

Procedure for Certification of Comprehensive Knowledge for Non-Thesis Option Master of Science in Technology

I. Purpose:

To serve as a basis for certifying comprehensive knowledge to the Graduate School.

II. Objectives:

1. To determine the quality and degree of knowledge that students gained during their study in the graduate program.
2. To certify that a graduating student has attained comprehensive knowledge of cognate areas in the graduate program in Technology.
3. To verify that students have the ability to integrate and synthesize information.
4. To ensure that students can demonstrate proficiency with presentation technologies.
5. To ensure that students are able to effectively communicate with written and oral modalities.
6. To verify that students have met the goals and objectives of the program.

III. Format: Written Report and Oral Defense

A. Written Report

Candidates must meet the following writing requirements three weeks prior to the oral defense. The written document will:

- a. Describe the bases of the candidate's decision to pursue graduate studies in Technology. The description will include personal and professional goals, as well as desired program outcomes.
- b. Discuss how the stated goals have been attained, and to what extent graduate study has impacted the candidate's personal and professional life.
- c. Identify one specific concept or model that has left an indelible imprint on the candidate and how this concept/model has transformed his/her personal and professional life.
- d. Present a reality-based case (extended example) using a problem solving/decision making format to demonstrate how the knowledge, principles, and tools learned during graduate study may be applied to solve problems or to resolve practical issues. The case should be an actual case based upon candidate's professional experience or personal experience, *or literature review*. Concepts and principles from at least **four** (4) elective courses from one area of study should be integrated into the case (effective Spring 2009).

Candidates are required to provide evidence of substantial research to support their findings. A minimum of five primary references is required.

e. Conform to the most recent edition of the *Publication Manual of the American Psychological Association (APA)*.

f. Demonstrate the conventions of scholarly, professional and technical writing. Those conventions include, but are not limited to, clear flow of ideas, free of grammatical and spelling errors, and correct sentence and paragraph structure.

g. Students must comply with the ethical behavior as published in the EIU Student Conduct Code <http://www.eiu.edu/~judicial/code.html> . Any infraction of these standards will be referred to the Director of Judicial Affairs or designee to determine if reasonable cause of a violation has occurred. Students found to be in violation of the EIU Student Conduct Code will be dismissed from graduate degree candidacy in the School of Technology. **Refer to the Graduate Catalog for the Academic Integrity Policy.**

B. Oral Defense

a. The candidate will work closely with the Comprehensive Knowledge Committee chair and committee members to decide the time and location for the oral defense.

b. Oral presentations of the written document will be limited to 20 minutes. Students must use appropriate presentation technology (media) during their presentation.

c. Upon conclusion of the presentation, committee members will ask questions related to the presentation, course work, and other experiences during the graduate study.

C. Evaluation

The committee will quantitatively evaluate the comprehensive knowledge of the candidate, using a rubric based upon the following:

- The report addressed the required issues.
- The report presented the ideas clearly.
- The report conforms to the most recent edition of the *Publication Manual of the American Psychological Association (APA)*.
- The report is free of grammatical, spelling, and other errors.
- The oral presentation was well prepared.
- The oral presentation was clear and effective.
- The candidate responded to the questions and provided correct answers to the questions.
- The candidate clearly demonstrated the ability to evaluate and synthesize information by providing an appropriate solution to the case presented.

Score for Pass/No Pass: A candidate has to achieve at least 70 points of a possible 100 in order to be certified with comprehensive knowledge as a part of the degree completion requirement. Students receiving a score above 92 will be eligible for Pass with

Distinction. Candidates who score between 61 and 69 points may repeat the process the semester following their first attempt. Candidates scoring 60 points or less must petition the School of Technology Graduate Committee in order to be eligible for a second opportunity to certify comprehensive knowledge. The Graduate Committee may prescribe remediation for the candidate.

Failure in the certification:

- Candidates who successfully petition to repeat the process may do so the semester following their first attempt.
- The same committee will administer the certification process the next term. In the event that members of the original committee are not available, new members will be named to the candidate's committee by the Graduate Coordinator.
- Failure to achieve a passing score during the second attempt will result in loss of degree candidate status.
- A different reality-based case is required from the candidate in subsequent attempts to certify comprehensive knowledge. Candidates will not be permitted to proceed to the oral defense the next term if the written report is not significantly improved and to the satisfaction of the Comprehensive Knowledge Committee.

D. Summer Graduation:

A student may petition to have his/her comprehensive knowledge certified in spring semester in order to permit graduation in summer semester, under the following conditions:

- a. Student completes all required core courses by the end of spring semester.
- b. Student completes at least 29 semester hours by the end of spring semester, including the one semester hour independent study.
- c. For the certification of comprehensive knowledge, student is required to submit application to the graduate coordinator by the end of preceding fall semester. (Approved on March 25, 2004)

IV. Procedure

1. Candidates will be assigned to a regular graduate faculty member of the School of Technology who will serve as the chairperson of their Comprehensive Knowledge Committee. The committee chair will be assigned by the graduate coordinator during the first semester of the students' graduate study in Technology. For students who entered the program before this policy is effective, a faculty chair will be assigned during their graduating semester.
2. Each candidate will consult with the committee chair regarding the certification process.
3. At the beginning of the graduating term, the candidate will enroll in a one semester-hour Independent Study Course. The chair of the candidate's Comprehensive Knowledge

Committee will supervise the Independent Study and work with the candidate to identify other members of the committee and guide the candidate in the identification of an appropriate reality-based problem and advise him/her in preparing the written report. The chair of the Comprehensive Knowledge Committee will inform the graduate coordinator of the committee's composition before the end of the 4th week of the fall or spring semesters, or by June 5th for summer terms.

4. If the chairperson of the Certification of Comprehensive Knowledge Committee is not available due to unforeseeable circumstances, the graduate coordinator will serve as the committee chair on behalf of the assigned chairperson.

5. The Certification of Comprehensive Knowledge Committee will consist of no less than three graduate faculty members including the Certification of Comprehensive Knowledge Committee chair and graduate coordinator. Adjunct or associate graduate faculty can be included on the committee upon approval of the graduate coordinator. The Certification of Comprehensive Knowledge Committee members may or may not be an instructor for the graduate candidate. If the student desires, one committee member may be from outside the School of Technology.

6. The Graduate Coordinator will establish the dates and times for the presentation by the candidates. The oral defense should be completed PRIOR TO the final exam week of the fall or spring semesters. Completion of the process during the summer will depend upon available funding. If the comprehensive knowledge process occurs during the summer, the oral defense must be completed prior to the final exam period of the final summer session.

7. Three weeks prior to the oral defense, the chair of the Certification of Comprehensive Knowledge Committee will notify the candidate regarding the status of the written report. To facilitate this process, the candidate is required to submit four hard copies of the report to the committee chair at least five weeks prior to the scheduled oral defense date. Email submission is NOT acceptable. If the written report is not acceptable, the candidate must revise it to the satisfaction of the graduate committee before the candidate can proceed to the oral defense. The revised document must be resubmitted no later than two weeks prior to the oral defense.

8. If the candidate's written report is not approved by the Certification of Comprehensive Knowledge Committee within the time frame specified above, the oral defense will be postponed until the next term. Please note that this will delay the official graduation date for the candidate.

9. Students will be given approximately 20 minutes to present an overview of their written report.

10. Certification of Comprehensive Knowledge Committee members will ask questions related to the presentation, course work, and other experiences during graduate study.

11. The Certification of Comprehensive Knowledge Committee will then quantitatively evaluate the comprehensive knowledge of the graduate degree candidate based upon the established scale.

12. If the candidate achieves a score of 70 out of 100 points for the written report and oral defense, s/he will receive the certificate of comprehensive knowledge.

13. If the candidate does not receive a score of 70, s/he must wait until the next semester to repeat the certification process.

14. Candidates scoring 60 points or less must petition the SCHOOL OF TECHNOLOGY Graduate Committee in order to be eligible for a second opportunity to certify comprehensive knowledge. The Graduate Committee may prescribe remediation for the candidate as a condition of granting approval to repeat the certification of comprehensive knowledge process.

15. If the candidate fails to receive a total score of 70 for the written report and oral defense, s/he will have to begin the entire process the next term, including written report and oral defense. Failure to achieve a passing score during the second attempt will result in loss of degree candidate status.

Acknowledgement:

This document was a result of hard work by the graduate program quality improvement subcommittee. The subcommittee was chaired by Dr. Larry Helsel, and composed of Drs. Boldrey, Butler, Liu, and Luft. The subcommittee made every attempt to integrate suggestions and discussions by graduate faculty and students.

The following implementation schedule was approved by the graduate committee on September 18, 2003

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|---------------------|---|
| Spring 2004: | Optional |
| Summer 2004: | Not available |
| Fall 2004: | Required for every graduating students |

Approved September 18, 2003
Changes approved November 6, 2003

The following changes were approved by the graduate committee on September 4, 2008:

Section III.d: Require four (4) elective courses from one area of study, effective Spring 2009.

Please see the section on page 1 for the actual language pertaining to the above change.