

COLLEGE OF TECHNOLOGY GRADUATE FACULTY HANDBOOK

Assembled by the Graduate Faculty in the College of Technology



West Lafayette, IN

August 2013

This page is left intentionally blank.

CoT Graduate Faculty Handbook

TABLE OF CONTENTS

	Page
FORWARD: HOW TO USE THIS HANDBOOK?	1
College Contact Information	1
Departmental Contact Information	1
SECTION 1.0. INTRODUCTION	2
1.1. History & Program Structure	
1.2. Program Governance	
1.2.1. University Graduate Council	3
1.2.2. CoT Graduate Studies Committee	
1.2.3. Departmental Graduate Studies Committees	
1.3. <u>College and Departmental Courses</u>	
1.3.1. Course Approval	
1.3.2. Offering Courses	5
1.3.3. Special Course Numbers	5
1.3.3.1. Experimental Courses	
1.3.3.2. Independent Study Courses	
1.3.3.3. Research Credit Courses	6
1.4. Record Keeping	6
1.5. <u>Program Review</u>	6
1.6. Graduate Faculty Status	6
1.6.1. Appointment to Graduate Faculty	7
1.6.2. Requesting Graduate Faculty Status	
1.6.3. Graduate Faculty Identifier	
SECTION 2.0. ADMISSIONS	9
2.1. <u>CoT Application Requirements</u>	
2.2. CoT Applicant Review Procedure	
2.3. <u>Time Limitations</u>	
SECTION 3.0. GRADUATE STUDENT ADVISING	
3.1. Serving as a Graduate Advisor	
3.2. <u>Graduate Committees</u>	11
3.3. Monitoring Graduate Student Progress	
3.4. The Electronic Plan of Study	
3.5. Proposal Meetings (M.S. & Ph.D.)	
3.5.1. Proposal Defense	
3.6. <u>Examinations</u>	15
3.6.1.Preliminary Examination (Ph.D. Only)	15
3.6.2. Final Oral Examination/Defense (M.S. & Ph.D.)	16
3.7. <u>Hooding Ph.D. Candidates</u>	17
3.8. Final Examination Packets	17
3 8 1 Master's Thesis Final Examination Packet	17

	Page
3.8.2. Master's Non-thesis Final Examination Packet	17
3.8.3. Doctorial Final Examination Packet	17
3.9. Reporting the Results of Examinations	18
3.10. College Thesis and Dissertation Review	
3.11. University Deposit of Completed Thesis/Dissertation	
3.12. College Deposit of Completed Directed Project/Thesis/Dissertation	
3.13. Graduation Processes	
3.14. Questionnaires	
3.14.1. Graduate School Exit Questionnaire	
3.14.2. Survey of Earned Doctorates	
3.14.3. College of Technology Exit Questionnaire	
SECTION 4.0. GRADUATE ASSISTANTS	
4.1. Working with Teaching Assistants	
4.1.1. Grade Confidentiality (FERPA)	
4.1.2. Loading and Office Hours	
4.2. Working with Research Assistants	23
4.3. <u>Assistantship Duration</u>	
4.4. Evaluating TA/RA Performance	24
CECCHION FO CEDETICA FRONG DUDI ICA FRONG O INFECDITA	25
SECTION 5.0. CERTIFICATIONS, PUBLICATIONS & INTEGRITY	
5.1. <u>Certifications & Approvals</u>	
5.1.1. Family Educational Rights and Privacy Act (FERPA)	25
5.1.2. Collaborative Institutional Training Initiative (CITI)	25
Certification	
5.1.3. Institutional Review Board (IRB) Approval	
5.2. <u>Resources</u>	
5.2.1. Research Oversight	
5.2.2. Responsible Conduct of Research (RCR)	26
5.2.3. Purdue University Psychometric Instruction/Investigation	27
Laboratory (PUPIL)	
5.2.4. Statistical Consulting Service (SCS)	
5.2.5. Center for Instructional Excellence (CIE)	
5.2.6. Sponsored Programs Services (SPS)	
5.2.7. Discovery Park	
5.2.8. Purdue Research Foundation (PRF)	
5.2.8.1. PRF Research Parks	
5.2.8.2. Office of Technology Commercialization (OTC)	
5.3. <u>Co-authoring with Students</u>	
5.4. <u>Integrity</u>	
5.4.1. Plagiarism, Falsification, and Fabrication	
5.4.1.1. Plagiarism	
5.4.1.2. Strategies for Avoiding Plagiarism	
5.4.1.3. Guidelines for Quoting and Citing	
5.4.2. Self-checking for Plagiarism	
5.4.2.1. Rules Governing Usage	31

5.4.2.2. Procedure for iThenticate	31 32
APPENDIX A: GRADUATE FORM 40G	34
APPENDIX B: INDEPENDENT STUDY APPROVAL FORM	40
APPENDIX C: STEPS IN A GRADUATE STUDENT'S PROGRAM	43
APPENDIX D: GEC 02 ANNUAL STUDENT PROGRESS FORM	51
APPENDIX E: GEC 07 M.S. PROGRESS REPORT FORM	53
APPENDIX F: GEC 08 PHD PROGRESS REPORT FORM	55
APPENDIX G: GEC 05 DISSERTATION RESEARCH PROPOSAL FORM	57
APPENDIX H: GEC 11 THESIS RESEARCH PROPOSAL FORM	61
APPENDIX I: GEC 13 DIRECTED PROJECT PROPOSAL FORM	65
APPENDIX J: COT FORM 2: ACCEPTANCE OF GRADUATE PROPOSAL	69
APPENDIX K: GEC 12 WRITTEN AND ORAL PRELIMINARY EXAMINATION FORM	73
APPENDIX L: GEC 09 THESIS AND DEFENSE FORM	79
APPENDIX M: GEC 10 DIRECTED PROJECT AND DEFENSE FORM	84
APPENDIX N: GS FORM 9: THESIS ACCEPTANCE	89
APPENDIX O: DIRECTED PROJECT COVER PAGE	93
APPENDIX P: GEC 06 GRADUATE TEACHING EVALUATION FORM	95
APPENDIX Q: GEC 14 GRADUATE RESEARCH ASSISTANT EVALUATION FORM	99

	CoT	Graduate	Faculty	Handbook,	August 2013
--	-----	----------	---------	-----------	-------------

This page is left intentionally blank.

FORWARD: HOW TO USE THIS HANDBOOK?

This document is intended to supplement the existing *CoT M.S. Graduate Student Handbook* and the *CoT Ph.D. Graduate Student Handbook* (available at: http://www.tech.purdue.edu/Graduate/). In an effort to minimize redundancy, this handbook will refer to the student handbooks. Graduate faculty in the CoT should familiarize themselves with these documents, as they detail the requirements, policies and procedures for graduate students. Also helpful is the Graduate's Schools handbook, *Policies & Procedures for Administering Graduate Student Programs*, available at: http://www.gradschool.purdue.edu/downloads/Graduate_School_Policies_and_Procedures_Manual.pdf.

College Contact Information

James L. Mohler

Associate Dean for Academic Affairs and CoT Thesis Format Advisor

Email: jlmohler@purdue.edu
Phone: 765.496.6071

Debbie Hulsey

CoT Graduate Program Coordinator

Email: dhulsey@purdue.edu
Phone: 765.494.46875

Departmental Graduate Contacts

Aviation Technology	Richard Fanjoy	rofanjoy@purdue.edu
Building Construction Technology	Mark Shaurette	mshauret@purdue.edu
Computer and Information Technology	Jeffrey Whitten	jwhitten@purdue.edu
Computer Graphics Technology	Mihaela Vorvoreanu	mihaela@purdue.edu
Electrical and Computer Engineering Technology & Mechanical Engin	Duane D. Dunlap neering Technology	ddunlap@purdue.edu
ProSTAR	Mitch Springer	mlspring@purdue.edu
Technology, Leadership and Innovation	Kathy Newton	kanewton@purdue.edu

SECTION 1.0. ADMINISTRATION OF GRADUATE PROGRAMS IN THE COT

Section 1.0 details the structure of CoT Graduate Studies programs and the various decision making bodies that affect them. It also covers policies and procedures relative to graduate faculty status and graduate courses in the CoT, record keeping, and program review.

1.1. History & Program Structure

Graduate programs at Purdue University typically reside in departments across the university, as opposed to colleges or schools. While the creation of new schools or colleges at Purdue does not happen often, when a new college or school is created graduate programs typically begin at the college or school level. As these programs grow, departments within that college or school are able to obtain their own degrees through an official process (see Section I of Policies & Procedures for Administering Graduate Student Programs). Such is the transition that the College of Technology (CoT) has undertaken since the mid-1990s when it began to focus much effort on graduate education and expanding its graduate offerings.

The CoT graduate program began as a joint venture between the Industrial Technology department and the College of Education from nearly the beginning of the CoT in 1964. By the late 1990s, the CoT M.S., which had become independent of the College of Education, required students to take a set of core courses and then allowed students to gain specialized knowledge by populating related areas of study with courses from the departments within the college. The CoT saw steady growth of its college-program, to the extent that departmental programs were possible.

As of the writing of this handbook the CoT continues to offer a college-based M.S. program, however several departments now have (or are pursuing) their own M.S. degrees. Similarly, the CoT has a college-based Ph.D. It is envisioned that the transition from college to department will also occur with the Ph.D. program as a critical mass of students focus their doctoral studies within different segments of the CoT's specialties and as the CoT's research profile grows. The CoT also offers non-thesis M.S. programs through its ProStar organization, sometimes referenced as the Weekend Masters Program. Several programs also offer combined degree programs a as well (i.e., 3+2 M.S./B.S. programs).

NOTE: For more information on specific CoT degree programs, refer to the CoT M.S. Graduate Student Handbook and the CoT Ph.D. Graduate Student Handbook (available at: http://www.tech.purdue.edu/Graduate/). Check with departments that have their own degrees for department specific handbooks also.

1.2. Program Governance

Governance of graduate programs in the CoT occurs at three levels. The following sections describe the committees that are involved with decisions relative to graduate studies, beginning with the University Graduate Council.

1.2.1. University Graduate Council

The University Graduate Council is comprised of 25 appointed voting members from programs across the university that represent the faculty relative to academic polices for postbaccalaureate study and degree programs. The CoT representative at the University Graduate Council is appointed by the Associate Dean for Academic Affairs in the CoT.

NOTE: For more information on the Graduate Council, see Section I.B of the Policies & Procedures for Administering Graduate Student Programs handbook. Additional information is available at the Graduate Council's web site: http://www.gradschool.purdue.edu/faculty/administration/.

1.2.2. CoT Graduate Studies Committee

The CoT Graduate Studies Committee is comprised of a representative from each of the college's departments, as well as representatives from ProStar (professional education/weekend masters program). Typically the individuals who serve on the CoT Graduate Studies Committee are the chairs of the individual departmental graduate committees. Assignment to the CoT Graduate Studies Committee is typically by appointment at the departmental level and approval by the Associate Dean for Academic Affairs in the CoT.

Within the CoT, the Graduate Studies Committee serves as both an advisory and approval body for various aspects of the graduate program. For the college-based M.S. and Ph.D., the CoT Graduate Studies Committee functions as an approval body. Relative to departmentally-based M.S. programs, the CoT Graduate Studies Committee functions in an advisory/review capacity.

1.2.3. Departmental Graduate Studies Committees

Typically each department has its own Graduate Studies Committee that is responsible for policies and procedures affecting its program (assuming the department has its own M.S. degree program), policies and procedures affecting areas of specializations (if they exist), as well as their participation in college-based M.S. and Ph.D. programs. In most departments, it is this committee (or a subset of it) that also reviews candidate applications for admission to the CoT programs and/or departmentally based programs. Appointment to the Departmental Graduate Studies Committee (and its chair) typically occurs in the spring each year and is by appointment of the respective CoT department head.

1.3. College and Departmental Courses

Graduate courses within the CoT can occur at the college level (with the prefix TECH) or at the department level (with the departmental prefix, such as AT, CNIT, etc.).

Typically both types of courses can be used in a student's graduate plan of study, unless otherwise prohibited within a particular program's policies or guidelines.

1.3.1. Course Approval

Often graduate faculty will propose new courses with either the TECH prefix or their departmental prefix, depending on whether the course is applicable to the entire college or an individual department. Typically new courses are offered one or two semesters using a temporary or "experimental course number" before an official course number is requested via the University Graduate Council. The proposal of a temporary or experimental course requires approval and vetting at the department and college level. The proposal of a new course— with an official permanent course number— requires vetting and approval at the department, college and the university level.

When a graduate faculty member desires to propose a new course, they typically begin by vetting it within their departmental Graduate Studies Committee. The Graduate Form 40G details the specifics of the course and is used to propose the course (see Appendix A for an example). The Form 40G is available at: http://www.gradschool.purdue.edu/gpo/. Faculty desiring to propose a course should request prior examples of course proposals from their departmental chair or graduate committee chair.

NOTE: Even if a faculty is proposing a new experimental course without a permanent course number, the FORM 40G is completed and used to propose the course to the departmental and college graduate studies committees.

Once a course is approved at the departmental level, it is forwarded to the College Graduate Committee. If the course is a TECH course, the College Graduate Committee must approve the course. If the course is a departmental course, the College Graduate Committee provides advice relative to the proposal. Such advice can be useful for the eventual proposal of the course at the University Graduate Council.

If the proposed course is a temporary or experimental course, it may be scheduled and offered following the vetting and/or approval process at the college level. If the course is a new permanent course, the proposal must then be sent to the University Graduate Council for approval before the course may be offered.

NOTE: When offering a temporary or experimental course, the course may only be offered three (3) consecutive times in that status. The fourth offering of the course must have a permanent course number. As such, typically during the second semester of offering an experimental course, the faculty member will begin the process of seeking approval for a permanent course number via department and college graduate committees and then, finally, the University Graduate Council.

1.3.2. Offering Courses

Once a course can officially be offered, the course should be made available and the course load should be computed as part of the faculty member's load. If the course is a TECH course, the CoT Graduate Studies Office officially schedules the course for the faculty member. If the course is a departmental course, the faculty member's schedule deputy manages the process of scheduling the course. In determining when to offer the course, faculty should not only consider their own personal scheduling concerns, but also what other courses (particularly required courses) may be scheduled at the same time.

1.3.3. Special Course Numbers

Within both the CoT and its departments, there are certain course numbers that are used for experimental, independent study, and research courses. The following three sections acknowledge the specific numbers that are typically used for these courses.

1.3.3.1. Experimental Courses

At the college level, TECH 581 is typically used for experimental/temporary courses. As such, there are a number of TECH 581 courses that may be offered in any given semester, each with a different title. TECH 581 is the mechanism faculty use for developing and testing new courses. For experimental doctoral courses, TECH 621 is typically used.

1.3.3.2. Independent Study Courses

Often students may wish to work with specific faculty on particular research or study topics for which no course exists, or for which very few students would have an interest in taking a course on the subject matter. In such cases students typically take independent study courses with specific faculty. Typically the 590 course number is available in each department for use for M.S. students (such as BCM 590 or CGT 590). For doctoral students, TECH 690 should be used (in some cases a departmental equivalent of TECH 690 exists).

For a student and faculty to be able to engage in an independent study course, there is a specific proposal format and process. Students should be referred to the *CoT M.S. Graduate Student Handbook* and the *CoT Ph.D. Graduate Student Handbook* (available at: https://tech.purdue.edu/degrees/phd-technology/resources/forms-and-documents) for information about the proposal process. Appendix B shows an example of the *Graduate Independent Study Authorization Form*. Faculty should be aware of the following concerning independent study courses:

- For students to engage in an independent study course, they must have a plan of study on file.
- Students and faculty must submit the proposal for the independent study prior to the student enrolling in the course.
- Faculty must have graduate faculty status to offer a graduate independent study courses.

• TECH 690 (or equivalent) may only be offered by faculty with an earned doctorate.

1.3.3.3. Research Credit Courses

Many of the M.S. programs, as well as the Ph.D. program, require students to have a certain number of research credits. The number of credits depends upon which program they are enrolled. TECH 598 is used for M.S. students desiring to do a directed project (non-thesis M.S.). TECH 698 is used for M.S. students desiring to complete a thesis, and TECH 699 is used for doctoral dissertation research. Typically departments having their own M.S. degree programs also have the 598 or 698 course prefixed with their department code.

1.4. Record Keeping

For the CoT M.S., the CoT Graduate Studies Office is responsible for various records related to graduate study. These include:

- Coordination of graduate applicant review and admission documents
- Assembly of the applicant's application file
- Acceptance letters and other documents related to student notification of acceptance
- Records and reports related to the progress of students within CoT programs
- Maintenance of each student's master file
- Examination schedule requests
- Examination and progress evaluations provided by graduate faculty
- Interface with Purdue University's Graduate School on final graduation check requirements

Where CoT departments have their own degrees, a designee within the department will maintain such records related to the degree and its students.

1.5. Program Review

The CoT Graduate Studies Office will on an ongoing basis engage in review of the graduate program. The mechanisms for this will include CoT Graduate Committee improvement recommendations based upon review of various sources of data, solicitation of feedback from students via exit interviews, solicitation of feedback from graduate faculty in the CoT, student advisory committee reviews, and conducting follow-up studies with former students.

NOTE: The CoT has a Graduate Student Advisory Council that provides valuable feedback concerning the graduate program. Departments that have their own M.S. degrees also have similar advisory groups. Students interested in the improvement of graduate studies within the CoT should be directed to get involved with these groups.

1.6. Graduate Faculty Status

To participate in graduate committees or offer graduate courses requires that the faculty member be appointed as a graduate faculty member. The following sections outline the expectations of graduate faculty and the process for becoming a member of the graduate faculty at Purdue University.

1.6.1. Appointment to Graduate Faculty

"Regular" members of the Graduate Faculty are tenure-track faculty members at Purdue University who have been nominated by their department head and the CoT Associate Dean for Graduate Studies for appointment to the Graduate Faculty. Nominations typically include a memo from the department head and a current vita of the nominee. The Dean of the Graduate School, acting on behalf of the Graduate Council, grants graduate faculty status to Purdue faculty members. New faculty members may be nominated for appointment to the Graduate Faculty after their date of employment and after they arrive on campus. New faculty must also attend the New Faculty Mentoring Workshop hosted by the Graduate School each semester (see http://www.gradschool.purdue.edu/ for more information about the workshop). Appointment as a "regular" member permits the individual to serve as chair or member of a graduate committee and to teach graduate courses.

NOTE: Only faculty holding an earned doctorate may chair or serve on Ph.D. graduate committees. As well, teaching certain courses requires that the faculty hold an earned doctorate. Similarly, chair or co-chair a thesis master's committee requires that one hold an earned thesis-based master's degree.

A "special appointment" to the graduate faculty may be requested for an individual who does not meet the conditions required for "regular" appointment, yet who can contribute special expertise to the work of graduate students. Such a person may serve as a member or as a co-chair, but not as chair for graduate committees and he or she may teach graduate courses.

NOTE: Additional information pertaining to graduate faculty appointment is available in Section I.E of the Policies & Procedures for Administering Graduate Student Programs handbook.

1.6.2. Requesting Graduate Faculty Status

Nominations for graduate faculty status at the West Lafayette campus are initiated electronically by the faculty member's department head. Nominations are forwarded to the CoT Associate Dean for Academic Affairs for endorsement via electronic signature. After which the nomination is forwarded electronically to the Dean of the Graduate School for review. Upon approval, the Graduate School assigns a graduate faculty identifier (e.g., C0001) to the appointee for use on Graduate School documents.

1.6.3. Graduate Faculty Identifier

Graduate faculty identifiers are used on documents and within electronic systems to represent the faculty. Faculty should make a note of their identifier as it is used within the Electronic Plan of Study (EPOS) generator and is frequently needed for documentation associated with oral examinations.

NOTE: For information on the Electronic Plan of Study (EPOS) generator and the general process of POS approval, see the CoT M.S. Graduate Student Handbook and the CoT Ph.D. Graduate Student Handbook (available at: http://www.tech.purdue.edu/Graduate/).

SECTION 2.0. ADMISSIONS

The following sections detail the CoT application requirements and review procedures.

2.1. CoT Application Requirements

Applicants to any of the College of Technology's graduate programs are required to submit an electronic application with a resume (online via the Graduate School), three letters of recommendation, a goal statement indicating their career goals and purpose for pursuing graduate studies, official original transcripts of all college coursework, and results of the GRE examination. International applicants must also submit TOEFL scores and documentation of financial support. Ph.D. applicants must also provide information concerning the earned M.S. degree and their letters of recommendation must be from faculty who have an earned doctorate.

NOTE: More detailed information on admissions requirements are available in the CoT M.S. Graduate Student Handbook and the CoT Ph.D. Graduate Student Handbook (available at: http://www.tech.purdue.edu/Graduate/).

2.2. CoT Applicant Review Procedure

The general procedure for the review of graduate applications includes the following:

- Applicants complete Purdue University's online electronic application and submit the Graduate School's application fee.
- Applicants submit all other application materials to the CoT's Graduate Studies Office (or department graduate office in the case of departmentally-based M.S. degrees).
- The CoT Graduate Studies Office assembles complete application package for internal review.
- The completed application package is routed to the relevant department in the CoT for review.
- For Ph.D. applications, at least one of the reviewers interviews the candidate, if possible. Although in-person interviews are desirable, alternative procedures (such as telephone interviews) may be employed.
- Faculty review package and report assessment to the CoT Graduate Studies Office.
- Forwarding departmental admission recommendations to the CoT Graduate Studies Office.

NOTE: While the university does not have minimum requirements for the GRE, it does have minimum scores for the TOEFL exam. Additionally, the Graduate School has a minimum entry GPA requirement of a 3.0 on the bachelor degree of incoming students.

Faculty reviewers may recommend any of the following concerning a student applicant to a program:

- Admit without conditions.
- Admit with conditions ("Conditional Admission"), or
- Deny.

Conditional admission requires that certain minimum performance standards be established by the faculty reviewer, such as "must achieve at least a 3.00/4.00 graduate index at the completion of the first 12 credits following admission to the degree program." In addition, faculty may require certain prerequisite coursework to satisfy a deficiency in the student's background.

Academic conditions of admission for all conditionally admitted students are monitored by the departmental Graduate Studies Office (in the case of departmental programs), the CoT Graduate Studies Office and/or the Graduate School, depending on who has imposed the condition. Each semester the Graduate School will remove the eligibility to register for future sessions for all students who failed to satisfy their conditions of admission in the previous session.

Departments are to justify and indicate any conditions under which these students should have their eligibility to register restored and be allowed to continue to study for the degree. This is requested by a memo from the *major professor* and routed through the CoT's Associate Dean for Graduate Studies (or departmental Graduate Studies Office in the case of departmentally-based programs), detailing reasons why the student should be permitted to continue. Upon Graduate School approval, the eligibility to register will be restored.

2.3. <u>Time Limitations</u>

A candidate for the M.S. degree is expected to complete all requirements for the degree within five years from the completion of the oldest course on the plan of study. Most students complete the degree in one and one-half to two and one-half years.

Students pursuing the Ph.D. degree have up to eight years to complete their program. If the student exceeds these limits, the student may be dismissed for lack of satisfactory progress or, when circumstances are justified, may be required to retake some courses or take new courses to replace out-of-date courses. Typically, students complete their coursework in three (3) years, and complete their preliminary examination at the end of that period. Ph.D. students then have five (5) years from passing their preliminary examination in which to complete their degree requirements.

SECTION 3.0. GRADUATE STUDENT ADVISING

The following sections provide detailed information for faculty relative to student advising and the major milestones in a graduate students program.

NOTE: The Graduate School periodically offers workshops for new faculty concerning the advising and mentoring of graduate students. See the Graduate School web page for more information.

3.1. Serving as a Graduate Advisor

The agreement to advise a graduate student must be done carefully and thoughtfully. The graduate advisor is responsible for all phases of graduate education and must be accessible to students who are under their guidance. The advisor acts as the student's mentor, shaping the student's values and understanding of research. The advisor has the responsibility to discuss career opportunities with the student throughout the student's graduate program, and often after the student has completed their immediate degree objective. It is the advisor's responsibility to guide the graduate student through the student's first research experience and to understand and constructively critique the research accomplishments made. In relations with students, graduate faculty will be candid, fair, and committed to the student's welfare and progress.

Before agreeing to advise a student, the advisor and student should consider their research goals; their mutual interests; the compatibility of their expectations, work habits, and personalities; and the career goals of the student. The advisor should establish and communicate clear expectations regarding student commitment and effort to be devoted to the student's graduate program. The best student/advisor relationships are those that closely approximate the relationship between senior and junior colleagues.

3.2. Graduate Committees

There are two official types of graduate committees: the advisory committee and the examination committee. However in practice, the individuals who serve on one usually also serve on the other. The advisory committee typically advises the student through completion of their plan of study (that also includes the preliminary examination in the case of the doctoral student). The examination committee typically approves the research proposal and conducts the final examination of the research (typically called the final defense) as well as the preliminary examination (in the case of Ph.D. students). While the graduate advisor will often become the chair of the examination committee (sometimes called the major professor), this is not always the case.

Nevertheless, the graduate advisor/chair assists the student in selecting other members of the graduate faculty to serve on the student's graduate committee. These faculty should be individuals who can help validate the plan of study of the student, as well as the student's capstone activity (i.e., directed project, thesis or dissertation).

In the case of M.S., the graduate committee is comprised of three faculty. This group is comprised of the chair, who must be a member of the CoT Graduate Faculty, another member of the CoT Graduate faculty, and a third member (who is often a graduate faculty member outside the CoT). It is also possible to have a third member from industry (via a special graduate faculty status appointment). Note that occasionally the M.S. graduate committee may also have more than three people.

In the case of a doctoral student, the graduate committee is comprised of three people through the completion of the preliminary examination. Then a fourth member is added for the proposal defense and final examination. Typically the three faculty on the initial committee also serve on the second committee. However it is possible to have different individuals on the two committees. Yet the chair typically remains the same.

For doctoral committees, the chair of the committee must be a CoT Graduate Faculty member who holds an earned doctorate. Other members of the committee may be graduate faculty holding M.S. degrees, but the majority of the doctoral committee typically have earned doctorates and are members of the CoT.

Regardless of the degree, the advisory committee offers advice during the period of graduate work, helps keep the student informed of important deadlines, and works closely with the student on their thesis, directed project or dissertation. M.S. and Ph.D. advisory committees approve the research proposal and the final defense of the student's research. The doctoral advisory committee has the added responsibility of conducting the preliminary examination prior to defense of the dissertation proposal.

3.3. Monitoring Graduate Student Progress

An additional task for the graduate advisor/chair/major professor is to monitor graduate student progress. Graduate advisors should meet at least once each year with their graduate students to evaluate progress towards completion of their degree. At this meeting each graduate student should be required to complete the *GEC 02 Annual Student Progress Form* to document their progress. Similarly the faculty member should document the progress of the student using form *GEC 07 MS Progress Report Form or GEC 08 PhD Progress Report Form*.

NOTE: Appendix C provides a summary of steps in the graduate student progress. Appendix D provides a visual example of the GEC 02 Annual Student Progress Form. Appendix E provides the GEC 07 MS Progress Report Form and Appendix F provides the GEC 08 PhD Progress Report Form.

3.4. The Electronic Plan of Study

Graduate students at Purdue University use the Electronic Plan of Study generator to file their plan of study (POS) via the myPurdue system. Students can submit a draft (typically for review by the graduate advisor/chair) as well as a final version. Approval of

the POS is done electronically and the graduate advisor/chair and committee are a part of that approval process.

NOTE: Students should file a draft of their POS by the end of the first semester of study and a final POS by the end of their second semester of study. Subsequent changes to the POS (due to course unavailability, change of direction of research, etc.) can be processed using a change of POS request.

A tentative plan of study should be drawn up prior to the registration for the first session of graduate work. The graduate advisor works with the student to choose the courses to be taken. Non-thesis M.S. plans of study require a minimum of 30 course credits be listed. M.S. thesis plans of study require a minimum of 27 credits to be listed. Ph.D. plans of study require a minimum of 30 credit hours beyond the master's. Research credits for all graduate students are acknowledged in the notes field (as opposed to being listed in the POS course listing).

NOTE: For more information about plan of study requirements for the M.S. or Ph.D., see the CoT M.S. Graduate Student Handbook and the CoT Ph.D. Graduate Student Handbook (available at: http://www.tech.purdue.edu/).

NOTE: Because Ph.D. students can use up to 30 credit hours of courses from their master's toward the Ph.D. POS requirements, a Ph.D. planning worksheet is provided that can be used to chart a Ph.D. students coursework (https://tech.purdue.edu/office-of-academic-affairs/faculty-and-staff-resources/faculty-and-staff-forms).

NOTE: If the student's M.S. does not have 30 credits hours of coursework, the student will need to take extra courses such that coursework from a qualifying M.S. and the Ph.D. equals 75 credit hours.

Faculty should be aware of the following rules concerning the plan of study:

- Purdue courses on the POS require grades of A, B, or C.
- Courses taken for P/NP, S/U, departmental credit, credit by exam, etc. are not allowed on the POS.
- Transfer courses require grades of A or B.
- Courses at the 100- and 200-level are not allowed on a graduate POS.
- Six hours of 300- and 400-level courses, taken as a graduate student, are allowed on the plan with grades of at least a B.
- Research courses (598, 698, 699, or 699A) are not to appear on the plan. Instead they are referenced in the notes field of the POS.
- Credits earned by a student whose graduate study/professional activity has been inactive for five or more years cannot be used on a POS. Approved POS or any exams completed prior to such a period of inactivity are invalid.

- All academic admissions conditions must be met before the POS can be finalized.
- The formal plan of study should be submitted as soon as possible, but no later than the Friday before the session of anticipated graduation begins. Students not meeting this deadline should plan to register for exam or degree only for the next session.
- Doctoral plans must be submitted to the Graduate School prior to the submission of a request for appointment of a preliminary examination committee.

3.5. Proposal Meetings (M.S. & Ph.D.)

M.S. students typically create their proposal and defend it the semester before they intend on graduating. They usually take TECH 646 at that time also. Ph.D. students typically take TECH 646 their last semester before taking their preliminary examination. Following the preliminary examination, Ph.D. students defend their proposal.

NOTE: The dissertation proposal defense meeting cannot occur in the same semester as the preliminary examination.

NOTE: The M.S. proposal defense cannot occur in the same semester as the final defense.

All graduate students take TECH 646 and one of the major deliverables of the course is the development of the research proposal. Typically M.S. students will take TECH 646 and either one credit hour of TECH 598 (directed project credit) or TECH 698 (thesis research credit) their next to last semester. At the end of that semester, M.S. students typically defend their proposal before their committee. Ph.D. students defend their proposal the semester after they have successfully passed their preliminary examinations. For the proposal meeting, students are required to meet with their full faculty committee to seek their input and approval for their proposed work before beginning work on a directed project, thesis, or dissertation students can begin. Typically the student does a presentation and faculty will ask follow-up questions and/or provide recommendations that guide the research.

The graduate student proposal is comprised of the first three chapters of the thesis or dissertation, or the first three major sections of the directed project. The CoT standard format for the thesis, directed project or dissertation is the APA parenthetical, citation format.

NOTE: Students are required to provide the entire, completed proposal to all members of the committee at least two weeks prior to the defense meeting. They are also required to schedule their defense (or preliminary examination in the case of Ph.D. students) two weeks prior to the meeting.

NOTE: The CoT M.S. Graduate Student Handbook and the CoT Ph.D. Graduate Student Handbook provide much detailed information about the thesis, directed project and dissertation (available at: http://www.tech.purdue.edu/). Included is information about types of research, format for the documents and other associated policies and processes.

3.5.1. Proposal Defense

Scheduling of the proposal defense is initiated by the student and major professor through the CoT Graduate Studies Office. The CoT graduate student handbooks detail this process.

At the proposal meeting, all committee members complete an evaluation rubric for student proposal and presentation (see forms *GEC 05 Dissertation Research Proposal Form*, *GEC 11 Thesis Research Proposal Form*, and *GEC 13 Directed Project Proposal Form*, located in Appendices G. H, and I). Following approval of the student proposal, the committee signs the CoT Form 2, Acceptance of Graduate Proposal. The signed CoT Form 2, a copy of the proposal and the appropriate GEC form are deposited in the CoT Graduate Studies Office. See Appendix J for an example of the CoT Form 2.

3.6. Examinations

The following sections describe preliminary examinations for Ph.D. students, final examinations for M.S. thesis and Ph.D. students. A final section acknowledges some notes about establishing examination committees.

NOTE: The CoT Ph.D. provides an option for students entering with an M.S. degree (master's plus) or students entering directly from a bachelor degree (direct-to-PhD). See the Ph.D. handbook for information on the direct-to-Ph.D. option.

3.6.1. Preliminary Examination (Ph.D. Only)

The doctoral preliminary examination is aimed at testing the student's knowledge relative to the coursework they have taken and to ensure that the student has the requisite skill to conduct independent research. Before taking the preliminary examination, the student must have an approved plan of study and satisfactorily completed most of the formal coursework in the plan of study. In practice, the preliminary examination is taken during the last semester of formal coursework.

The preliminary examination has both a written and oral component. It also requires a minimum of three faculty members. The written component is a number of questions submitted by the faculty committee to the student. This can be done via a meeting between the student and each faculty (which is the most common approach) or via a face-to-face meeting between student and committee. These questions are normally answered over a period of about two weeks in an un-proctored manner. The student then submits their answers to the faculty committee for review before the oral portion of the exam.

Scheduling of oral portion of the preliminary examination is initiated by the student via the *GS Form 8: Request for the Appointment of an Examining Committee*. The student files this electronically within the myPurdue system. The GS Form 8 is provided to the CoT Graduate Studies office, which it then sends to the Graduate School. The examining committee reports the results of the preliminary examination electronically through the Graduate School Database (https://ias.itap.purdue.edu/rgs/wpu_intra.pu_dispauth).

NOTE: The GS Form 8 must be submitted electronically two weeks before the intended date of the preliminary examination.

An additional set of paper forms that must be completed by the committee is the *GEC 12 Written and Oral Preliminary Examination Form*. Each committee member completes the evaluation rubric. The chair of the examining committee provides the completed rubrics to the CoT Graduate Studies office following completion of the examination. See Appendix K for an example of the GEC 12 Form.

3.6.2. Final Oral Examination/Defense (M.S. & Ph.D.)

The goal of the final oral examination is for the student to provide an overview of their project and to defend their research and findings. Typically students do a presentation, the length of which is dependent on the level of student (M.S. or Ph.D.) and the desires of the committee.

For all students wanting to conduct the final oral examination or defense they must have an approved plan of study. M.S. students must have a minimum of three committee members at the defense, whereas Ph.D. students must have a minimum of four committee members. M.S. final examinations cannot occur in the same semester as the proposal meeting. Ph.D. final examinations must occur three academic sessions after the preliminary examination and the student must register for research credits in these three semesters.

Scheduling of the final oral examination is electronically initiated by the student the *GS Form 8: Request for the Appointment of an Examining Committee* in the myPurdue system. The GS Form 8 must be electronically filed with the Graduate school two weeks prior to the examination date. The examining committee reports the results of the preliminary examination electronically through the Graduate School Database (https://ias.itap.purdue.edu/rgs/wpu_intra.pu_dispauth).

In addition to these electronic forms, all committee members complete a paper-based evaluation rubric for student presentation and thesis, directed project or dissertation (see forms *GEC 09 Thesis and Defense Form* and *GEC 10 Directed Project and Defense Form in Appendices M and N*). These forms are returned to the CoT Graduate Studies Office following the examination.

NOTE: Two weeks before the proposal meeting, the student should have the final written thesis, directed project or dissertation provided to the faculty committee for their review.

NOTE: All final examinations must be held before the last week of classes. Refer to the Directed Project Deadline Calendar and the Graduate School Graduation Deadlines Calendar for exact dates. The Directed Project deadlines are different than those for M.S. thesis & Ph.D. See http://www.tech.purdue.edu/ for Directed Project deadlines.

3.7. <u>Hooding Ph.D. Candidates</u>

At Purdue University, it is customary for the chair of the Ph.D. candidate's committee to put the doctoral hood on the candidate at the graduation ceremony. Graduate faculty serving as chair should talk to the Ph.D. candidate about their expectations. In the case of a committee with co-chairs, the student should select one of the chairs to serve in this capacity. In the event that the chair cannot attend the ceremony, the Dean of the Graduate School will hood the candidate.

3.8. Final Examination Packets

The following sections acknowledge the documents that are provided to the chair of the examining committee relative to each type of graduate student.

3.8.1. Master's Thesis Final Examination Packet

The master's thesis examination packet includes:

- GEC 09 Thesis and Defense Form
- Candidate Certification Audit
- Graduate School Exit Survey cover letter

3.8.2. Master's Non-thesis Final Examination Packet

The master's non-thesis (directed project) examination packet includes:

- Approved copy of the COT Form 1 Request to Schedule Oral Exam
- Candidate Certification Audit
- College of Technology Exit Questionnaire

3.8.3. Doctoral Final Examination Packet

The doctoral examination packet includes:

- GEC 04 Dissertation and Defense Form
- Candidate Certification Audit
- Graduate School Exit Survey cover letter
- The Survey of Earned Doctorates

3.9. Reporting the Results of Examinations

Examination chairs and committees should realize the following:

- The Committee chair should present the examination committee with an appropriate examination report form (see the referenced GEC forms above). This examination report form should be completed and presented without delay to the head of the graduate program for recording and prompt transfer to the Graduate School.
- The report form for the final examination (GS Form 7 for M.S., or GS Form 10 or 11 for Ph.D.) must be electronically received by the Graduate School before the last week of classes of the academic session in which graduation is expected.
- After a satisfactory examination involving a thesis or dissertation defense, committee members who approve the thesis or dissertation must sign a *Thesis Acceptance* (G.S. Form 9). The Form 9 is prepared and brought to the exam by the student (see Appendix N). Directed Project students prepare a Report Cover Page for committee members to sign (see Appendix O).
- Members of the examining committee might wish to examine the deposit copy of the thesis/directed project prior to signing the *Thesis Acceptance* (G.S. Form 9)/Report Cover Page. Once a committee member has signed the *Thesis Acceptance* (G.S. Form 9)/Report Cover Page, the document is approved by that individual.
- No changes may be made to the directed project/thesis/dissertation after it has been deposited.

3.10. College Thesis and Dissertation Review

Students are required to meet with their Thesis Format Advisor **at least two weeks** before they defend their thesis or dissertation. The last date to meet for a thesis formatting appointment is two weeks prior to the last day to defend the thesis or dissertation. A thesis formatting appointment is mandatory. Students should schedule their thesis or dissertation review via the CoT Graduate Studies Office.

3.11. University Deposit of Completed Thesis/Dissertation

Following successful defense of a thesis or dissertation, students must deposit their thesis with the Graduate School. The deposit meeting is a face-to-face meeting in which the graduate student provides an electronic copy of their thesis, as well as the several forms. Graduate students should be advised to pay close attention to the sections of the CoT M.S. and Ph.D. handbooks regarding the university deposit.

NOTE: Directed projects are not deposited with the university.

3.12. College Deposit of Completed Directed Project/Thesis/Dissertation

The College of Technology no longer requires a printed and bound copy of the thesis, directed project or dissertation. The college now requires a digital copy be

submitted electronically to the Purdue e-Pubs site. Students should be directed to the Purdue e-Pubs site (http://docs.lib.purdue.edu/tech/).

3.13. Graduation Processes

Chairs and advisors of graduate students should meet with students the semester they intend to graduate and cover the graduation processes to ensure nothing impedes the student's graduation. Graduate processes for graduate students include the following:

- Beginning candidate roster is sent to the CoT Graduate Studies Office.
- Review roster and inform the Graduate School of any adjustments that need to be made.
- Audit/Certification forms distributed to CoT Graduate Studies Office.
 - o Be sure that all issues/problems indicated are corrected
 - o Check for accuracy of degree title
 - o Check for areas of specialization
 - o If not previously done, indicate on the audit/certification form if the candidate will be continuing for another degree in your program.
- Commencement Participation
 - o Must be a bona fide candidate eligible to graduate at the end of the session
 - o Must be on the candidate roster

3.14. Questionnaires

Graduate students are required to fill out several questionnaires before the graduate from the university. All students complete the *Graduate School Exit Questionnaire* and the *College of Technology Exit Questionnaire*. Only Ph.D. candidates complete the *Survey of Earned Doctorates*. The sections below provide additional information about each of these questionnaires.

3.14.1. Graduate School Exit Questionnaire

The Graduate School administers an exit questionnaire that is provided to both master's and doctoral candidates at the time the final examination is scheduled. Students should be assured that their answers are maintained confidentially in the Graduate School. The trend data, however, is distributed to departments and is useful in strengthening our graduate programs.

3.14.2. Survey of Earned Doctorates

Although completing this survey is optional, departments should strongly encourage doctoral candidates to complete the *Survey of Earned Doctorates*, conducted by the National Opinion Research Center of the University of Chicago. Responses provide data that are important for statistical studies by federal agencies who conduct studies of national trends in doctoral education and of manpower supply and demand.

3.14.3. College of Technology Exit Questionnaire

The College of Technology would like to keep a record of where our former graduate students go, the type of career they pursue, and their average starting salaries. The information provided via the exit questionnaire is the last entry in the permanent file of the student. This information serves as our means for contacting students after graduation and compiling reports pertaining to the demand for Technology advanced degrees. These reports are of value to the Dean of Technology, prospective employers, and prospective graduate students. M.S. thesis and doctoral students complete the questionnaire as part of their Thesis Format Review. Directed project students complete the exit survey at their final oral defense.

SECTION 4.0. GRADUATE ASSISTANTS

The following sections provide some suggestions for faculty working with teaching or research assistants.

NOTE: Teaching and research assistants should be directed to the Graduate School Employment Manual located at: http://www.gradschool.purdue.edu/faculty/publications.cfm.

4.1. Working with Teaching Assistants

Teaching assistants (TA) are typically considered apprentice instructors under the guidance of a faculty member. The CoT has a long history of preparing students for roles as teachers and instructional personnel. Most TAs in the CoT are half-time, but the number of course hours taught and/or office hours held vary per department. The duties of TA are also vary depending on the department and course in which they are involved. For example, TAs may assist the faculty member in the preparation of course materials, conduct laboratory or field sections scheduled by the faculty member, assist in the evaluation and grading of student work, hold office hours, and proctor examinations. In some departments, TAs may provide the entire instruction of a lower-division course under the supervision of a faculty member assigned as director for the course.

Faculty members with TAs should actively establish open communication with their TAs from the very beginning of the course and maintain good communication throughout the academic term. Misunderstandings occur between faculty and TAs when they do not communicate. It is important for faculty to express the exact nature of their expectations regarding TA roles in instruction prior to beginning the course. The following are some issues that should be discussed before the course begins:

- What exactly are the goals of the course?
- Is there a guiding methodology for the course with which TAs should be familiar?
- What types of decisions can TAs make in their classes? For example, can they amend the syllabus, the handouts, or the course policies?
- Are there any additional materials that would help the TA be better prepared for the course?
- What is the procedure for handling student complaints, issues of plagiarism, or cheating?
- Who will make up the exams and assignments? What kinds of exams will they be?
- Exactly how are grades to be tracked, communicated and determined? When and how frequently will TAs be expected to turn in grades to the faculty member?

Additional suggestions for working with TAs include:

- Meet with your TAs on a regular basis. Many departments have weekly or biweekly meetings so that instructions can be given and questions can be answered. Instructors of labs, for instance, may walk through the entire lab for the TAs and explain what the common problems are that can occur in that particular lab. Also, be sure to explain what the objective of each lesson. Often times TAs are good at teaching the lesson, but need help from their course coordinator to be able to explain the relevance of a topic and why it is being taught.
- Observe your TAs at least once during the semester to give them feedback on how they're doing.
- Have an open-door policy so that a TA who is having problems in their class can come to you for advice.
- Have your TAs who are in charge of recitation or lab sections attend the lectures given in the course so they know what was said and can build on that information.
- Meet with your TAs who will be doing the grading and give them specific grading rubrics to use to mark the homework or assignments. Are they to mark on the papers? How much? Or how little? Having a training session will make the semester's grading much more fair and consistent.
- If you have an international T.A. who is having trouble with the language, find out where to get them some help. At Purdue, you can contact the English as a Second Language Program in Heavilon Hall at 494-3769.

NOTE: The Center for Instructional Excellence (http://www.cie.purdue.edu) offers several programs to help TAs enhance their teaching skills. Two series of workshops are offered each semester. The College Teaching Workshop Series 1 is called The Basics of Teaching. These workshops are facilitated by members of the CIE staff.

4.1.1. Grade Confidentiality (FERPA)

As an instructor, you cannot discuss a student's grade or any other aspect of his/her educational record with anyone other than that student—not even with his/her parents or prospective employer. Federal law, the Family Educational Rights and Privacy Act (FERPA), protects the privacy of students' educational records. According to the law and University policy, students have the right to consent to disclosures of personally identifiable information contained in the student's educational records, except to the extent that FERPA authorizes disclosure without consent (University Regulations 2007-2008, http://www.purdue.edu/univregs/). This has implications for how you handle requests for information about a student's academic performance as well as how you post grades and return graded work to students. Before talking with parents or potential employers about any aspect of a student's educational record, be sure to have the permission of the student in writing to release the requested information to that person. When returning students graded work, you must ensure that no other individual can see or pick up work other than their own. Similarly, grades cannot be posted in any manner

that allows one student to identify the grade of another student. Additional information about FERPA is available at http://www.teachingacademy.
purdue.edu/resources/gradeConfidentiality.asp.

NOTE: Ensure that your TAs are aware of the legal requirements relative to teaching students with disabilities. Direct your TAs to the following URL for more information: http://www.teachingacademy.purdue. edu/resources/teachingStudentsWithDisabilities.asp.

NOTE: Faculty should work with their department head or department head secretary to ensure that all TAs are FERPA certified.

4.1.2. Loading and Office Hours

The number of course hours that a TA is in the classroom varies; however, it is assumed that a .5-FTE appointment is approximately 20 hours of direct work. As a general rule, for ever two-hours of contact in the classroom the TA typically holds one-hour of office hours. Work with your TA to establish the location where they will hold the hours and when. You should provide this information to your students.

4.2. Working with Research Assistants

Most RAs assist faculty with research projects or other work that advances the research of the faculty, department and university. Typically the work that an RA does is more varied and less defined. When working with RAs, the faculty member should:

- Make work expectations very clear and put them in writing.
- Encourage accountability by using time-sheets, work logs, or other reporting methods.
- Meet regularly to encourage regular work.
- Make sure you are staying on track with the project so you know what you need from RAs and when you need it.
- When possible, hand-select people with which to work.
- Emphasize accountability and integrity in research.
- In team settings, monitor group interactions to curtail potential communication or group-dynamic problems.

Faculty working with RAs should also consider the following:

- Encourage investment in the research work by making it clear how important the RA's efforts are to the research project and be clear about how the work fits into the goals of overall project.
- Cultivate idea of working together as a team via regular meetings (both work oriented and social/team development).
- Use RA positions as opportunities for giving students concrete, valuable training and practice that they can apply later in their own work.
- Emphasize big-picture issues so RAs keep can envision the whole, not just he part on which they are working.

- Take the time to acknowledge and celebrate exciting discoveries; accepted conference papers or journal articles; and awards.
- Treat RAs as the professional collaborators that they are.

4.3 Assistantship Duration

In order to provide opportunity for the student to progress satisfactorily toward the degree objective, graduate appointments will ordinarily be for no more than one-half time and for a maximum of two (2) academic years. Renewal of graduate appointments for additional time will be based on satisfactory performance in the position and academic performance toward plan of study requirements, as well as availability of positions.

Teaching assistantships (TA) and Research Assistantships (RA) include a tuition waiver during the semester the student has the assistantship. Normally teaching assistantships are not available in the summer. However, if a student has a teaching assistantship in the spring and the following fall semester, a tuition waiver for the summer is still available to the student.

NOTE: Assistantships DO NOT cover the cost of student fees assessed each semester.

4.4. Evaluating TA/RA Performance

It is important that faculty who supervise TAs and RAs evaluate their performance annually. Faculty should use GEC Form 06 and GEC Form 14, respectively. These forms should be completed and provided to the CoT Graduate Studies Office. See Appendix P and Q for examples of these forms.

SECTION 5.0. CERTIFICATIONS, PUBLICATIONS & INTEGRITY

The following sections provide information about certifications (FERPA, IRB, CITI, etc) and resources available at Purdue. Information about co-authoring with students and research integrity, plagiarism and copyrights conclude this section of the handbook.

5.1. Certifications & Approvals

To be able access student information and to conduct research at Purdue University requires that faculty and students alike be certified in specific ways. Accessing student information requires FERPA certification. To conduct research requires CITI certification and IRB approval (when human subjects are involved). The following sections provide more information about these items.

5.1.1. Family Educational Rights and Privacy Act (FERPA)

To be able to access student information via Purdue's various computer systems (such as myPurdue), faculty must be aware of certain legal issues associated with such data. FERPA protects and makes confidential student information beyond basic "directory information" about the student.

NOTE: Purdue University's official FERPA policy is outlined in Executive Memorandum C-51 available at: http://www.purdue.edu/policies/pages/records/c_51.html

Purdue University requires that faculty and other individuals who have a justifiable need to access student information be trained and certified. Most importantly, before faculty can access student rosters for courses they must complete the FERPA certification. Faculty can become FERPA certified by accessing: https://www2.itap.purdue.edu/SSTA/certifications/select.cfm?groupid=1.

NOTE: Faculty should work with their department head or department head secretary to ensure that all TAs are FERPA certified.

5.1.2. Collaborative Institutional Training Initiative (CITI) Certification

The CITI Program is a subscription service providing research ethics education to all members of the research community. Purdue University uses this system to certify faculty and graduate students to conduct research. Of particular importance, researchers involved in the use of human subjects are required to complete the CITI web-based education program in order to be certified as eligible to engage in human subject research at Purdue University. All researchers on an IRB protocol must complete the CITI training before the IRB protocol will be approved. Initial and continuing education (every 5 years) in human subject protections are required of all faculty. To become CITI certified, faculty should create an account at https://www.citiprogram.org/ and then go through the required training modules. Graduate students who serve as collaborators on research are also required to pass CITI certification.

5.1.3. Institutional Review Board (IRB) Approval

The IRB is a unit of the Human Research Protection Program (HRPP), which is housed within the Office of Research Administration (ORA), located in room 300 Hovde Hall

NOTE: The IRB is an extension of the Office of the Vice President for Research (http://www.purdue.edu/research/vpr/). Faculty and graduate researchers should become familiar with the wealth of information available on the VPR's web site.

The IRB website provides detailed steps, forms, and example IRB proposals for all Purdue University faculty and students conducting human subjects research. Researchers need to obtain permission to conduct any studies at Purdue University by submitting IRB proposals and completing certain workshops and online training protocols (see CITI Certification above).

5.2. Resources

The following sections acknowledge important resources provided by various units across campus.

NOTE: The Vice President for Research provides a handbook titled, Research Handbook: A Guide to the Grants Process at Purdue University, located at: http://www.purdue.edu/research/vpr/rschdev/documents/researchhandbook.pdf.

5.2.1. Research Oversight

The Office of the Vice President for Research (VPR) provides much information for faculty concerning issues pertaining to research. The VPR provides research oversight concerning Export Control (transport of commodities, software, technical data and certain other information to foreign countries), use of controlled substances for research purposes, use of radiation/lasers, use of biologically hazardous materials, use of animals as well as research involving humans. Faculty should be aware of the information available, particular if their research includes any of these or if they are traveling abroad (https://www.purdue.edu/research/vpr/rschadmin/rschoversight.php).

5.2.2. Responsible Conduct of Research (RCR)

The RCR is a joint program between the Graduate School and the Office for the Vice President for Research. This program provides workshops, online training and tutorials, as well as assists in setting policy relative to the conduct of research at Purdue University. More information about the RCR is available at: http://www.gradschool.purdue.edu/RCR/.

5.2.3. Purdue University Psychometric Instruction/Investigation Laboratory (PUPIL)

Purdue University Psychometric Instruction/Investigation Laboratory (PUPIL) Consulting Service, located in BRNG 3157 (phone: 496-3233), is available to respond to and provide resources for questions involving measurement/assessment, psychometrics, and educational and behavioral sciences empirical research. Their web site is located at: http://pupil.education.purdue.edu/.

5.2.4. Statistical Consulting Service (SCS)

The Department of Statistics provides statistical software and design consulting services for the University community – free of charge. The Statistical Consulting Service can help with statistical software problems and data analysis issues. *Statistical Software Consulting* provides assistance with the set up and running of a wide variety of statistical computing programs, including SAS, SPSS, Minitab and S-Plus. Software consulting is available in MATH G175 on a drop-in basis. *Experimental Design and Data Analysis Consulting* is available during the fall, spring and summer semesters. Services include assistance with all phases of research projects: proposal preparation, design of studies, survey design, data input strategies, data import/export, analysis of data, interpretation of results, presentation of results, and other statistics or probability problems. More information is available at: http://www.stat.purdue.edu/scs/.

5.2.5. Center for Instructional Excellence (CIE)

The CIE provides valuable teaching resources (and teaching scholarship resources) to faculty. Graduate student TAs can obtain various certificates by completing a series of free workshops and seminars. The certificates include: Graduate Teaching Certificate (GTC), Graduate Teacher Certificate Alternative, Advanced Graduate Teacher Certificate (AGTC), Preparing Future Faculty Program (PFFP), and the Graduate Teacher Technology Certificate (GT2C). In addition, the website provides teaching tips, teaching consultation, and information about instructional data processing (e.g., test scoring and page scanning services). More information is available at: http://www.cie.purdue.edu/.

5.2.6. Sponsored Programs Services (SPS)

SPS assists Purdue's faculty, staff, and students in securing and managing sponsored program support, and in delivering maximum public benefit from sponsored projects. SPS manages the process of proposal submission, award management, reporting and various contracts that may result from a sponsored award. For more information about SPS and their services, see http://www.purdue.edu/sps/.

5.2.7. Discovery Park

Discovery Park, located adjacent to campus, is a collection of large-scale centers that lead Purdue's interdisciplinary research efforts. Some of these centers include Bindley Bioscience Center, Birck Nanotechnology Center and Burton D. Morgan Center for Entrepreneurship. There are various ways in which graduate faculty can engage Discovery Park. For more information, see http://www.purdue.edu/dp/.

5.2.8. Purdue Research Foundation (PRF)

PRF is a nonprofit foundation that 1) manages gifts, bequests and endowments; 2) makes funding available to faculty, staff and students to aid in scientific investigation, research or educational studies; 3) acquires, constructs and improves Purdue's facilities, grounds and equipment; and 4) manages intellectual property developed at Purdue. More information about PRF is available at: http://www.prf.org/.

5.2.8.1. PRF Research Parks

The Purdue Research Parks are the result of Purdue University's commitment to spur economic growth in Indiana's high-tech sector. Under development since the late '90s by the Purdue Research Foundation, a private, nonprofit foundation created to assist Purdue, the parks are focused on companies operating in the arenas of life sciences, homeland security, engineering, advanced manufacturing and information technology. More information about the PRF Research Parks is available at: http://www.purdueresearchpark.com/about/.

5.2.8.2. Office of Technology Commercialization (OTC)

The Purdue Research Foundation's Office of Technology Commercialization (OTC) operates one of the most comprehensive technology transfer programs among leading research universities in the United States. Services provided by this office support the economic development initiatives of Purdue University and benefit the university's academic activities.

Purdue's intellectual property is an asset we strive hard to protect, market and license. We work hand-in-hand with Purdue faculty-, staff- and student-entrepreneurs to provide the resources needed to better understand Purdue policies related to intellectual property and the processes whereby this intellectual property (patents, copyright, trademarks, and tangible research property) can become an actual product or service. To ensure the long-term success of the innovations, we take the process one step further – at times – and help our inventors form startup companies complete with investor support and qualified management teams. More information about the OTC is available at: http://www.prf.org/otc/about_otc.asp.

5.3. Co-authoring with Students

Because of the usual intense and dynamic interaction of professor and graduate student, there is an expectation that research will lead to one or more joint publications. Typically, the designation of authorship is mutually agreed upon and it follows an order of decreasing contribution to the research and publication.

NOTE: All faculty and students should be familiar with Purdue University's policy on intellectual property. See Purdue University's Policy VIII.4.1, Intellectual Property at: http://www.purdue.edu/policies/pages/teach_res_outreach/viii.4.1.htm.

5.4. Integrity

Purdue University has a tradition of ethical conduct spanning its history. As a land-grant institution, we demonstrate our responsiveness to our constituencies and extend to them access to our knowledge resources. We nurture relationships with other partners in education who support our vision or join us to foster common interests. We integrate our mission with our responsibilities. We contribute our knowledge resources impartially in serving our public purposes. As faculty, students, staff, and administrators, we are a community of dedicated learners, scholars, professionals, and practitioners - all contributing our talents to uphold our standards, and improve ourselves and the broader community in which we live and work. Our responsibilities and obligations toward the advancement of learning, discovery, and engagement in the University and in Indiana extend to our nation and the world. Purdue's statement of integrity is meant to provide an overarching declaration that informs specific policies and procedures regarding conduct, enforcement, and accountability. Such policies and procedures either exist in official University documents or will be developed as necessary.

NOTE: Purdue's Statement of Integrity is available at: http://www.purdue.edu/Purdue/about/integrity_statement.html

Faculty should ensure that graduate students are aware of the University statement of integrity. Faculty advisors should communicate the following:

- Integrity in research is an essential part of Purdue University's intellectual and social structure, and adherence to its spirit and principles must be maintained. These principles include commitment to truth, objectivity, fairness, honesty, and free inquiry.
- Graduate faculty will advise students concerning the ethics of the profession; encourage the practice of ethical and responsible conduct in research, scholarship and publication; and assist students in addressing ethical issues.
- Early in a student's graduate tenure, their advisor should make the student aware of university and departmental policies regarding the conduct of research, and rights in data and intellectual property developed in the course of thesis research. Also critical is ensuring that the student understands their advisor's policies and procedures governing authorship and publication of research results.
- Graduate faculty have a responsibility to serve as an exemplar in recognizing and acknowledging the scholarly contributions of others; in providing complete and accurate records and reports of the results and conclusions of their research, scholarly, or artistic endeavors; and in preserving the integrity of the research record.

NOTE: Typically cases of breach of integrity in the classroom with students are matters for the Dean of Students. Breaches of integrity in research, publication or grant endeavors are matters of the Office of the Vice President for Research (VPR).

5.4.1. Plagiarism, Falsification, and Fabrication

Purdue University maintains the highest academic and ethical standards research conducted by faculty and graduate students. It is important to note that the university sees the acts of plagiarism, falsification and fabrication as equal as acknowledged by the following university policy on research conduct:

"Research misconduct" shall mean, for the purposes of this policy, fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific and academic community for proposing, conducting, or reporting research. It does not include honest error or honest differences in interpretations or judgments of data (Excerpt from the *Purdue University Policy on Research Misconduct (VIII.3.1)*).

5.4.1.1. Plagiarism

Plagiarism is serious violation of research conduct and every researcher, faculty and graduate student needs to be conscious of what it is, and how to avoid it. Plagiarism is to steal or pass off the words, ideas, or intellectual product of another as one's own. It is essentially literary theft as it regards works of a written nature. Plagiarism is typically defined as the use of four or more adjacent words from a specific source.

To avoid plagiarism, you must give credit whenever you use:

- Another person's idea, opinion, or theory;
- Any facts, statistics, graphs, drawings—any pieces of information—that are not common knowledge;
- Quotations of another person's actual spoken or written words; or
- Paraphrase of another person's spoken or written words.

5.4.1.2. Strategies for Avoiding Plagiarism

The following are some general strategies to avoid unintended plagiarism:

- Put in quotations everything that comes directly from the text, **especially** when taking notes.
- Paraphrase, but be sure you are not just rearranging or replacing a few words (which is conscious plagiarism). Instead, read over what you want to paraphrase carefully; cover up the text with your hand, or close the original source so you can't see any of it (and so aren't tempted to use the text as a "guide"). Write out the idea in your own words without peeking.
- Check your paraphrase against the original text to be sure you have not accidentally used the same phrases or words, and that the information is accurate.

5.4.1.3. Guidelines for Quoting and Citing

The following are some guidelines that can be used for determining when to quote and when to cite material from other sources:

- If paraphrasing or writing about the ideas presented by another, citation is necessary (Smith, 2008).
- If using four or more words (even with "permission to use"), quotation and citation is necessary. Quotations over 40 words long should be "blockquoted" as per APA format specifications.
- All quotations require a page number following the quotation or integrated into the citation.
- If you are in doubt how to give credit, quote and cite the source.

5.4.2. Self-checking for Plagiarism

To assist Purdue faculty and students, the Graduate School, in partnership with the Office of the Vice President for Research, has initiated this voluntary self check service called *iThenticate*. The software checks submitted documents against thousands of articles that are published in journals and conference proceedings as well as text that appears on the Web. A similarity report is generated that highlights excerpts in the submitted document that match similar text in documents found in print and on the Web. Similarity reports can be helpful in detecting occurrences of inadvertent replication and neglect in referencing.

5.4.2.1. Rules Governing Usage

iThenticate is expressly for use as a tool for checking documents before submission to committees, journals, publishers, and archives, to help students and faculty prevent incidences of unintended plagiarism. The service is free for Purdue faculty and is only for individual use.

Use of the service is limited to individual work authored or co-authored by faculty and students for the purpose of screening for potential plagiarism violations prior to submission. The screening service is not to be used for checking the work of others; screening articles of any kind previously submitted for publication; or screening documents of any kind previously submitted for deposit with the Graduate School, for review by an academic committee, or for archiving within the University.

Since the report generated by *iThenticate* only provides citations of language similarity, judgment on the part of the student is often necessary as to whether the submitted text is substantively different from similar text found in the literature.

5.4.2.2. Procedure for iThenticate

It is the goal of the university to grant all faculty at Purdue the ability to use the *iThenticate* system. Students do not have direct access to the system. For students to gain access to the system, they must contact a faculty member who has access. However faculty can process documents on behalf of students and then provide the results.

NOTE: If a faculty member does not have iThenticate access, she or he may contact the CoT Graduate Studies Office to request access.

Most CoT faculty have access to the *iThenticate* system. If is expected that faculty will submit documents on behalf of their graduate students, assist students in interpreting the results, and provide an electronic copy of the results to the student. Please note that as part of the Thesis Format Advising Process, all graduate students will have their thesis analyzed in the *iThenticate* system.

NOTE: The iThenticate system accepts the following file formats: Microsoft Word, searchable pdf, LaTex, postscript, and plain text. Scanned documents converted to pdf or encapsulated in Word or LaTex are not acceptable. Also note that you should delete all images from your file before submitting it for processing (so as to reduce file size).

5.4.3. Copyright Issues with Figures

Figures and images included in a publication can pose significant issues for authors. Generally, any figure that is directly from another source, such as a journal, book, or other publication (including web publications) are copyrighted. Including them within one's publication requires more than just a citation if used directly from the source. If you desire to use an image from another publication or from an online source, the safest course of action is to secure a release to do so. Otherwise, it could be classified as copyright infringement. A secondary method, albeit in certain cases it could still be considered copyright infringement, is to redraw the image. However, in many cases, redrawing or recreating the image is not enough to ensure it is still not a copyright infringement.

A release to use an image can vary from a specific legal document to a simple email. The key element of a release is that the "copyright holder" gives you permission to use the image for your purposes. Yet, determining who the copyright holder is can sometimes be quite difficult. And, often authors do not fully understand what rights they have.

If you want to use an image, the first course of action is to email the author of the source from which the image is being taken. A release from an author needs to include two things:

- 1. That the author has the right to grant use of the image.
- 2. That he or she gives permission for the image to be used for your specific purposes.

It is always a good idea, even if an author gives permission, to follow up with the publisher of the source from which the image is taken and ensure a release is not also needed from the publisher.

As with issues of plagiarism, copyright infringement issues resulting from the illegal use of images is a serious matter. The author should do everything in his or her power to ensure the legitimacy of the use of materials in his or her publications. It is safer

to not include an image if you cannot secure appropriate permissions than run the risk of copyright infringement.

APPENDIX A: GRADUATE FORM 40G

(available at http://www.purdue.edu/registrar/Forms/Form_40_Introduction.html)

INSTRUCTIONS FOR COURSE ADDITIONS, EXPIRATIONS, OR REVISIONS

Graduate course additions, expirations, or revisions (course numbers 50000-69999) shall be originated by a department and submitted on Office of the Registrar Form 40 through college/school channels to the Office of the Registrar via the Graduate School (and the chancellor or school dean if by a regional campus). See the Graduate School's Policies and Procedures Manual (Section I) for specific course guidelines, http://www.gradschool.purdue.edu/downloads/Graduate-School Policies and Procedures Manual.pdf.

If the number, title, and description of a course are all changed, it shall be considered a new course.

A proposal to change or expire a course that is a requisite for a course in another department or that is a requirement for a curriculum in any college/school should be discussed with the department and college/school concerned before submitting a change. In particular if the change or expiration affects multiple campuses, all campuses involved should be consulted.

If the request is a course revision, only the items to be revised need to be specified on the Form 40. For example, check Item #2 to add an existing course, indicate the course identifier (subject abbreviation and course number) and the campus where the course is to be added.

New subject abbreviations must be coordinated with the Office of the Registrar.

The numbering system designates the level of the course with 00100-09999 pre-college, remedial, deficiency and non-degree courses; 10000-29999 lower division; 30000-49999 upper division; 50000-59999 graduate courses open to upper-division undergraduates; 60000-69999 graduate courses and 80000-89999 professional courses. The department and/or college/school shall propose a course number, subject to clearance by the Office of the Registrar, in order to avoid duplication.

A number that has been used for a course being expired should not be used again for a new course.

The title of the course should reflect major content of the course. Variable title courses should be specified. Courses such as: special topics, special problems, seminars, selected topics may be offered under a variable title for students.

Courses with variable credit should be so indicated and minimum/maximum credit hours are to be specified. Equivalent credit is granted for non-collegiate courses and should be so designated. Thesis credit applies to thesis research at all upper undergraduate and graduate-level courses and should be so indicated.

If the grade option for the course is to be other than regular grade, (i.e. pass/not pass option or satisfactory/unsatisfactory option) the appropriate item should be checked.

Courses that are repeatable for credit (indicate maximum number of credits the course may be repeated if applicable), credit by examination, variable title or requiring special fees should be indicated.

If special approval by department/instructor is required for scheduling purposes, it should be indicated.

Courses that are annotated as honors should be so indicated.

If a course has an off campus experience (i.e., Clinical Experience, Co-Op, Internship, Professional Practicum, Student Teaching or Study Abroad), please list accordingly.

Each instructional type that is utilized should be marked appropriately. For the definitions of each type, you can refer to http://www2.itap.purdue.edu/faculty/documents/Minutes.pdf refer to pages 35-48. Please indicate how many minutes per meeting, meetings per week and weeks offered. Additionally, of the total amount of credit associated with the course, please specify what percentage is to be recorded with each instructional type.

A department on a specific campus may create a course that is similar to an existing course offered on one or more campuses. However, the level and number for an existing course being offered on more than one campus shall remain the same unless the responsible department heads on all campuses that offer the course mutually agree to a change.

A course covering the same general area of essentially equivalent content will carry the same subject abbreviation, course number, and title for all campuses. However, basically equivalent courses may be offered with variable patterns (i.e. instructional types, such as laboratories) and variable credits with the approval of the responsible department heads.

Approvals in addition to the department head, college/school dean, and chancellor, as appropriate, are as follows:

PURPOSE	GRADUATE
	APPROVALS REQUIRED
	(Forms for all 50000-60000 level courses are
	submitted to the Office of the Registrar via the
	Graduate School.)
New course with supporting documents	Graduate Council Area Committee;
	Graduate Council
Add existing course	Graduate Dean
Expiration of a course	Graduate Dean
Change in course number	(Upgrading only) Graduate Council Area
	Committee; Graduate Council
Change in course title	
Change in course credit/type	Graduate Dean
Change in course attributes	
Change in instructional hours	
Change in course description	
Change in course requisites	Graduate Dean
Change in semesters offered	
Cross-listing courses	Graduate Dean
Transfer from one department to another	Graduate Dean

ALL CAMPUSES INVOLVED IN ADDITIONS, EXPIRATIONS, OR REVISIONS SHOULD BE INDICATED AND THE APPROPRIATE SIGNATURES OBTAINED PRIOR TO SUBMISSION TO THE OFFICE OF THE REGISTRAR AT WEST LAFAYETTE.

Office of the Registrar FORM 40G REV. 4/10	PURDUE U REQUEST FOR ADDITI OR REVISION OF A GR. (50000-80000	ON, EXPIRATION, DUATE COURSE	Print Form
DEPARTMENT	EFFE	CTIVE SESSION	
INSTRUCTIONS: Please check the items	below which describe the purpose of this requ	est.	
New course with supporting	ng documents (complete proposal form)	7. Change in course	
Add existing course offere	d at another campus	8. Change in instruct	
Expiration of a course Change in course number		Change in course Change in course	description requisites/restrictions
Change in course title		11. Change in semest	•
Change in course credit/ty	/pe	12. Transfer from one	department to another
PROPOSED:	EXISTING:		TERMS OFFERED
Subject Abbreviation	Subject Abbreviation		Check All That Apply:
Course Number	Course Number	Summ	er Fall Spring CAMPUS(ES) INVOLVED
	Course Name	Calum	
Long Title		Cont E	Tech Statewide
Short Title		Indian	
Abbreviated title will be	entered by the Office of the Registrar if omitte		
Fixed Credit: Cr. Hrs.	1. Pass/Not Pass Only	COURSE ATTRIBUTES: Check All That Apply	
Variable Credit Range:	Satisfactory/Unsatisfactory Only	6. Registration Approval T Department	ype Instructor
(Check One) To Or	3. Repeatable	7. Variable Title	III SC UCCO
Maximum Cr. Hrs.	Maximum Repeatable Credit:	8. Honors	
Equivalent Credit: Yes No No No	Credit by Examination Special Fees	9. Full Time Privilege	
	ings Per Weeks % of Credit	10. Off Campus Experience	e Cross-Listed Courses
Presentation aboratory alb Prep Studio Distance Clinic Experiential Research			
nd. Study			
Pract/Observ COURSE DESCRIPTION (INCLUDE REQU	HOLTEO/DECTDICTIONS):		
alumet Department Head	Calumet School Dean		
	Sast Wayne School Doop		curriculum Committee Date
	Date Fort Wayne School Dean	Date Fort Wayne Chancel	
	Date Indianapolis School Dean	Date Undergrad Curriculur	n Committee Date
	Date Vice Chancellor for Academic Affairs Wort Lafavorte College/Behard Popp	Date Date Approved by Gr	
	Date West Lafayette College/School Dean	Date Graduate Council Se	cretary Date
Vest Lafayette Department Head D			

		Course	
Го:	Purdue University Graduate	Council	For Reviewer's comments only (Select One)
From:	Faculty Member: Department: Campus:		Reviewer:
Date:			
Subject:	Proposal for New Graduate (Required by the Graduate Co Registrar's Form 40G		Comments:
	Contact for information if questions arise:	Name: Phone Number: E-mail: Campus Address:	
	Course Subject Abbreviation a	nd Number:	
	Course Title:		
A. Justif	ication for the Course:		
	preparation of students, in pr meeting degree requirements	oviding new knowledge s, etc.), how the course c n, and how the course rel	heed for the course (e. g., in the //training in one or more topics, in ontributes to existing fields of study ates to other graduate courses offered inary programs.
	on, but not limited to: (1) the	e target audience, includ	000- or 60000-level) including statements ing the anticipated number of in the course; and (2) the rigor of the
B. Lear	ning Outcomes and Method	of Evaluation or Assess	ment:
	Describe the course objective (i.e., knowledge, communication	-	utcomes that address the objectives hical research, etc.).
	Describe the methods of eval evidence for both direct and		student learning outcomes. (Include
	Grading criteria (select from will be used to assess student		a statement describing the criteria that e will be determined.
	Criteria		·

 Identify the method(s) of instruction (select from dropdown box) and describe how the methods promote the likely success of the desired student learning outcomes.

Method of Instruction

C. Prerequisite(s):

- · List prerequisite courses by subject abbreviation, number, and title.
- List other prerequisites and/or experiences/background required. If no prerequisites are indicated, provide an explanation for their absence.

D. Course Instructor(s):

Provide an outline of topics to be covered and indicate the relative amount of time or emphasis devoted to each topic. If laboratory or field experiences are used to supplement a lecture course, explain the value of the experience(s) to enhance the quality of the course and student learning. For special topics courses, include a sample outline of a course that would be offered under the proposed course.

F. Reading List (including course text):

- A primary reading list or bibliography should be limited to material the students will be required to read in order to successfully complete the course. It should not be a compilation of general reference material.
- A secondary reading list or bibliography should include material students may use as background information.

G. Library Resources

- Describe the library resources that are currently available or the resources needed to support this proposed course.
- H. Example of a Course Syllabus (While not a necessary component of this supporting document, an example of a course syllabus is available, for information, by clicking on the link below, which goes to the Graduate School's Policies and Procedures Manual for Administering Graduate Student Programs. See Appendix K.)

http://www.gradschool.purdue.edu/downloads/Graduate School Policies and Procedures Manual.pdf

(Revised and Approved by the Graduate Council 2/08)

2

APPENDIX B: INDEPENDENT STUDY APPROVAL FORM

(available at http://www.tech.purdue.edu/)

INDEPENDENT STUDY AUTHORIZATION FORM

College of Technology Purdue University

(NOTE: A maximum of 6 credit hours of independent study is permitted on any program plan of study)

Student Name		Student ID #
lumber of independent study credits already	completed:	
hereby request permission to enroll in TECH	f 690 for credits of indep	pendent study during the
iall Spring Summer semester of (circle one) plan to pursue an independent study project		e: Instructors of TECH 690 must hold PHD or equiv.)
plan to pursue an independent study project	or the problem,	
	(Please insert title of cours	se)
will submit all deliverables by:	Date	
Student's Signature	Printed Name	 Date
	Ph.D. (Circle one)	
am willing to guide the independent study ou	(Circle one)	is and I agree to the deadlines indicated above.
am willing to guide the independent study or Professor in Charge of Instruction Signature Enrollment in the above independent study is	utlined in the attached prospecture. Printed Name consistent with the degree objecty. This student will not exceed	
am willing to guide the independent study or Professor in Charge of Instruction Signature Enrollment in the above independent study is on □ not on his/her plan of sture study with this enrolled	utlined in the attached prospecture. Printed Name consistent with the degree objecty. This student will not exceed	
am willing to guide the independent study out the professor in Charge of Instruction Signature Enrollment in the above independent study is on	Itlined in the attached prospectural interest of the attached printed Name Printed Name	
am willing to guide the independent study or confessor in Charge of Instruction Signature Enrollment in the above independent study is on not on his/her plan of study with this enroll cademic Advisor's Signature Approved Not Approv	Itlined in the attached prospectural interest of the attached printed Name Printed Name	
am willing to guide the independent study or Professor in Charge of Instruction Signature Enrollment in the above independent study is on not on his/her plan of study with this enrollment Advisor's Signature Approved Not Approv Departmental Graduate Committee Chair Signature Associate Dean approval required only when	utlined in the attached prospecture. Printed Name consistent with the degree objectly. This student will not exceed oilment. Printed Name Printed Name approval is granted by the Depart	ctives of this student and is six (6) credit hours of independent study on his/her plan o
am willing to guide the independent study or Professor in Charge of Instruction Signature Enrollment in the above independent study is on not on his/her plan of study with this enrollment Advisor's Signature Approved Not Approv Departmental Graduate Committee Chair Signature Associate Dean approval required only when	utlined in the attached prospecture. Printed Name consistent with the degree objectly. This student will not exceed oilment. Printed Name Printed Name approval is granted by the Depart	ctives of this student and is six (6) credit hours of independent study on his/her plan o

INSTRUCTIONS FOR REQUESTING PERMISSION TO ENROLL IN AN INDEPENDENT STUDY COURSE College of Technology Purdue University

About the Independent Study

Independent study courses are only allowed if they (1) supplement existing courses in the curriculum with deeper study in a subject area, (2) delve into topics not currently covered offered in existing course, or (3) work on specific developmental projects that are designed to extend the student's knowledge in a particular area. In all cases the course requirements must equate to the required effort that justifies the level and credit provided by the course. An independent study cannot substitute for existing, permanent courses. A maximum of six credit hours of independent study is permitted on any program plan of study. Additionally, independent study courses should not repeat, nor be used for remediation of, content already covered in other existing courses. Independent studies must be reviewed and approved by the student, course instructor, student's academic advisor and the department graduate committee before the start of the semester in which the independent study is to begin. Lastly, graduate students must have an approved plan of study on file to be eligible to enroll in an independent study course.

Process

For an independent study, the student and instructor must fill out an independent study authorization form containing a 16-week schedule of activities (with milestones or deliverables) and respective due dates. The student, course instructor, and student's academic advisor signs the form and provides it to the departmental graduate committee. The form must then be reviewed and approved by the departmental graduate committee. The chair of that committee then signs the form giving either approval or denial of the request. If the request is denied by the committee, the committee chair returns a copy to the student's academic advisor for record keeping and conferral with the student. If the request is approved by the committee chair provides the form to the CoT Graduate Studies Office (Knoy 150). The Associate Dean of Academic Affairs & Diversity has final approval authority. After approving or denying the form, the Associate Dean signs the form and returns a copy to the student's academic advisor for record keeping and conferral with the student. Only upon Associate Dean approval is a student allowed to be enrolled in an independent study course. The entire independent study process must be completed prior to the start of the semester in which the independent study is to begin.

Procedural Requirements

- 1. Meet with your professor to discuss your proposed study and secure his/her approval for the project you envision.
- Incorporating your professor's input, prepare a detailed project prospectus (typed or word processed, use APA format, title page), including the following indicated sections.
 - a. Problem: Define the rationale and delimit your problem area (explain your interest in pursuing the project, why this area is of concern to you). How does this project relate to your degree objectives?
 - b. Purpose and Objectives: What do you hope to accomplish? Provide a physical numbered listing of all objectives you expect to accomplish.
 - c. Procedures: Explain the methods you expect to use and any unusual requirements for materials, equipment, or facilities. A graphical time line and two progress reports from the student must be submitted by the student to the professor in charge between weeks three and ten of the semester. Specifically, indicate key deadline dates for each progress report and deliverable. Provide a narrative, flow chart, or outline of step-by-step procedures used to complete this study. If applicable, provide a supply and material cost worksheet.
 - d. Outcomes. What will be the tangible results (deliverables, i.e. software source code, papers, reports, products, or summaries) of your study? Who will receive copies (office, professor, co-working professor, and student)? Will you conduct a formal presentation of your results?
 - e. 16-week outline: The 16 week outline should include a week-by-week listing of any meetings, milestones or other deliverables, along with associated due dates, that the student will undertake.
- 3. Meet with your professor in charge to discuss and refine your project prospectus.
- 4. Revise the prospectus as necessary. Complete the <u>INDEPENDENT STUDY AUTHORIZATION FORM</u> (reverse side of this page); attach it to the front of the prospectus; and secure the signatures of your academic advisor <u>and</u> the professor in charge of the independent study course you will be taking before pursuing the approval and signature of the appropriate committee.
- 5. Provide the form to your department for review by your department's graduate committee.

APPENDIX C: STEPS IN A GRADUATE STUDENT'S PROGRAM

(available at http://www.tech.purdue.edu/)

Steps in a CoT Graduate Student's Program for Students

August 2013

v 1.0

Select a Major Professor

- Acts as chair of advisory committee
- Agrees to supervise the student's graduate study, research, and writing
- Works with the student to set up the advisory committee
- Oversees and participates in student proposal and examination meetings
- Maintains a record of student progress (see form GEC 02 Annual Student Progress Form and form GEC 07 MS Progress Report Form; provided annually to the CoT Graduate Studies Office).

Advisory Committee Duties

- Assist in preparing the plan of study
- Offer advice during period of graduate work
- Keeps the students informed of important deadlines
- Works closely with the student on their research or directed project proposal

Develop the Plan of Study

- A tentative plan of study should be drawn up prior to the registration for the first session of graduate work.
- The plan must be appropriate to meet the needs of the student in his or her chosen field.
- Non-thesis plans of study require a minimum of 30 credits be listed. Thesis plans of study require a minimum of 27 credits to be listed.
- Purdue courses on the plan require grades of A, B, or C.
- Courses taken for P/NP, S/U, departmental credit, credit by exam, etc. are not allowed on the plan.
- Transfer courses require grades of A or B.
- 100 & 200 level courses are not allowed on the plan.
- Six hours of 300 & 400 level courses, taken as a graduate student, are allowed on the plan with grades of at least a B.
- Research courses (598, 698, 699, or 699A) are not to appear on the plan. Instead it is referenced in the notes field of the plan of study.
- Credits earned by a student whose graduate study/professional activity has been inactive for five or more years cannot be used on a plan of study.
- Approved plans of study or any exams completed prior to such a period of inactivity are invalid.

File the Plan of Study

• Student submits POS via myPurdue's Plan of Study Generator.

- All technical conditions must be satisfied prior to submitting the plan of study.
- Normally all academic conditions of admission must have been met.
- The formal plan of study should be submitted as soon as possible, but no later than the Friday before the session of anticipated graduation begins. Students not meeting this deadline should plan to register for exam or degree only for the next session.
- Doctoral plans must be submitted to the Graduate School prior to the submission of a request for appointment of a preliminary examination committee.

Establish Examining Committees

- Examining committees may or may not be identical to advisory committees.
- A minimum of three committee members are required for all examining committees except the doctoral final examining committee, which requires a minimum of four.
- Examining committees are established for MS Thesis and PhD by electronically completing *A Request for Appointment of Examining Committee (G.S. Form 8)*, and submitted to the Graduate School at least two weeks prior to the proposed examination date. The examining committee for MS Directed Project is established by completing the *COT Form 1 Request to Schedule Oral Exam*, and submitted to the COT Graduate Office, Knoy 150, at least two weeks prior to the proposed examination date.
- All final examinations must be held before the last week of classes. Refer to the Directed Project Deadline Calendar and the Graduate School Graduation Deadlines Calendar for exact dates. Note: the Directed Project deadlines are different than those for MS Thesis & PhD.

Conduct Proposal Meeting

- Before beginning work on a Directed Project, Thesis, or Dissertation students are required to meet with their full faculty committee to seek their input and approval for their proposed work. Typically the student does a presentation and faculty ask follow-up questions and/or provide recommendations that guide the research.
- All committee members complete evaluation rubric for student proposal and presentation (see forms *GEC 05 Dissertation Research Proposal Form*, *GEC 11 Thesis Research Proposal Form*, and *GEC 13 Directed Project Proposal Form*). Once completed these forms are returned to the CoT Graduate Studies Office.
- Two weeks before the proposal meeting, the student should have the written proposal provided to the faculty committee for their review.
- The proposal meeting must occur the semester before the student intends to graduate.
- Following approval of the student proposal, s/he has the committee sign CoT Form 2, *Acceptance of Graduate Proposal*. The signed CoT Form 2 and a copy of the proposal are deposited in the CoT Graduate Studies Office.

Conduct Directed Project or Thesis Final Examination (Defense)

- Must have an approved plan of study
- Must have three committee members at the defense
- Typically the student does a presentation and faculty ask follow-up questions relative to the results of the work.
- All committee members complete evaluation rubric for student defense and presentation (see forms *GEC 09 Thesis and Defense Form* and *GEC 10 Directed Project and Defense Form*). Once completed, these forms are returned to the CoT Graduate Studies Office.
- Two weeks before the defense meeting, the student should have the final written thesis or directed projects provided to the faculty committee for their review.
- The final defense meeting cannot occur in the same semester as the proposal meeting.

Conduct Doctoral Examinations

- Doctoral Preliminary Examination
 - o Must have an approved plan of study
 - o Satisfactorily completed most of the formal study
 - o The committee will consist of a minimum of three members
 - The preliminary exam is a number of questions submitted by the faculty committee to the student. These questions are normally answered over a period of about a week in an un-proctored manner. The student then submits their answers to the faculty committee for review before the oral portion of the exam.
 - All committee members complete evaluation rubric for doctoral final examination (see form GEC 12 Written and Oral Preliminary Examination Form). Once completed, these forms are returned to the CoT Graduate Studies Office.
- Doctoral Final Examination (Defense)
 - At least two academic sessions devoted to research and writing must elapse between the preliminary and final doctoral examinations. For example, a doctoral student who passes the preliminary examination during a spring semester is not eligible to take the final examination (provided that the student is registered for the subsequent summer session and fall semester) before the following spring semester.
 - o The committee will consist of a minimum of four members.
 - o All committee members complete evaluation rubric for doctoral final examination (see form *GEC 04 Dissertation and Defense Form*). Once completed, these forms are returned to the CoT Graduate Studies Office.
 - o Final doctoral examinations should be announced so that interested members of the faculty and student body may attend.

Final Examination Packets

After the Form 8 or COT Form 1 has been approved, the following materials will be

returned to your department:

Master's Thesis Final Examination Packet:

- GEC 09 Thesis and Defense Form
- Candidate Certification Audit
- Graduate School Exit Survey cover letter

Nonthesis Master's Final Examination Packet:

- GEC 10 Directed Project and Defense Form
- Candidate Certification Audit
- College of Technology Exit Questionnaire

Doctoral Final Examination Packet:

- GEC 04 Dissertation and Defense Form
- Candidate Certification Audit
- Graduate School Exit Survey cover letter
- The Survey of Earned Doctorates

Reporting the Results of Examinations

- The Committee chair should present the examination committee with an appropriate examination report form (see the referenced GEC forms above).
- This examination report form should be completed and presented without delay to the head of the graduate program for recording and prompt transfer to the Graduate School.
- The report form for the final examination must be received by the Graduate School before the last week of classes of the academic session in which graduation is expected.
- After a satisfactory examination involving a thesis defense or dissertation, committee members who approve the thesis or dissertation must sign a *Thesis Acceptance* (G.S. Form 9). The Form 9 is prepared and brought to the exam by the student and can be found on the Graduate School Thesis web page http://www.gradschool.purdue.edu/thesis.cfm Directed Project students should prepare a Report Cover Page for committee members to sign. http://www.tech.purdue.edu/
- Members of the examining committee might wish to examine the deposit copy of the thesis/directed project prior to signing the *Thesis Acceptance (G.S. Form 9)/Report Cover Page*. Once a committee member has signed the *Thesis Acceptance (G.S. Form 9)/Report Cover Page*, the document is approved by that individual.
- No changes may be made to the directed project/thesis/dissertation after it has been deposited in the Thesis/Dissertation Office/COT Grad Office.

College Thesis and Dissertation Review

• Prior to depositing the thesis or dissertation with the University, students must schedule a thesis review meeting with the College Thesis Format Advisor.

University Deposit of the Completed Thesis/Dissertation

- The complete and corrected deposit copy of the thesis, including the completed *Thesis Acceptance (G.S. Form 9)*, must be delivered to the Graduate School Thesis/Dissertation Office before the last day of classes of the session in which the student is to graduate.
- Ph.D. and M.S. candidates will submit their theses electronically.
- Electronic copies of the MS Thesis and Directed Projects must be submitted to the College of Technology Purdue e-Pubs site http://docs.lib.purdue.edu/tech/.
- The Electronic Thesis Deposit (ETD) Submission/Deposit Checklist and the Masters Final Deposit Checklist along with other information regarding thesis preparation, deadlines and forms can be found at the Graduate School Thesis web page http://www.gradschool.purdue.edu/thesis.cfm

College Deposit of the Completed Thesis/Dissertation

- The complete and corrected deposit copy of the thesis or dissertation is to be electronically submitted at the College of Technology Purdue e-Pubs site http://docs.lib.purdue.edu/tech/. The completed & signed Form 9 must be delivered to the COT Graduate Office, Knoy 150. Both need to be submitted simultaneously before the last week of classes of the session in which the student is to graduate.
- The signed Form 9 will not be accepted until an electronic copy of the thesis
 or dissertation has been submitted to the College of Technology Purdue ePubs site.

College Deposit of the Completed Directed Project

- The complete and corrected deposit copy of the directed project is to be electronically submitted at the College of Technology Purdue e-Pubs site http://docs.lib.purdue.edu/tech/. The completed & signed Report Cover Page must be delivered to the COT Graduate Office, Knoy 150. Both need to be submitted simultaneously before the last week of classes of the session in which the student is to graduate (refer to the Directed Project Deadlines Calendar http://www.tech.purdue.edu/academics/graduate/dpdeadlines.cfm).
- The signed Report Cover Page will not be accepted until an electronic copy of the Directed Project has been submitted to the College of Technology Purdue e-Pubs site.

Graduation Processes

- Beginning candidate roster is sent to the COT graduate office.
- Review roster and inform the Graduate School of any adjustments that need to be made.

- Audit/Certification forms distributed to COT graduate office.
 - o Be sure that all issues/problems indicated are corrected
 - o Check for accuracy of degree title
 - o Check for areas of specialization
 - o If not previously done, indicate on the audit/certification form if the candidate will be continuing for another degree in your program.
- Commencement Participation
 - Must be a bona fide candidate eligible to graduate at the end of the session
 - Must be on the candidate roster

Questionnaires

• Graduate School Exit Questionnaire

o The Graduate School administers an exit questionnaire that is provided to both master's and doctoral candidates at the time the final examination is scheduled. Students should be assured that their answers are maintained confidentially in the Graduate School. The trend data, however, is distributed to departments and is useful in strengthening our graduate programs.

• Survey of Earned Doctorates

O Although completing this survey is optional, departments should strongly encourage doctoral candidates to complete the Survey of Earned Doctorates, conducted by the National Opinion Research Center of the University of Chicago. Responses provide data that are important for statistical studies by federal agencies who conduct studies of national trends in doctoral education and of manpower supply and demand.

College of Technology Exit Questionnaire

O The College of Technology would like to keep a record of where our former graduate students go, the type of career they pursue, and their average starting salaries. The information provided via the exit questionnaire is the last entry in the permanent file of the student. This information serves as our means for contacting students after graduation and compiling reports pertaining to the demand for Technology advanced degrees. These reports are of value to the Dean of Technology, prospective employers, and prospective graduate students. M.S. Thesis and Doctoral students complete the questionnaire as part of their Thesis Format Review. Directed Project students complete the exit survey at their final oral defense.

APPENDIX D: GEC 02 ANNUAL STUDENT PROGRESS FORM

Student Name:			Form CoT GE	SC 2
•	Annual Progress Revie	w of Graduate Staff – S	tudent Data	
Degree Program:		Evaluation Year: _		
Date of Annual Comm	ittee Meeting:			
PUBLICATIONS (List	all published or in press artic	les in research, teaching, ou	itreach, or popular outlets)	
PRESENTATIONS (L	ist all oral and poster presenta	ations to research, teaching,	outreach, or popular audienc	es)
INVITED PRESENTA 1.	ATIONS (List all invited pre	sentations to research, teach	ning, outreach, or popular auc	liences)
TEACHING (List and in 1.	ndicate role in any courses in	which you taught, served as	s a TA, or provided a guest le	cture)
<u>FUNDING</u> (List any fun 1.	ding you received for researc	h, teaching, outreach, or ser	vice activities)	
AWARDS (List any awa	rds you received for research	teaching, outreach, or serv	ice activities)	
WORKSHOPS (List an 1.	y professional workshops you	organized, or served as a p	presenter, or attended)	
SERVICE (List participa	ation in professional societies,	on committees, or as a revi	iewer for a journal or grantin	g agency)
	e as an officer for professiona	l or campus groups, establis	shment of patents, etc.)	
1.				
CO BOOK STORES				
				Pag

APPENDIX E: GEC 07 M.S. PROGRESS REPORT FORM

Progress Record for M.S	Craduata Students	
Frogress Record for M.S		
Degree Program:	Beginning Semester and Year:	
area of Specialization:	Advisor:	
Company of the Compan	<u>Date Completed</u>	
Advisors:		4
Major professor assigned		4
dvisory committee selected ¹		_
Course work: Praft Plan of Study Completed		-
inal Plan of Study Approved by Graduate School 1,2,3		-
		-
lan of Study Coursework Completed		-
ncidence(s) of Academic Probation (GPA<3.0)		4
Research: roposal Approved by Advisory Committee ^{1,4}		4
roposal Filed with CoT Graduate Studies Office		-
ncidence(s) of "U" on Research Credits		-
		4
ncidence(s) of Missing Annual Progress Review		-
Adherence to University and Dept. Policies (for RA/TA) approval of Vacation ⁵		1
ttendance at Departmental Seminars ⁵		1
Other (describe) ⁴		1
Examinations/Defense:]
1.S. Thesis Oral Defense ⁶		
I.S. Thesis Deposited ^{6,7}		
Completion of Departmental Exit Checklist		7
First committee meeting. ² Attach copy of plan of study. ³ 33 ct Attach one-page summary of proposal plan (i.e., objectives, me ompliant. Please provide additional comments below. ⁶ Pass of the provide additional comments below. ⁶ Comments:	thods and hypothesis). 5 Compliant or Non-	
*		

APPENDIX F: GEC 08 PHD PROGRESS REPORT FORM

Progress Record for Ph.D	Graduate Students	
Degree Program:	Beginning Semester and Year:	
Area of Specialization:	Advisor:	
	Date Completed	
Advisors: Major professor assigned		
Advisory committee selected ¹		_
	a section in the section of the sect	4
Course work: Draft Plan of Study Completed		-
Final Plan of Study Approved by Graduate School ^{1,2,3}		\dashv
Plan of Study Coursework Completed	* * * * * * * * * * * * * * * * * * * *	
Preliminary Examination Completed		-
-		4
Incidence(s) of Academic Probation (GPA<3.0)	A PORTUGA SER MANAGEMENTAL DE PORTUGA DE LA CONTRACTOR DE	_
Research: Proposal Approved by Committee ^{1,4}		
Proposal Filed with CoT Graduate Studies Office		\dashv
Incidence(s) of "U" on Research Credits		-
Incidence(s) of Missing Annual Progress Review		-
Adherence to University and Dept. Policies (for RA/TA)		
Approval of Vacation ⁵	BENERAL CARACTERISTICS AND INCOMPANION SEA 2011 FACILITY OF A SECOND	
Attendance at Departmental Seminars ⁵		\dashv
Other (describe) ⁴		٠, .
Examinations/Defense:		
Ph.D. Dissertation Oral Defense ⁶	M DESERTED STATE SERVICE THE SELECTION AND CLASSIC AND DESCRIPTION OF SERVICE SERVICES.	
Ph.D. Dissertation Deposited ⁶		\dashv
Completion of Departmental Exit Checklist		\dashv
First committee meeting. ² Attach copy of plan of study. ³ 33 cr ⁴ Attach one-page summary of proposal plan (i.e., objectives, me compliant. Please provide additional comments below. ⁶ Pass of Please provide additional comments below.	thods and hypothesis). 5 Compliant or Non-	
Comments:		
		,
*		

APPENDIX G: GEC 05 DISSERTATION RESEARCH PROPOSAL FORM

Student Name:			Form CoT GEC 5
(This pa	Rubric for Evaluating Pl 1ge should be filled out by the student or Co	Rubric for Evaluating PhD Dissertation Research Proposal (This page should be filled out by the student or Committee (Thairman/advisor prior to distribution to Committee)	imittee)
Chair of Evaluation Committee		Date of Proposal Review	
Research Proposal Title			
Committee Members and Department	nent		
		27-200	
After evaluating the dissertation research proposal, each con member feels is somewhat or very deficient, a short explanat of the reasoning behind the overall evaluation of the examine of the Evaluation Committee (or Advisor), not the student.	research proposal, each committee member y deficient, a short explanation should be pull evaluation of the examinee's performance r Advisor), not the student.	After evaluating the dissertation research proposal, each committee member should fill out the response sheets provided. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. A Comment sections at the bottom of the rubric is provided for explanations of the reasoning behind the overall evaluation of the examinee's performance on the research proposal if desired. Completed forms are to be turned in to the Chair of the Evaluation Committee (or Advisor), not the student.	each attribute which a committee the provided for explanations are to be turned in to the Chair
A summary of written comment provided to the student by the chacommittee WILL be provided to t	its from committee members as well as any air of the examining committee (or advisor) the student by the chair of the examining co	A summary of written comments from committee members as well as any edited copies of the research proposal submitted by committee members WILL be provided to the student by the chair of the examining committee (or advisor) and; a verbal summarization of the overall evaluation of the research proposal by the committee WILL be provided to the student by the chair of the examining committee (or advisor) or during a prescheduled meeting of the advisory committee.	y committee members WILL be no of the research proposal by the of the advisory committee.
All evaluation documents includin	All evaluation documents including rubrics and written comments must be completed.	mpleted.	
A copy of the completed forms (both rubrics a the completion of the proposal review process.	ooth rubrics and written comments) must be view process.	A copy of the completed forms (both rubrics and written comments) must be sent to Dr. Gary R. Bertoline, Associate Dean for Graduate Programs within 1 week of the completion of the proposal review process.	duate Programs within 1 week of
			Page 1
	• •		
	e		

Form CoT GEC 5	Date:	Exceeds Expectations	Arguments are superior	Objectives are well defined	Exhibits mature, critical thinking skills	Reflects mastery of subject matter and associated literature.	Demonstrates mastery of theoretical concepts	Displays exceptional creativity and insight	Excellent potential for success of research	Exceptional potential for discovery Greatly extends previous research	Exceptional theoretical or applied significance	Exceptional publication potential	Demonstrates exceptional originality	Demonstrates regulatory compliance Documentation is excellent	Writing is publication quality	No grammatical or spelling errors	apparent Organization is avoidlent	Exceeds Expectations		Page 2
		Meets Expectations	Arguments are coherent and clear	Objectives are clear	Demonstrates average critical thinking skills	Reflects understanding of subject matter and associated literature	Demonstrates understanding of theoretical concepts	Displays creativity and insight	Good potential for success of research	Some potential for discovery Builds upon previous research	Reasonable theoretical or applied significance	Keasonable publication potential	Demonstrates acceptable originality	Considers regulatory compliance Documentation is adequate	Writing is adequate	Some grammatical and spelling errors	apparent Organization is logical	Meets Expectations	Date:	* * *
	al Rubric - Completed by:	Does Not Meet Expectations	Arguments incoherent or flawed	Objectives are poorly defined	Demonstrates rudimentary critical thinking skills	Reflects poor understanding of subject matter and associated literature	Demonstrates poor understanding of theoretical concepts	Displays limited creativity and insight	Little potential for success of research	Limited potential for discovery Limited expansion upon previous research	Limited theoretical or applied significance	Ellinica puolication potential	Demonstrates unacceptable originality	Lacks regulatory compliance Documentation is inadequate	Writing is weak	Numerous grammatical and spelling	Organization is poor	Does not meet expectations	:- -	
Student Name:	Dissertation Research Proposal Rubric - Completed by:	Attribute	Overall quality of science							Contribution to discipline		- 0	Research		Quality of writing			Overall Assessment	Chair of Examining Committee:	

Form CoT GEC 5	oposal:	Page 3
Fon	nce on Dissertation Research Pr	
	Summary of <u>Individual</u> Committee Member comments for student concerning performance on Dissertation Research Proposal: Chair of Examining Committee Signature Date:	
	Committee Member comments	
Student Name:	Summary of Individual Committee Men	

APPENDIX H: GEC 11 THESIS RESEARCH PROPOSAL FORM

Student Name:		Form Col GEC II
This page should be filled ou	Rubric for Evaluating MS Thesis Research Proposal (This page should be filled out by the student or Committee Chairman/advisor prior to distribution to Committee)	issribution to Committee)
Chair of Evaluation Committee	Date of Proposal Review	
Committee Members and Department		
× 30		
30		
After evaluating the Thesis Research Proposal, each comm member feels is somewhat or very deficient, a short explanat of the reasoning behind the overall evaluation of the examine of the Evaluation Committee (or Advisor), not the student.	After evaluating the Thesis Research Proposal, each committee member should fill out the response sheets provided. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. A Comment sections at the bottom of the rubric is provided for explanations of the reasoning behind the overall evaluation of the examinee's performance on the research proposal if desired. Completed forms are to be turned in to the Chair of the Evaluation Committee (or Advisor), not the student.	provided. For each attribute which a committee e bottom of the rubric is provided for explanations Completed forms are to be turned in to the Chair
A summary of written comments from committee m provided to the student by the chair of the examining committee WILL be provided to the student by the cha	A summary of written comments from committee members as well as any edited copies of the research proposal submitted by committee members WILL be provided to the student by the chair of the examining committee (or advisor) and; a verbal summarization of the overall evaluation of the research proposal by the committee WILL be provided to the student by the chair of the examining committee (or advisor) or during a prescheduled meeting of the advisory committee.	osal submitted by committee members WILL be coverall evaluation of the research proposal by the icheduled meeting of the advisory committee.
All evaluation documents including rubrics and written comments must be completed.	comments must be completed.	
A copy of the completed forms (both rubrics and written commethe completion of the Thesis Research Proposal review process.	A copy of the completed forms (both rubrics and written comments) must be sent to Dr. Gary R. Bertoline, Associate Deam for Graduate Programs within 1 week of the completion of the Thesis Research Proposal review process.	iate Deam for Graduate Programs within 1 week of
		Page 1

Student Name:			Form CoT GEC 11
Thesis Research Proposal Rul	Rubric - Completed by:	Date:	
Attribute	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Overall quality of science	Arguments are incoherent or flawed	Arguments are coherent and clear	Arguments are superior
	Objectives are poorly defined	Objectives are clear	Objectives are well defined
	Demonstrates rudimentary critical thinking skills	Demonstrates average critical thinking skills	Exhibits mature, critical thinking skills
	Reflects poor understanding of subject matter and associated literature	Reflects understanding of subject matter and associated literature	Reflects mastery of subject matter and associated literature.
	Demonstrates poor understanding of theoretical concepts	Demonstrates understanding of theoretical concepts	Demonstrates mastery of theoretical concepts
	Displays limited creativity and insight	Displays creativity and insight	Displays exceptional creativity and insight
	Little potential for success of research	Good potential for success of research	Excellent potential for success of research
Contribution to discipline	Limited potential for discovery	Some potential for discovery	Exceptional potential for discovery
	Limited expansion upon previous research	Builds upon previous research	Greatly extends previous research
	Limited theoretical or applied significance	Reasonable theoretical or applied significance	Exceptional theoretical or applied significance
	Limited publication potential	Reasonable publication potential	Exceptional publication potential
Responsible Conduct of	Demonstrates unacceptable originality	Demonstrates acceptable originality	Demonstrates exceptional originality
Nescalcii	Lacks regulatory compliance	Considers regulatory compliance	Demonstrates regulatory compliance
3	Documentation is inadequate	Documentation is adequate	Documentation is excellent
Quality of writing	Writing is weak	Writing is adequate	Writing is publication quality
	Numerous grammatical and spelling errors annarent	Some grammatical and spelling errors	No grammatical or spelling errors
	Organization is poor	Organization is logical	Organization is excellent
Overall Assessment	Does not meet expectations	Meets Expectations	Exceeds Expectations
Comments:			
Chair of Examining Committee:	ee:	Date:	
			Page 2

Form CoT GEC 11	Proposal:				Page 3
	Summary of <u>Individual</u> Committee Member comments for student concerning performance on Thesis Research Proposal:	**************************************		Date	
196.7	ommittee Member comments for student c			ttee Signature	
Student Name:	Summary of <u>Individual</u> Co			Chair of Examining Committee Signature	

APPENDIX I: GEC 13 DIRECTED PROJECT PROPOSAL FORM

(This			Form CoT GEC 13
	Rubric for Evalua s page should be filled out by the student or	Rubric for Evaluating MS Directed Project Proposal (This page shauld be filled out by the student or Committee)	on to Committee)
Chair of Evaluation Committee	a)	Date of Proposal Review	
Research Proposal Title			
Committee Members and Depa	Department		
After evaluating the Directed member feels is somewhat or of the reasoning behind the ow of the Evaluation Committee	After evaluating the Directed Project Proposal, each committee memb member feels is somewhat or very deficient, a short explanation should bot the reasoning behind the overall evaluation of the examinee's perform of the Evaluation Committee (or Advisor), not the student.	After evaluating the Directed Project Proposal, each committee member should fill out the response sheets provided. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. A Comment sections at the bottom of the rubric is provided for explanations of the reasoning behind the overall evaluation of the examinee's performance on the research proposal if desired. Completed forms are to be turned in to the Chair of the Evaluation Committee (or Advisor), not the student.	 d. For each attribute which a committee of the rubric is provided for explanations deforms are to be turned in to the Chair
A summary of written comm provided to the student by the committee WILL be provided	nents from committee members as well as chair of the examining committee (or adv I to the student by the chair of the examinin	A summary of written comments from committee members as well as any edited copies of the research proposal submitted by committee members WILL be provided to the student by the chair of the examining committee (or advisor) and; a verbal summarization of the overall evaluation of the research proposal by the committee WILL be provided to the student by the chair of the examining committee (or advisor) or during a prescheduled meeting of the advisory committee.	mitted by committee members WILL be evaluation of the research proposal by the I meeting of the advisory committee.
All evaluation documents inclu	including rubrics and written comments must be completed.	e completed.	
A copy of the completed form the completion of the Directed	A copy of the completed forms (both rubrics and written comments) musthe completion of the Directed Project Proposal review process.	forms (both rubrics and written comments) must be sent to Dr. Gary R. Bertoline, Associate Dean for Graduate Programs within 1 week of ected Project Proposal review process.	n for Graduate Programs within 1 week of
			Page 1
	, •		

Student Name:		***	Form CoT GEC 13
Directed Project Proposal Rubric - Completed by:	ıbric – Completed by:	Date:	
Attribute	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Overall quality of science	Arguments are incoherent or flawed	Arguments are coherent and clear	Arguments are superior
	Objectives are poorly defined	Objectives are clear	Objectives are well defined
	Demonstrates rudimentary critical thinking skills	Demonstrates average critical thinking skills	Exhibits mature, critical thinking skills
٠	Reflects poor understanding of subject matter and associated literature	Reflects understanding of subject matter and associated literature	Reflects mastery of subject matter and associated literature.
	Demonstrates poor understanding of theoretical and applied concepts	Demonstrates understanding of theoretical and applied concepts	Demonstrates mastery of theoretical and applied concepts
	Displays limited creativity and insight	Displays creativity and insight	Displays exceptional creativity and insight
	Little potential for success of directed project	Good potential for success of directed project	Excellent potential for success of directed project
Contribution to discipline	Limited potential for applied research	Some potential for applied research	Exceptional potential for applied research
	Limited expansion upon previous applied research	Builds upon previous applied research	Greatly extends previous applied research
	Limited theoretical or applied significance	Reasonable theoretical or applied significance	Exceptional theoretical or applied significance
	Limited publication potential	Reasonable publication potential	Exceptional publication potential
Responsible Conduct of	Demonstrates unacceptable originality	Demonstrates acceptable originality	Demonstrates exceptional originality
ocarcii	Lacks regulatory compliance	Considers regulatory compliance	Demonstrates regulatory compliance
	Documentation is inadequate	Documentation is adequate	Documentation is excellent
Quality of writing	Writing is weak	Writing is adequate	Writing is publication quality
	Numerous grammatical and spelling	Some grammatical and spelling errors	No grammatical or spelling errors
	Organization is noor	Organization is logical	Organization is excellent
Overall Assessment	Does not most evacuations	Mosts Europetions	Description of Description
Chair of Examining Committee:		Date:	rycces rybecations
)			
	. 4		

2 13			Page 3
Form CoT GEC 13	t Proposal:		
	ance on Directed Projec	Date:	
	student concerning perform:	, ,	
	Committee Member comments for student concerning performance on Directed Project Proposal:	ttee Signature	
Student Name:	Summary of <u>Individual</u> Co	Chair of Examining Committee Signature	

APPENDIX J: COT FORM 2: ACCEPTANCE OF GRADUATE PROPOSAL

V 1.0	Please type or print clearl August 2010
	College of Technology Graduate Studies
	eptance of Graduate Proposal uate Studies Office Following Proposal Defense Meeting)
Title of Project:	
Proposal Defense Date:	Project Type: Directed Project Thesis Dissertation
Chair	Date (month/day/year)
Member	Date (month/day/year)
Member	Date (month/day/year)
Member	Date (month/day/year)
Printed Name and Signature of Candidate	Date (month/day/year)

APPENDIX K: GEC 12 WRITTEN AND ORAL PRELIMINARY EXAMINATION FORM

(available at https://tech.purdue.edu/office-of-academic-affairs/faculty-and-staff-resources/faculty-and-staff-forms)

Form CoT GEC 12	andidacy ation to Committee) 2 (circle correct number) rics and provide written comments to the nt, a short explanation should be provided. valuation of the examinee's performance if ormmittee and a verbal summarization of the or oral examination.	Page 1
	Rubric for Evaluating Written and Oral Preliminary Examinations for Ph.D. Candidacy Chis page should be filled out by the student or Committee Examination literation: 1 2 (circle correct number)	lacy.
Student Name:	Chair of Examination Committee Chair of Examination Committee Chair of Examination Committee Chair of Examination Committee Date of Oral Examination Dissertation Title Dissertation Title Dissertation Title Committee Members and Department At the conclusion of the written and oral examinations, each committee member should fill out performance rubrics and provide written comments to the student on the pages provided. For each articuture which a committee member should fill out performance rubrics and provide written comments to the student on the student of each nibrio are provided for explanations of the reasoning behind the overall evaluation of the examinee's performance by the committee member Written to member with a toward the student. Written Comments from each committee member Wilde to the student by the chair of the student by the committee will be student by the committee will be student by the committee or at a verbal summarization of the overall evaluation of the student's performance by the comments) must be essent to Dr. Gary R. Bertoline, Associate Dean for Graduate Programs, at the conclusion	of both portions of the preliminary examination for Ph.D. Candidacy.

(To be completed by each committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute acts are foundations. Does not reflect understanding of Exhibits understanding of Ex	- Cambradana	Date.	
Attribute Overall quality of responses Re La	member. Please check boxes for all evo	luation criteria that you feel are appropriat	e within each attribute category)
	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
La	Responses are flawed	Responses are adequate	Responses are exceptional
2	Lacks careful, critical thinking skills	Demonstrates average critical thinking skills	Exhibits mature, critical thinking skills
ns	Does not reflect understanding of subject matter and pertinent literature	Exhibits understanding of subject matter and pertinent literature	Exhibits mastery of subject matter and pertinent literature.
Ar	Arguments are weak, inconsistent or unconvincing.	Arguments are coherent	Arguments are exceptional
The Design of the Control of the Con	Demonstrates little understanding of theoretical concepts	Demonstrates average understanding of theoretical concepts	Demonstrates exceptional understanding of theoretical concepts
Di	Displays limited creativity and insight	Displays some creativity and insight	Displays superior creativity and insight
Overall breadth of knowledge M	Majority of responses unacceptable	Majority of responses acceptable	All responses acceptable
	Responses reveal critical weaknesses in depth of knowledge in subject matter	Responses reveal some depth of knowledge in subject matter	Responses reveal exceptional depth of knowledge in subject matter
Re th	Reponses reflect limited critical thinking skills	Reponses reflect above average critical thinking skills	Reponses reflect well developed critical thinking skills
Re	Reponses are narrow in scope	Responses reveal the ability to draw from knowledge in several disciplines	Reponses reveal the ability to interconnect and extend knowledge from multiple disciplines
Ethical Considerations De	Demonstrates unacceptable originality	Demonstrates acceptable originality	Demonstrates exceptional originality
Quality of writing W	Writing is weak	Writing is adequate	Writing is millication quality
Z	Numerous grammatical and spelling	Some grammatical and spelling errors	No grammatical or spelling errors
i o	Organization is poor	opporein Organization is logical	Organization is excellent
Overall Assessment Do	Does not meet expectations	Meets Expectations	Exceeds Expectations
Comments:			
Completed by:	Date:		
			Page 2

Form CoT GEC 12	•		 V W II		·		 ,	Page 3
							Date:	
	<u>Individual</u> Committee Member comments for student concerning performance on written examination:						Da	
	mber comments for student conc	CHICAGO COMPANIA	# 1 × 10 MM 10				on Rubric – Completed by:	
Student Name:	<u>Individual</u> Committee Men		*;:::w: ::				Committee Member Signature Oral Preliminary Examination Rubric - Completed by:	

		Γ,					Į.					90		_	-	Γ				Page 4
Form CoT GEC 12	e within each attribute category)	Exceeds Expectations	Responses are eloquent	Arguments are skillfully presented	Respondent exhibits superior	knowledge in subject area and pertinent literature	Responses exceed level expected of a Ph.D. candidate	Responses superior	Responses reveal exceptional	deptin of subject knowledge	Responses reveal well developed critical thinking skills	Responses reveal the ability to interconnect and extend knowledge from multiple disciplines	Responses are eloquent	Arguments are skillfully presented.	Respondent exhibits superior verbal communication skills	Exceeds Expectations				4
	To be completed by each committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute category	Meets Expectations	Responses are complete	Arguments are well organized	Respondent exhibits adequate	knowledge in subject area and pertinent literature	Responses meet level expected of a Ph.D. candidate	Responses acceptable	Responses reveal some depth of	NIOWICUSC III Subject IIIatter	Responses reveal above average critical thinking skills	Responses reveal the ability to draw from knowledge in several disciplines	Responses are complete	Arguments are well organized	Respondent exhibits confidence in verbal communication skills	Meets Expectations			Date:	
•••	e member. Please check boxes for all eva	Does Not Meet Expectations	Responses are incomplete	Arguments are poorly presented	Respondent exhibits lack of	knowledge in subject area and pertinent literature	Responses do not meet level expected of a Ph.D. candidate	Responses unacceptable	Responses reveal critical	in subject matter	Responses reveal poor critical thinking skills	Responses are narrow in scope	Responses are incomplete	Arguments are poorly presented	Respondent exhibits excessive lack of confidence in verbal communication skills	Does not meet expectations	,			
Student Name:	To be completed by each committee	, Attribute	Overall quality of responses					Overall breadth of knowledge			, .		Quality of Communication Skills			Overall Assessment	Comments:		Chair of Examining Committee:_	

	Form CoT GEC 12					Page 5
. *		oral examination:			Date:	
	Q	Summary comments from <u>ALL</u> committee members for student concerning performance on oral examination:				
	**************************************		*		Chair of Examining Committee Signature	
	Student Name:	Summary comme			Chair of Examinin	

APPENDIX L: GEC 09 THESIS AND DEFENSE FORM

Student Name:			Form CoT GEC 9
٠	Rubric for Evaluating MS Thesis and Defense (This page should be filled out by the student or Committee)	Rubric for Evaluating MS Thesis and Defense y the studeut or Committee Chairman/advisor prior to distribution t	Committee)
Chair of Evaluation Committee	ommittee		
Advisor:	Date	Date of Thesis Defense	
Thesis Title			
Committee Members and	and Department		
At the conclusion of the somewhat or very deficies behind the overall evalua Advisor), not the student.	At the conclusion of the Thesis Defense, each committee member should fill out the response sheet. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. Comment sections at the bottom of the rubric are provided for explanations of the reasoning behind the overall evaluation of the examinee's performance if desired. Completed forms are to be turned in to the Chair of the Evaluation Committee (or Advisor), not the student.	fill out the response sheet. For each attributent sections at the bottom of the rubric are prompleted forms are to be turned in to the Cha	e which a committee member feels is ided for explanations of the reasoning ir of the Evaluation Committee (or
A summary of writte verbal summarization	A summary of written comments from the committee members WILL be provided to the student by the chair of the examining committee (or Advisor) and a verbal summarization of the overall evaluation of the student's performance by the committee WILL be provided to the student by that individual.	provided to the student by the chair of the exity the committee WILL be provided to the stude	mining committee (or Advisor) and a or by that individual.
All examination docur	All examination documents (rubrics and written comments) must be completed regardless of the outcome of the Thesis Defense.	d regardless of the outcome of the Thesis Defen	9
A copy of the completed f the conclusion of the Thes	A copy of the completed forms (both rubrics and written comments) must be sent to Dr. Gary R. Bertoline, Assistant Dean for Graduate Programs within 48 hours of the conclusion of the Thesis Defense.	sent to Dr. Gary R. Bertoline, Assistant Dean for	Graduate Programs within 48 hours of
			Page 1

Form CoT GEC 9		te within each attribute category) Exceeds Expectations	Well organized	Professional presentation	Excellent communication skills	Slides and handouts outstanding	Presentation superior	Presentation reveals exceptional	depth of subject knowledge	Presentation reveals well developed	critical thinking skills	Presentation reveals the ability to interconnect and extend knowledge from multiple disciplines	Responses are eloquent	Arguments are skillfully presented	Respondent exhibits superior knowledge in subject area	Responses exceed level expected of a MS graduate	Exceeds Expectations		Page 2
	Date:	uation criteria that you feel are appropriat Meets Expectations	Clearly organized	Clear presentation	Good communication skills	Slides and handouts clear	Presentation acceptable	Presentation reveals some depth of	knowledge in subject matter	Presentation reveals above average	critical thinking skills	Presentation reveals the ability to draw from knowledge in several disciplines	Responses are complete	Arguments are well organized	Respondent exhibits adequate knowledge in subject area	Responses meet level expected of a MS graduate	Meets Expectations		
	ed by:	committee member. Please check boxes for all evaluation criteria that you feel are appropriate within each attribute category) Does Not Meet Expectations Meets Expectations	Poorly organized	Poor presentation	Poor communication skills	Slides and handouts difficult to read	Presentation unacceptable	Presentation reveals critical	weaknesses in depth of knowledge	in subject matter	Presentation does not reflect well	developed critical thinking skills Presentation is narrow in scope	Responses are incomplete	Arguments are poorly presented	Respondent exhibits lack of knowledge in subject area	Responses do not meet level expected of a Ph.D. graduate	Does not meet expectations		
Student Name:	Thesis Defense Rubric - Completed by:	(To be completed by each committee	Overall quality presentation				Overall breadth of knowledge		**				Quality of response to questions		,		Overall Assessment	Comments:	

Student Name:	Thesis Rubric - Completed by:	each committee m		Overall quality of science Arguments are	Objectives are poorly defined	Demonstrates n thinking skills	Does not reflect understanding subject matter and associated literature	Demonstrates poor urtheoretical concepts	Displays limite	Contribution to discipline Limited evider	Limited expan research	Limited theore significance	Limited publication potential	Responsible Conduct of Demonstrates u		Documentation is inadequate	Quality of writing Writing is weak	Numerous gran	Organization is poor	Overall Assessment Does not meet expectations	Chair of Examining Committee:		•
		ase check boxes for all eve	Does Not Meet Expectations	Arguments are incoherent or flawed	poorly defined	Demonstrates rudimentary critical thinking skills	Does not reflect understanding of subject matter and associated literature	Demonstrates poor understanding of theoretical concepts	Displays limited creativity and insight	Limited evidence of discovery	Limited expansion upon previous research	Limited theoretical or applied significance	tion potential	Demonstrates unacceptable originality	ry compliance	is inadequate		Numerous grammatical and spelling	poor	expectations			
	Date:	aluation criteria that you feel are appropria	Meets Expectations	Arguments are coherent and clear	Objectives are clear	Demonstrates average critical thinking skills	Reflects understanding of subject matter and associated literature	Demonstrates understanding of theoretical concepts	Displays creativity and insight	Some evidence of discovery	Builds upon previous research	Reasonable theoretical or applied significance	Reasonable publication potential	Demonstrates acceptable originality	Considers regulatory compliance	Documentation is adequate	Writing is adequate	Some grammatical and spelling errors	Organization is logical	Meets Expectations	Date:		• • 100
Form CoT GEC 9		te within each attribute category)	Exceeds Expectations	Arguments are superior	Objectives are well defined	Exhibits mature, critical thinking skills	Exhibits mastery of subject matter and associated literature.	Demonstrates mastery of theoretical concepts	Displays exceptional creativity and insight	Exceptional evidence of discovery	Greatly extends previous research	Exceptional theoretical or applied significance	Exceptional publication potential	Demonstrates exceptional originality	Demonstrates regulatory compliance	Documentation is excellent	Writing is publication quality	No grammatical or spelling errors	apparent Organization is excellent	Exceeds Expectations		Page 3	

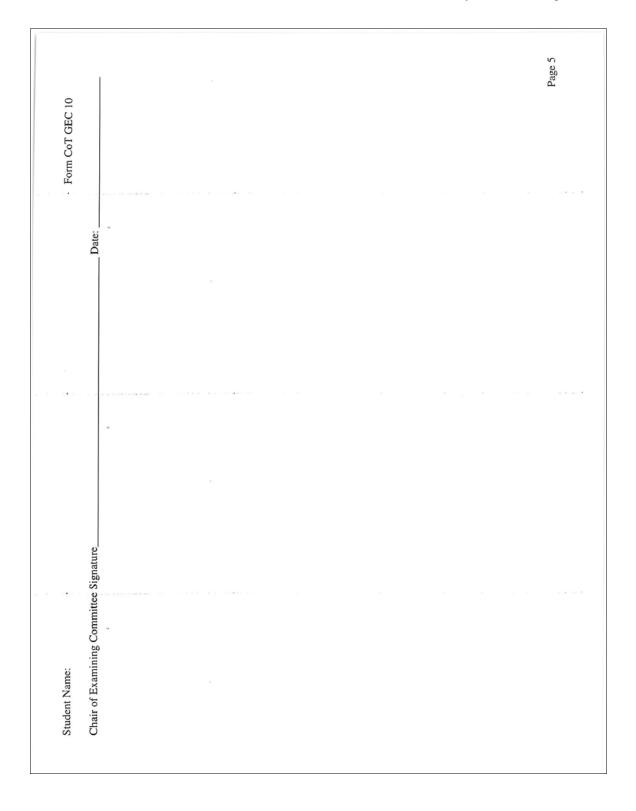
Form CoT GEC 9	fense:	Page 4
	ning performance on Thesis and De	
	mittee members for student concer-	
Name:	Summary of written comments from ALL committee members for student concerning performance on Thesis and Defense: Chair of Examining Committee Signature Date:	
Student Name:	Summary of written com	

APPENDIX M: GEC 10 DIRECTED PROJECT AND DEFENSE FORM

Student Name:	i r	Form CoT GEC 10
Rubric for Evaluating MS Directed Project and Defense (This page should be filled out by the student or Committee Chairman/advisor prior to distribution to Committee) Chair of Evaluation Committee	ng MS Directed Project and Defense Committee Chairman/advisor prior to distribution to Committee Chairman/advisor prior to distribution to Committee Chairman/advisor prior to distribution to Committee Chairman/advisor Defense	ittee)
Project Title		
Committee Members and Department	30 000	
At the conclusion of the Directed Project Defense, each committee member should fill out the response sheet. For each attribute which a committee member feels is somewhat or very deficient, a short explanation should be provided. Comment sections at the bottom of the rubric are provided for explanations of the reasoning behind the overall evaluation of the examinee's performance if desired. Completed forms are to be turned in to the Chair of the Evaluation Committee (or Advisor), not the student.	ill out the response sheet. For each attribut it sections at the bottom of the rubric are preleted forms are to be turned in to the Chair of	e which a committee member ovided for explanations of the of the Evaluation Committee
A summary of written comments from the committee members WILL be provided to the student by the chair of the examining committee (or Advisor) and a verbal summarization of the overall evaluation of the student's performance by the committee WILL be provided to the student by that individual. All examination documents (rubrics and written comments) must be completed regardless of the outcome of the Directed Project Defense.	o the student by the chair of the examining intee WILL be provided to the student by that so of the outcome of the Directed Project Defer	committee (or Advisor) and a t individual.
A copy of the completed forms (both rubrics and written comments) must be sent to Dr. Gary R. Bertoline, Assistant Dean for Graduate Programs within 48 hours of the conclusion of the Directed Project Defense.	Sary R. Bertoline, Assistant Dean for Graduat	e Programs within 48 hours of
		Page 1

Directed Project Rubric - Completed by:			Form CoT GEC 10
	upleted by:	Date:	
(To be completed by each comm	To be completed by each committee member. Please check boxes for all evaluation criteria that vou feel are appropriate within each attribute category)	luation criteria that vou feel are appropriat	e within each attribute category)
Attribute	Does Not Meet Expectations	Meets Expectations	Exceeds Expectations
Overall quality of science	Arguments are incoherent or flawed	Arguments are coherent and clear	Arguments are superior
	Objectives are poorly defined	Objectives are clear	Objectives are well defined
	Demonstrates rudimentary critical thinking skills	Demonstrates average critical thinking skills	Exhibits mature, critical thinking skills
	Does not reflect understanding of subject matter and associated	Reflects understanding of subject matter and associated literature	Exhibits mastery of subject matter and associated literature.
	nierature		
	Demonstrates poor understanding of theoretical concepts	Demonstrates understanding of theoretical concepts	Demonstrates mastery of theoretical concepts
	Displays limited creativity and insight	Displays creativity and insight	Displays exceptional creativity and insight
Contribution to discipline	Limited evidence of discovery	Some evidence of discovery	Exceptional evidence of discovery
	Limited expansion upon previous research	Builds upon previous research	Greatly extends previous research
	Limited theoretical or applied significance	Reasonable theoretical or applied significance	Exceptional theoretical or applied significance
	Limited publication potential	Reasonable publication potential	Exceptional publication potential
Responsible Conduct of	Demonstrates unacceptable originality	Demonstrates acceptable originality	Demonstrates exceptional originality
Nescalcii	Lacks regulatory compliance	Considers regulatory compliance	Demonstrates regulatory compliance
	Documentation is inadequate	Documentation is adequate	Documentation is excellent
Quality of writing	Writing is weak	Writing is adequate	Writing is publication quality
	Numerous grammatical and spelling	Some grammatical and spelling errors	No grammatical or spelling errors
	Organization is noor	Organization is logical	Organization is avoid lant
Overall Assessment	Does not meet expectations	Meets Expectations	Exceeds Expectations
Comments:			
			Page 3

· Form CoT GEC 10	nd Defense:			Page 4
. Form (rmance on Directed Project a	gra- 100 00 000 - wild		
Date:	<u>Summary</u> of written comments from <u>ALL</u> committee members for student concerning performance on Directed Project and Defense:			
Committee:	en comments from <u>ALL</u> committee n			
Student Name: Chair of Examining Committee:	Summary of writte			



APPENDIX N: GS FORM 9: THESIS ACCEPTANCE

(more information available at http://www.gradschool.purdue.edu/thesis3.cfm)

NOTE: This form *must* be completed and turned in by *all* master's and Ph.D. candidates at their final thesis deposit appointment. Please do not confuse this form with the ETD Form 9, linked elsewhere on this website, which is solely used by *Ph.D.*'s when submitting Electronic Thesis Deposits.

Please carefully read the following instructions and ensure you have properly completed this form and have obtained all required signatures and dates. Failure to do so will cause needless delays in your processing.

G. S. Form 9, "Thesis Acceptance"

The "original" copy of this form *must* be printed on 100% cotton, non-acidic paper *prior* to having it signed by your committee members, major professor, et.al. This is due to the following:

- Ph.D. candidates submitting via Electronic Thesis Deposit must still turn in their original, signed "Thesis Acceptance" form at their final deposit appointment.
 This copy of the form will be permanently maintained on file at the Graduate School. Accordingly, the Graduate School needs an "archival quality" copy of your thesis acceptance form to ensure it remains in good condition, since woodpulp ("acidic") paper deteriorates and fades with age.
- Ph.D. candidates who prefer to submit their dissertations in traditional "hard copy" form will also need to ensure an original completed and signed copy, printed on 100% cotton paper, is bound into the "deposit copy" they furnish at their final deposit appointment. However, please note that hard copy submissions will no longer be accepted once mandatory Electronic Thesis Deposit for doctoral candidates commences effective 23 August 2007.
- All other copies of your Thesis Acceptance form may be printed on regular copier paper, unless departmental requirements dictate otherwise.
- Candidates unable to immediately obtain 100% cotton paper from their department or workplace may contact the Thesis/Dissertation Office and it will be furnished to them at no charge.

Questions? Please contact the Thesis/Dissertation Office at 6-3157 or at markj@purdue.edu

PURDUE UNIV GRADUATE SO Thesis/Dissertation	CHOOL
This is to certify that the thesis/dissertation prepared	
Ву	
Entitled	
For the degree of	
Is approved by the final examining committee:	
Chair	
Approved by:	
Head of the Graduate Program To the best of my knowledge and as understood by the st Copyright Disclaimer (Graduate School Form 20), this t Purdue University's "Policy on Integrity in Research" an	thesis/dissertation adheres to the provisi
	Major Professor
—	
This thesis is not to be regarded as confidential.	Major Professor
=	Major Professor
This thesis is not to be regarded as confidential.	Major Professor Department Thesis Format Advisor

APPENDIX O: DIRECTED PROJECT COVER PAGE

(available at https://tech.purdue.edu/office-of-academic-affairs/faculty-and-staff-resources/faculty-and-staff-forms)

PURDUE UNIVERSITY Purdue University West Lafayette, Indiana	
College of Technolo	In partial fulfillment of the requirements for the Degree of Master of Science in Technology A Directed Project Proposal By <your here="" name=""> <date></date></your>
<u>Committee Member</u> <name>, Chair</name>	Approval Signature Date
<name> <name></name></name>	
<name></name>	

APPENDIX P: GEC 06 GRADUATE TEACHING EVALUATION FORM

Form CoT GEC 6					sibilities student had			tandard evaluation scores e and; a verbal culty member overseeing	Graduate Programs and	. Page 1	
	g Assistants overseeing the teaching assistant				or laboratory format; and respon			well as any written comments and st r overseeing the teaching experience LL be provided to the student by far ee completed.	nt head and the Associate Dean for (
	Rubric for Evaluating Graduate Teaching Assistants (This form and rubric should be completed by the faculty member overseeing the teaching assistant.)	Advisor	Semester		Describe teaching assistant's responsibilities in the course. Include if course was in lecture or laboratory format, and responsibilities student had regarding course content and course development.			A summary of written comments from the faculty member overseeing the teaching experience as well as any written comments and standard evaluation scores provided by students enrolled in the course WILL be provided to the student performance in the teaching experience wILL be provided to the student by faculty member overseeing the teaching experience. All evaluation of the students performance in the teaching experience WILL be provided to the student by faculty member overseeing the teaching experience. All evaluation documents including rubrics and written comments must be completed.	forms (both rubrics and written comments) must be sent to your department head and the Associate Dean for Graduate Programs and of the completion of the teaching evaluation.		. 147
`a	Rubric (This form and rubric should		er (1	ıts.	Describe teaching assistant's responsibilities in the co regarding course content and course development.			tten comments from the faculty membors enrolled in the course WILL be provide overall evaluation of the students perece. All evaluation documents included.	A copy of the completed forms (both rubrics and written comments) I Research within 1 week of the completion of the teaching evaluation.	(*)	
Student Name:		Student	Course Taught	Number of students	Describe teaching regarding course c			A summary of written c provided by students enr summarization of the ow the teaching experience.	A copy of the completed Research within 1 week		

, C	Form CoT GEC 6	Date:	Exceeds Expectations	Thorough and complete knowledge of material.	Extremely well organized and prepared for class.	Educational supplements enhanced learning, and added substantially to the class.	Instructor interacted very effectively with student learners. Students seek out instructor for assistance.	Assistance. Material was delivered in a clear and understandable fashion. Delivery style engaged learners in the process.	Assessments are exceptional. Accurately reflect content taught; higher level learning, and demonstrate thorough learner grasp of concepts and theory.	Exceptional instructional practices. Learners are stimulated and engaged. Instructor is responsive and applies feedback.	Exceptional.	Documentation is excellent	Exceeds expectations	Page 2
	•		Meets Expectations	Familiar with material. Can handle most learner inquiries.	Well- prepared for class.	Educational supplements were appropriate.	Instructor interacts competently with students. Comfortable fielding and seeking questions.	Material was well delivered. No speaking or teaching mannerisms to distract the learner	Assessments are very well done. Accurately reflect content taught; and assess higher level learning and thinking.	Instructional practices are creative and innovative. Learners respond to instruction.	Above average.	Documentation is adequate	Meets expectations	
O C		Feaching Rubric – Completed by:	Does Not Meet Expectations	Not familiar with material.	Not prepared for class.	Educational supplements were inappropriate or did not add to student learning.	Instructor uncomfortable with student interaction, and interacts in only the most basic ways.	Material was poorly delivered. Speaking or mannerisms created distractions limiting effectiveness.	Assessments are non- existent; or inappropriate for context.	Instructional practices are not adjusted to improve student learning; or in response to feedback	Poor.	Documentation is inadequate	Does not meet expectations	
Student Momen	Student Name:	Graduate Outcome T	Criteria	Content Knowledge	Organization/Prepara tion	Educational Supplements	Interaction with students	Delivery of material (lecture or laboratory)	Assessment of learning	Improvements in Instructional practice	Student (PICES) Evaluations	Ethics	Overall Assessment	

r GEC 6						Page 3
Form CoT GEC 6	4	 e e e e e e e e e e e e e e e e e e e				
	Experience:				,	Date:
	Completed by: Date:					
* ****	aching Evaluator concerni	 e a craetament sen				p
Student Name:	Completed by:					reaching Evaluator Signature

APPENDIX Q: GEC 14 GRADUATE RESEARCH ASSISTANT EVALUATION FORM

Student Name:	2 30 44.40		Form CoT GEC 14
(This fon	Rubric for Evaluating Graduate Research Assistants (This form and rubric should be completed by the faculty member overseeing the research assistant.)	te Research Assistants ry member overseeing the research assistant.)	
Student	Supervisor		
Project Title			4
Semester			
Describe research assistant's responsibilities within the project.	onsibilities within the project.		
A copy of the completed forms (both rubrics and written con Research within 1 week of the completion of the evaluation.	A copy of the completed forms (both rubrics and written comments) must be sent to your department head and the Associate Dean for Graduate Programs and Research within 1 week of the completion of the evaluation.	our department head and the Associate Dean for Gr	aduate Programs and
			Page 1

3EC 14		ısks.			0 e	uity	t t		.g				Page 2
Form CoT GEC 14	Exceeds Expectations	Accomplished all assigned tasks.	Was on time and attended all	meetings.	Assistant made every effort to meet what was needed for the project.	Assistant demonstrated outstanding creativity, ingenuity or problem solving ability.	Assistant demonstrated outstanding time management skills.	Assistant demonstrated outstanding communication (verbal, email, etc.).	Assistant demonstrated outstanding integrity in her/his work.	Exceeds expectations	v		
ו•	Meets Expectations	Accomplished most assigned	Was on time and attended most	meetings.	Assistant was generally flexible and attempted to accommodate what was needed of her/him	Assistant demonstrated some creativity, ingenuity or problem solving ability.	Assistant demonstrated satisfactory time management skills.	Assistant communicated satisfactorily (verbal, email, etc.).	Assistant demonstrated satisfactory integrity in her/his work.	Meets expectations		Date:	
Student Name: Graduate Outcome Teaching Rubric - Completed by:	Does Not Meet Expectations	Did not accomplish all	assigned tasks. Did not attend meetings as	required or was late.	Assistant was inflexible and unable to accommodate necessary tasks.	Assistant demonstrated no creativity, ingenuity or problem solving ability.	Assistant demonstrated no time management skills.	Assistant communicated poorly (verbal, email, etc).	Assistant demonstrated no integrity in her/his work.	Does not meet expectations	,		
Student Name: Graduate Outcome T	Criteria	Task	Meeting Attendance		Flexibility	Ingenuity	Time Management	Communication	Ethics	Overall Assessment		Completed by:	

