

Ph.D. Qualifying Exam Guidelines
 Department of Civil and Construction Engineering
 Western Michigan University

Before admission to candidacy for the doctoral degree, the student must take the qualifying examination within one (1) calendar year after admission to the Ph.D. program.

This exam covers the student's competence in his/her field of specialization (*i.e., construction engineering, structural engineering, or transportation engineering*). The Qualifying Exam Committee will solicit potential examination questions from the faculty of each area of specialization. The qualifying exam is administered by the student's advisor and the Qualifying Exam Committee. The performance of the student in the qualifying exam is used by the committee to determine competence of the student to continue in the doctoral program. The Qualifying Exam Committee can directly find the student competent to continue in the program or the committee can suggest additional course work and modifications to the Plan of Work.

Evaluation Criteria:

- The exam will be offered twice a year –in May and November
- A student must pass the qualifying exam in no more than two (2) attempts.
- To pass the exam, a student must meet the following two criteria:
 - Earn 70% or higher on average
 - Earn no less than 40% in any examination area described below.
- The student who earns at least 70% on average but fails to earn at least 40% in no more than TWO areas may pass by taking an oral exam in the areas the student failed. The oral exam will be scheduled in a month after the qualifying exam date.
- The student who earns between 60% and 70% on average but fails to earn at least 40% in no more than ONE area may pass by taking an oral exam in all areas of the exam. The oral exam will be scheduled in a month after the qualifying exam date.
- The student who did not pass the qualifying exam under one of the above conditions must retake the exam within a year.

Examination Areas by Specializations:

Field of Specialization		
Construction	Structures	Transportation
Examination Areas		
<ul style="list-style-type: none"> • Bidding and Estimating • Scheduling • Contracts and Project Delivery Methods • Construction Safety • Financial Management 	<ul style="list-style-type: none"> • Structural Analysis • Structural Mechanics • Structural Design • Structural Dynamics • Foundation Analysis and Design 	<ul style="list-style-type: none"> • Systems Analysis • Transportation Planning • Traffic Operations • Highway Design • Traffic Safety

Exam Format:

- The qualifying exam could be in open-book or closed-book format, and the format will be determined by individual fields of specialization.
- Use of other electronic items, other than an approved calculator, will be determined by the Qualifying Exam Committee and communicated to the candidates prior to the exam date.