

**QUALIFYING EXAMINATION, ADVISORY CONFERENCE REPORT,
AND GENERAL EXAMINATION FOR
PH.D. STUDENT IN CHEMICAL ENGINEERING**

**School of Chemical, Biological and Materials Engineering
University of Oklahoma**

Effective November 19, 2001, and as Amended

Students in the Ph.D. program in chemical engineering are to take and pass both the Qualifying Examination and the General Examination as requirements for continuation in the program and for graduation. The student is also required to submit an Advisory Conference Report to the Graduate College.

The Qualifying Exam consists of three area examinations: (1) Thermodynamics, (2) Transport Phenomena, and (3) Kinetics and Reaction Engineering. These exams are given in January the week before classes start for spring and in May/June the week before classes start for summer. A list of books for study will be available prior to the exams to help students in their preparations. A set of previously given exams will also be available to look over in the CBME office.

Following the Qualifying Exams and before the General Exam, the student will need to schedule a meeting of their Doctoral Committee to discuss their courses and research. The report of this meeting, the Advisory Conference Report, is to be submitted to the Graduate College following the committee meeting. Information about the committee and the forms is available in the Graduate College or on their web page. A copy of this signed report should be given to the CBME office. The meeting of the committee cannot be at the same time as the General Exam.

The General Exam consists of a written part and an oral part. The objective of the General Exam is to test the student's ability at writing, organization, planning, creating, and speaking. The timing of this exam is designed so that the student will take it not too long after starting his/her research project.

The following are the guidelines for the General Exam: For the written part of the exam, the student will write a 13-15 page paper (excluding references, figures, and tables; double spaced; no larger than 12 point type) on his/her research project that includes a literature review and analysis (at least 15 references), research plan, preliminary research results (if any), and two or three new ideas for research that are not just a restatement of the advisor's ideas. For example, new ideas could include new directions to pursue or new ways to take measurements or analyze experiments. The research plan should be reasonably detailed. The paper must be turned in to members of the Ph.D. committee at least one week before the oral presentation. The actual writing of the paper is to be done entirely by the student (only the student should edit it). The student will give a 20-25 minute presentation of this paper to his advisory committee. The committee will have the power and responsibility to offer suggestions to the student concerning his/her research plan.

In grading the General Exam, the results of the Qualifying Exam and the student's grades can be taken into account by the Ph.D. committee. For example, a marginal performance on both the Qualifying Exam and the General Exam could result in the termination of a student. The committee

could require remedial work that has to be completed for students to be given a "pass" on the General Exam. For example, the committee could require the student to take a course in English composition or technical writing and make at least a "B" or higher grade. Another option would be to give the student more time to correct deficiencies in the paper.

For the students entering with a B.S. degree in chemical engineering, the Qualifying Exam will be taken at the first opportunity after two regular semesters from entry, and the General Exam will be taken at the first opportunity after three regular semesters from entry.

For students entering with an M.S. degree in chemical engineering, the Qualifying Exam will be taken at the first opportunity after one regular semester from entry, and the General Exam will be taken at the first opportunity after two regular semesters from entry.

For students entering without a B.S. degree in chemical engineering, "entry" is considered to be the semester when either Engineering Rate Operations or Advanced Chemical Engineering Thermodynamics is taken; these students then follow the schedule for B.S. chemical engineering students.

For part-time students with a B.S. in chemical engineering, the Qualifying Exam will be taken at the first opportunity after the three required chemical engineering courses (Engineering Rate Operations, Advanced Chemical Engineering Thermodynamics, and Seminar in Theoretical and Applied Kinetics) are taken; the General Exam will be taken at the first opportunity after spending three regular semesters on research.

For part-time students with an M.S. in chemical engineering, the Qualifying Exam will be taken at the first opportunity after one semester of coursework; the General Exam will be taken at the first opportunity after spending two regular semesters on research.

The "first opportunity" to complete the General Exam should fall no later than four weeks from the start of the semester in which the student is required to take it. In the case of the major professor being on leave or on sabbatical, the major professor can petition the faculty for a change in this schedule.

STUDENT WITH B.S. IN CHEMICAL ENGINEERING		
Semester of Entry	Semester to take Qualifying Exam	Semester to take General Exam
Fall	Summer	Second Spring
Spring	Spring	Second Fall
Summer	Summer	Second Spring

STUDENT WITH M.S. IN CHEMICAL ENGINEERING		
Semester of Entry	Semester to take Qualifying Exam	Semester to take General Exam
Fall	Spring	Summer
Spring	Summer	Spring
Summer	Spring	Summer