

## Comprehensive Examination for Ph.D. Program

The main purpose of the PhD comprehensive examination is to assess the suitability of the candidate for graduate work at the doctoral level and to identify areas of weakness (if any) of the candidate in his/her discipline and field of specialization. The exam will focus primarily on the research topic and related background knowledge.

The results of the examination will be of assistance to the student and the advisory committee in recommending a program of study. Failure to pass the examination may result in a requirement to withdraw from the program.

The exam may have 3 outcomes: (a) pass without condition, (b) with specific conditions to be satisfied for continued registration, and (c) fail.

A student who fails the first attempt at the comprehensive examination may be required to withdraw or may be granted permission to attempt the examination again within a period of three months. A student who has passed with conditions but fails to satisfy the conditions shall be required to withdraw.

Each student registered in a Ph.D. program is required to attempt a comprehensive examination within the first four terms of the date of first registration in the Ph.D. Program. The comprehensive exam must be completed successfully (with no conditions) before the end of the 5<sup>th</sup> term of the Ph.D. study. If the course works are not completed before the comprehensive examination date, a special approval is required from the Associate Chair (Graduate).

If the comprehensive exam is not completed before the end of 5<sup>th</sup> term, the student's academic record will be sealed. The student's PhD advisory committee has to meet and submit a report to the graduate committee during the first two weeks of the 6<sup>th</sup> term. The student's file will be discussed at the graduate committee. The graduate committee may request to withdraw the student from the program.

The examination committee should be proposed by the student's advisor at least three weeks before the date of the oral examination. The advisor in consultation with the examination committee will specify at least two subject areas related to the fundamental aspects of the proposed research. These subject areas must be included in the PhD comprehensive examination submission form.

The student is required to submit a written proposal of his/her PhD research to the ECE graduate office and to the PhD comprehensive examination committee members at least 10 days before the examination date. The research proposal must include the following sections/information (but not limited):

- 1) Literature Review: Discuss the literature relevant to the proposal, placing the proposed research in the context of the latest development in the field of research. Strengths and weaknesses of previous research must be emphasized.
- 2) Discussion/Methodology: The student must describe the methods/proposed approaches and research tools that the student will be using in his/her research. Sufficient details must be provided to allow the committee members to assess the feasibility of the proposed research. Any progress or findings made to date must be included.
- 3) Summary of the proposed research and timetable describing the research milestones/deliverables with expected start and end dates.
- 4) A statement that highlights the anticipated significance of the proposed research

The research proposal must be limited to 20 pages (including figures, tables, and references), double-spaced. The report should be formatted with 1.5 line spacing and a 12 pt font.

The oral presentation at the beginning of the exam is limited to 30 minutes.

A Ph.D. comprehensive examination committee shall normally consist of at least three members of the Faculty of Graduate Studies (at least 1 of whom should not be from the advisory committee and at least 1 who should be a regular ECE member) and a chair appointed by the graduate coordinator. The membership of the examining committee shall be formed at least 3 weeks before the proposed examination date and approved approval by the associate chair (Graduate), who will ensure that each committee has sufficient members who are knowledgeable of the subject area of the student's research project. The chief advisor may be a member of the examining committee but not the chair.

The results of the examination shall be submitted to the Graduate Coordinator.

**Department of Electrical and Computer Engineering  
Form for Submission of  
Ph.D. Comprehensive Examination Committee**

Comprehensive Examination for: \_\_\_\_\_ Student #: \_\_\_\_\_

Date of Registration: \_\_\_\_\_

Chief Advisor: \_\_\_\_\_

The suggested membership of the Examining Committee and areas of questions are:  
(Give both name *and* area of questions/course numbers, the student is examined on relevant undergraduate and graduate course work and other topics related to the research area)

<b>Examiners:</b>	<b>General Areas of Questions and/or Course Numbers</b>	<b>Informed</b> <i>(tick when copies sent to examiners)</i>
1. _____	_____	<input type="checkbox"/>
2. _____	_____	<input type="checkbox"/>
3. _____	_____	<input type="checkbox"/>
4. _____	_____	<input type="checkbox"/>

The examination is to be held on: \_\_\_\_\_ at: \_\_\_\_\_ am/pm in room TEB \_\_\_\_\_  
(Date, time and room to be set by supervisor after consultation with examiners, and before seeking approval from the Departmental Graduate Board Chair)

**For Office Use Only:**

**APPROVALS:**

Graduate Board Chair : \_\_\_\_\_ Date : \_\_\_\_\_

Chairman: \_\_\_\_\_  
(Appointed by Graduate Affairs Assistant) (Date appointed)

Course Work Requirement

Complete  Incomplete

Date: \_\_\_\_\_