

# Energy Science and Engineering PhD Qualifying Examination Rubric

**Student:** \_\_\_\_\_ **Exam Question:** \_\_\_\_\_

**Reviewer's Name:** \_\_\_\_\_

Please rank the student in each area below using a 1-5 scale (5 is of highest quality).						
Outcome: Demonstrate the ability to investigate a problem in energy science and engineering and propose a research solution displaying competencies in *1) critical thinking and information literacy; *2) analysis and synthesis of scientific themes; and *3) written and oral communication.						
Written Proposal	1	2	3	4	5	Learning skills*
Student thoroughly addresses the topic introduced in the prompt, clearly investigating the background and significance of the problem						1
Student presents a compelling and cohesive research proposal demonstrating his/her understanding of the problem and clearly defines the methodology used to investigate and propose a solution						2
Student produces a professionally written proposal integrating advanced writing techniques, free of grammar and spelling errors and follows general formatting guidelines						3
Oral Defense	1	2	3	4	5	
Student communicates scientific themes and ideas clearly demonstrating his/her understanding of the problem and proposed solution						2
Student effectively utilizes visual aides to enhance the presentation and to communicate the theme of the proposal						3
Student answers questions clearly and thoroughly demonstrating his/her understanding of the problem, the proposed solution, and other published research on the topic						3
Research Potential	1	2	3	4	5	
Student effectively demonstrates the ability to identify, analyze, and research a current problem in energy science and engineering						1, 2, 3
Student understands and clearly communicates the relevancy of the problem and the proposed solution						1, 2, 3
Total Score						

Adopted from the Association of American Colleges & Universities Essential Learning Outcomes

# Energy Science and Engineering PhD Qualifying Exam Evaluation Form

To be completed by the qualifying exam committee

**Student Name:** \_\_\_\_\_

**Student ID #:** \_\_\_\_\_

**Exam Question:** \_\_\_\_\_

**Result of Examination:**

Pass \_\_\_\_\_

Retake \_\_\_\_\_

Fail \_\_\_\_\_

**Comments:**

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**Qualifying Committee Signatures:**

Sign: \_\_\_\_\_ Print: \_\_\_\_\_ Date \_\_\_\_\_

Sign: \_\_\_\_\_ Print: \_\_\_\_\_ Date \_\_\_\_\_

Sign: \_\_\_\_\_ Print: \_\_\_\_\_ Date \_\_\_\_\_

Sign: \_\_\_\_\_ Print: \_\_\_\_\_ Date \_\_\_\_\_

Sign: \_\_\_\_\_ Print: \_\_\_\_\_ Date \_\_\_\_\_