

IE 693

Industrial Engineering Doctoral Qualifying Exam (1)

Facilitator Dr. Gail W. DePuy
office: 311 J.B. Speed
phone: 852-0115
email: depuy@louisville.edu

Course The IE Doctoral Qualifying Exam (DQE) is a written exam designed to test PhD students' understanding of several fundamental IE topics.

Text No official text for this course HOWEVER students will need to refer to various resources (i.e. textbooks, lecture notes, assignments, etc.) pertaining to topics covered on DQE.

Prerequisites by Topic

Probability and Statistics
Deterministic Operations Research (e.g. LP, IP, MIP, etc.)
Stochastic Operations Research (e.g. simulation, queuing theory, etc.)

Grade Basis Doctoral Qualifying Exam 100%

Scale for Final Course Grade

Overall DQE score	70% – 100%	P (Pass)
	< 70%	F (Fail)

Note: the contribution of each topic to the overall DQE score is shown below:

Probability and Statistics question(s)	33.33%
Deterministic Operations Research question(s)	33.33%
Stochastic Operations Research question(s)	33.33%

Course Notes

- The DQE will be offered each term (based on need).
- The DQE will be a four-hour long written exam and include questions from three topic areas: Probability and Statistics, Deterministic Operations Research, and Stochastic Operations Research. The reference courses for the DQE are EM661, IE 515, and IE 541.
- Computers, calculators, textbooks and notes are allowed. However, students are NOT allowed to communicate with each other, or any other person, in any way during the exam. Cell phone use will be prohibited. Any violation of this policy will result in an immediate failure of the exam and further disciplinary action.
- The exam will be graded by a team of IE faculty using a blind review process.
- A student will have two attempts to pass the exam. In the case of a second DQE failure, the student's case is automatically considered by the Industrial Engineering faculty. Comments

from the student's research advisor, qualifying exam committee, and the faculty as a whole will be solicited. A vote is taken by secret ballot and a positive vote of greater than or equal to 2/3 of faculty in attendance is required for a student to remain in the program as a Ph.D. student.

- Any student who fails the DQE must retake entire exam.
- NO communication regarding this exam is allowed inside or outside the examination room. Students may not engage in any conduct that compromises the integrity, validity, or security of this exam.
- Students are not allowed to copy or reproduce the exam. The exams will not be returned to students, however feedback from the graders will be provided to those students who did not pass.