



Construction Engineering Qualifying Exam

The document provides guidelines for administering and taking the pre-doctoral qualifying exam for the construction engineering sub-specialty in the University of Washington Department of Civil and Environmental Engineering.

1 Qualifying Exam Purpose

A *qualifying exam* is an exam given to a post-masters student with the intent of providing an early assessment of the student's preparation and aptitude for completing a Ph.D. degree. A passing grade on the qualifying exam is required for admittance to the Ph.D. program in Construction Engineering.

2 When Taken

The post-masters student and his/her advisor determine the student's readiness for the exam and its timing. Typically, the qualifying exam should be taken after the first year of study in the department or after completing at least 20-30 coursework credits. Students that do not take the exam by the end of the fifth quarter they are enrolled as a post-masters student must have permission to do so from all construction engineering faculty members and must present a plan that outlines when the qualifying exam will be taken and the reason for not taking it on time.

3 Eligibility

The Department of Civil and Environmental Engineering requires that all students must have a UW cumulative GPA of 3.0.

4 Qualifying Exam Board¹

The *qualifying exam board* may be formed at any time before the exam and shall consist of at least two faculty members, preferably three, in construction engineering and members of the graduate faculty. The chair of the qualifying exam board shall be the student's assigned advisor if possible. The duties of the qualifying exam board are to (1) administer the written and oral exams and (2) determine the outcome of the exam. The chair of the board shall report the outcome to the Department Graduate Student Advisor.

5 Application for Exam

The student and student's advisor in consultation shall form the qualifying exam board by filling out the Ph.D. Qualifying Exam form. A formal application to take the exam shall include:

1. A brief statement from the student's advisor addressing the readiness of the student to take the exam.
2. A copy of the student's University of Washington transcript (unofficial copy is acceptable).
3. The signatures of the qualifying board members and return it to his/her advisor.

¹ Other areas in the Department use the term "Committee".



6 Exam Contents

The qualifying exam shall consist of two parts: written and oral.

6.1 Written Exam

The student shall be given three or more different questions that pertain to construction engineering and are relevant to at least one class the student has completed. If more than three questions are given, the student shall choose only three to answer. Each question shall be designed to require a research effort and an approximately 2,000 word (about 5 pages single-spaced) essay answer. The student is expected to research the answer using commonly acceptable research methods (i.e., plagiarism is not allowed) that would be used in the course of Ph.D. research. The student shall be given one calendar week in which to take the exam. Time starts when the student is given the questions in written (or electronic) form and stops when the student turns in the required essays electronically to the qualifying board. Each board member shall review the student's answers in preparation for the oral portion.

6.2 Oral Exam

The student, in consultation with the qualifying board, shall schedule a time for the oral exam that is within one month of completing the written exam. The oral exam shall be no longer than one hour and will consist of the qualifying board questioning the student on the answers provided in the written exam and any other questions the board may wish to ask.

7 Grading

Upon completion of the oral portion, the qualifying board shall immediately meet, discuss the student's exam performance (both written and oral) and render a grade for the qualifying exam. A dissenting minority opinion may be recorded but the majority opinion shall govern.

8 Decisions

The chair of the qualifying exam board shall provide a written report of the examination including a summary of the recommendation and supporting arguments. There are three potential outcomes of the qualifying exam:

Pass. The qualifying board determines the student has demonstrated satisfactory research skills and competence in construction engineering. This result shall be reported to the Department Graduate Student Advisor and no further action is required of the board.

Retake. If the qualifying exam is the student's first (i.e., not a retake), then the qualifying board may determine the student has not demonstrated satisfactory research skills and/or competence in construction engineering. In this case, the qualifying exam board shall recommend a *retake* to be taken within two months of the completed oral portion of the exam. A retake involves researching two additional questions (those that were not selected previously) in written form and then a subsequent oral exam in which all questions may be addressed. The retake result shall be reported to the Department Graduate Student Advisor. Only one retake grade is allowed for the student. The results of a retake may only be *pass* or *fail*.



Fail. The qualifying board determines the student has demonstrated unsatisfactory research skills and/or an unacceptable competency level in construction engineering. This result shall be reported to the Department Graduate Student Advisor and no further action is required of the board. A decision of fail on a retake will prevent the student from entry into the Ph.D. program.

9 Notification and Record Keeping

After the examination, the qualifying exam board shall notify the student of the exam decision. A record of the decision shall be signed by the board and forwarded to the Graduate Student Advisor for retention in the student's permanent file.

10 Appeals and Grievances

Any challenge to the decision of the Qualifying Exam Board should be taken directly to the Graduate Program Coordinator. If an appeal is made formally, a board of shall review the student's permanent file, qualifying exam, record of decision and interview the student and make a recommendation to either (1) let the decision stand, or (2) retake.



Application for Construction Engineering Qualifying Exam

Student: _____

Date of Application: _____

Desired Dates of Exam: _____

(pick a 1-week time frame)

Statement of Readiness from Student's Advisor

Write a short statement describing your impression of the student's readiness for this exam. The statement may be included in the space below or attached as a separate file/paper.

Qualifying Exam Board

At least 2 members, preferably 3, shall make up the board. The chair should be the student's advisor if possible.

	Printed Name	Signature
Chair:	_____	_____
Member:	_____	_____
Member:	_____	_____



Record for Construction Engineering Qualifying Exam

Student: _____

Dates of Exam: _____

Record of Decision

(circle one)

PASS

RETAKE

FAIL

Decision Report

The qualifying board chair shall write a brief discussion of the exam decision to include the student's performance (including major strong and weak points that influence the board's decision), the major opinions of the board members, and, if it is a first exam and the result is RETAKE, improvements necessary to pass the retake. This discussion may be written in the space provided or a separate document may be attached. A dissenting opinion may also be attached.

Qualifying Exam Board

The board members listed below have reached the stated decision in regard to the student's qualifying exam. Dissenting opinions may be state and discussed in an attached document.

	Printed Name	Signature
Chair:	_____	_____
Member:	_____	_____
Member:	_____	_____