**Computer Science Graduate Program**  
**Technical Qualifying Exam**

The TQE exam has two component exams, one in Computation Theory and one in Analysis of Algorithms. Each component exam is a three-hour written exam.

Each component exam will be both written and graded by two graduate faculty chosen by the CS Department Graduate Director. The exams are offered immediately before the spring and fall semesters each year. A student who receives an A in CS5311 is exempt from taking the exam in Computation Theory, and a student who receives an A in CS5321 is exempt from taking the exam in Analysis of Algorithms.

The topics covered on each of the exams are specified via a syllabus that is available from the Graduate Secretary. Preparation for both exams should include the successful completion of the following courses: CS5311 and CS5321. Although the exams are not specifically tied to a course, these courses provide excellent preparation for the material contained on each exam syllabus.

Each student has up to two attempts to pass the TQE Exam. All students must take the entire TQE exam (both components) during the first attempt. (If a student already has an exemption for one of the exams, she may take only the remaining component exam.) A student may earn one of the following grades on each component exam: pass, marginal, or fail. Each student must earn a pass on one exam and at least a marginal on the other exam in order to pass the entire TQE Exam. The table below summarizes the possible outcomes and requirements after a student’s first attempt at the TQE Exam. If a component exam is taken multiple times, the highest grade of the two attempts is counted. If a second attempt to pass the TQE exam is required, a student must make that attempt during the next offering.

### Possible Qualifier Outcomes

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<thead>
<tr>
<th>Theory</th>
<th>Algorithms</th>
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<tbody>
<tr>
<td></td>
<td>pass</td>
<td>marginal</td>
<td>fail</td>
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<tr>
<td>pass</td>
<td>A</td>
<td>A</td>
<td>C</td>
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<td>fail</td>
<td>B</td>
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A) Successful Completion of Qualifier  
B) Retake Theory Exam  
C) Retake Algorithms Exam  
D) Retake Either Exam  
E) Retake Both Exams