	84	60
Time (years)	8 (Max)	6 (Max)

Students who have started their research must register for a minimum of 6 credits of thesis work every semester.

Doctoral Qualifying Examination

Students must pass a "Doctoral Qualifying Examination (DQE)". Normally, this will be carried out upon the completion of the required coursework at around the end of the first year of the Ph.D. program. *Students are required to submit the "Application Form for Qualifying Examination" (Form P-1)* to the Office of Academic Division at the designated time and date. Students who fail the first DQE are allowed to retake the examination only once. DQE is normally offered to students once every semester, one in October and the other in March.

Preliminary Examination

Students must pass a Preliminary Examination. In doing so, students must submit a **thesis proposal** to their **Prelim Committee**, which will be appointed by the College. The proposal should contain not more than 30 pages, and should at least contain the following sections: **Introduction, Review of Theoretical Background and Literature Survey, Proposed Research, Preliminary Results, Scheduling of Research Activities, and Proposed Estimation of Research Budget**. In the Proposed Research section, students should discuss, in detail, their *research philosophy, objectives hypotheses, materials selection, sample preparation, and methodology in conducting the proposed research*.

It is important to note that the Proposed Research section should not be less than 50% of the whole proposal. Once research advisors are satisfied with the content of the thesis proposal, students are allowed to defend their proposed research before the Prelim Committee. Students are required to submit the **"Application Form for Preliminary Examination"** to the Office of Academic Affairs at least ten days before the scheduled proposal defense date. Students who fail the Prelim with a permission to retake the examination are allowed to do so only once. The second Prelim should be completed within six months after the first Prelim.

Ph.D. Candidacy

Students must apply for Ph.D. candidacy by submitting the form **"Application for Ph.D. Candidacy"** The requirements for Ph.D. Candidacy include **1) retention of GPA of not less than 3.00 on approved coursework, 2) passing the DQE and 3) passing the Prelim**. Students must be a Ph.D. candidate to be allowed to defend their dissertation.

Thesis Committee

Students must seek advice from their research advisors regarding the setup of their Thesis Committee. This must be completed within one month after passing the Prelim by submitting the **"Nomination for Thesis Committee Form"** The Thesis Committee has to comprise at least one committee member who is not affiliated with Chulalongkorn University. The US co-advisor(s) is/are not considered as external committee by this definition. In some cases, Thesis Committee member(s) may be appointed by the College upon the agreement of their advisor.

Committee Meeting

During conducting research work as outlined in thesis proposal, students are required to present their research progress before their Thesis Committee (so-called Committee Meeting) at least once a year. This can be done in the form of a Ph.D. seminar, in which the students will be rigorously evaluated by their Thesis Committee and/ or other PPC faculty.

Progress Report

Students should submit a progress report every year to their advisors. Submission of a publishable manuscript instead of a progress report is also acceptable. The direct benefits of this requirement are two-fold: **1) it helps students maintain their focus on the research at hand, and 2) it helps establish mutual understanding between the students and their Thesis Committee regarding direction of the research.** An indirect benefit of this requirement is that it helps the student to reach the graduating requirement of holding at least two publications in a reasonable time frame.

Data Meeting

Upon the recommendation of their advisors and other members of their Thesis Committee, students are advised to hold a **"Data Meeting"** before their Thesis Committee prior to writing-up. This is to ascertain that the amount and quality of the completed research work are satisfactory. If the Thesis Committee are satisfied, students will be allowed to write their dissertation.

Final Examination

To arrange for the Final Examination (also known as Final Defense of Dissertation) students must discuss and set the date with the committees then submit the **"Application Form for Final Examination"** to the Office of Academic Affairs at least one month before the scheduled dissertation defense date. The decision made by the Thesis Committee following the Final Examination is final.

Graduation

1. To be eligible for graduation, students must fulfill the following requirements:

- 1.1 Being conferred a Ph.D. candidate
- 1.2 Passing the Final Examination
- 1.3 Complete the dissertation based on the format and guidelines provided
- 1.4 Holding **two papers accepted for publication in international peer-reviewed journals** with the name of the student appearing as the first author, and preparing at least two more publishable papers
- 1.5 Obtaining a TOEFL (ITP) ≥ 550 or CU TEP ≥ 80 or IELTS (Academic) ≥ 6.5
- 1.6 Not holding any financial or other administrative restricts with the College.

2. For graduation, students must submit one copy each of their final dissertation, the two accepted publications, and two publishable papers, together with the signed Certifying letter to the Office of Academic Division.

Attachment I

	Bachelor Graduate	Master Graduate
1.Coursework	36	12*
<i>A.Compulsory Coursework</i>		
1.1 Core courses	9	-
1.2 Seminar I	1**	-
1.3 Seminar II	1***	1****
<i>B. Elective Course</i>	25	11
2.Ph.D. Thesis	48	48
Total Credit Requirement	<u>84</u>	<u>60</u>

*Coursework for M.S. graduate will be selected based on each student's specific needs and on advice from the student's advisor(s).

**To be presented in the first term of the second year of the 4-yr program

*** To be presented in the first term of the third year of the 4-yr program

****To be presented in the first term of the second year of the 3-yr program

Attachment II

Organization of the Thesis Proposal

- Cover page
- Introduction
- Review of Theoretical Background and Literature
- Proposed Research
 - Research Philosophy/Objectives/Hypothesis
 - Materials/Sample Preparation
 - Methodology/Techniques
 - Design/Experimental Setup
 - Experimental Procedures/Plans
 - Controlled Parameters
 - Variable Methods
- Preliminary Results
- Scheduling of Research Activities
- Budget Estimation
 - Chemical
 - Materials
 - Equipment
 - Analytical Costs
 - Etc.
- List of References

Attachment III

A. Make up of the Prelim Committee

The Prelim Committee shall comprise:

1. Chairman of the Prelim Committee
2. Advisor(s)
3. A PPC faculty members

B. Make up of the Thesis Committee

The Thesis Committee shall comprise:

1. Chairman of the Thesis Committee
2. US advisor(s) or co-advisor(s) who are not full-time faculty at the College. (if any)
3. Thai advisor(s)
4. A committee member who is not affiliated with Chulalongkorn University (External)
5. PPC faculty member(s) (Internal)

Remarks:

1. The minimum number of members of the Thesis Committee will be five and the maximum number seven.
2. The proposed external committee member has to be approved by the College based on the proposee's credentials