**Doctor of Engineering Program**

**Assessment of Student Academic Achievement Objectives – CANDIDACY**

This evaluation is to be completed by each member of the student’s doctoral dissertation committee, upon completion of the Candidacy Exam (Research Proposal). Return copies of this form to the department secretary and the Doctoral Program Director.

Please **circle** the appropriate box in each row.

<table>
<thead>
<tr>
<th>The objectives are to develop in the student:</th>
<th>Level of Achievement</th>
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<tbody>
<tr>
<td><strong>Objectives/Criteria for Evaluation</strong></td>
<td><strong>Exemplary</strong></td>
</tr>
<tr>
<td>1. A deeper, more general, and more fundamental understanding of the principles underlying a particular field of study, as well as those underlying related fields.</td>
<td>Student shows excellent understanding of fundamental principles directly related to the research.</td>
</tr>
<tr>
<td>a. Depth of knowledge</td>
<td>Student shows good understanding of related subjects.</td>
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<tr>
<td>b. Breadth of knowledge</td>
<td>Student is competent in the most advanced techniques needed for research in the field. Student can synthesize and integrate results and relate them to hypotheses.</td>
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<tr>
<td>2. A familiarity with advanced methods of analysis and synthesis that are more powerful and more generally applicable than those taught at the undergraduate level.</td>
<td>Student actively searches all works directly and indirectly related to the research. Student can identify strengths and limitations of various methods.</td>
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<tr>
<td>3. The ability to independently read and understand the significance and limitations of the relevant literature.</td>
<td>Work has the potential to have a strong impact on the field.</td>
</tr>
<tr>
<td>4. The ability to formulate, initiate, and complete new and innovative research projects that contribute to the advancement of the field.</td>
<td>Work has examined many facets of the research.</td>
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</tbody>
</table>
### c. Adequacy of the depth of the research
- Work deeply probes the principles behind the problem.
- Work addresses the basic questions of the problem.
- Work addresses only the surface of the problem.

### d. Adequacy of the proposed approach and method for the research goals
- Student shows creativity in designing experiments and formulations for the problem.
- Student contributes originality to designing experiments and formulations.
- The student follows directions from his or her advisor.

### 5. The ability to communicate effectively in written and oral form.

#### a. Quality of the writing style
- Written sentences are complete and grammatical, and they flow together easily. Words are chosen for their precise meanings.
- Writing is grammatically correct. Paragraphs and sentences may not flow together perfectly.
- Writing contains grammatical errors.

#### b. Organization of the written proposal
- Proposal is logically organized and easy to follow.
- Proposal organization is clear.
- Proposal is poorly organized.

#### c. Organization of the presentation
- Presentation is clear, logical and organized. Listener can follow the line of reasoning. Pacing is correct for the audience.
- Listener can follow and understand the presentation.
- Presentation is poorly organized. Presentation jumps around from topic to topic.

#### d. Clarity of language usage
- Speaker is comfortable in front of the group and can be heard by all.
- Grammatical errors and use of slang are evident. Some sentences may be incomplete.
- Speaker is difficult to understand or hear.

#### e. Ability to answer questions
- Student answered questions directly and clearly.
- Student answered questions, but with some difficulty.
- Student had difficulty understanding questions and answering clearly.

#### f. Quality of slides
- Slides enhance the presentation and are prepared in a professional manner.
- Slides are adequate for the presentation.
- Slides are inadequate (writing too small, too much or too little information per slide).

### 6. The ability to conduct application-oriented research of an interdisciplinary nature.

#### a. Application-oriented research
- Research will have practical applications that are clear.
- Research may have practical applications.
- The practical application of the proposed research is unclear.

#### b. Interdisciplinary research
- Research will require significant knowledge of, and interaction with, more than one discipline.
- Research will involve some work or interaction with more than one discipline.
- Research will be completely within one discipline.

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**To be answered by the research advisor only:**
Have any papers resulting from the proposal work been accepted for publication in a peer-reviewed journal?  _____Yes  _____No

Revised October 9, 2013