February 3, 2015
(Last update: 02/02/15)

Handouts of the Graduate Faculty Council
Graduate Faculty Status Review Template

Version 2.1

This template is meant to assist unit chairs/deans with the periodic review of the qualifications of each of their graduate faculty-eligible members as per Section 1.5.3 “Graduate Faculty Status” of the Faculty Handbook. Completed forms will be reviewed by the Dean of the Graduate School and will be used to update the listing of eligible Graduate Faculty.

This review shall take place every 6 years from the start of the member’s eligible status as graduate faculty. To retain the status of Graduate Faculty, the unit chair/dean must circle at least one item in Section 1 and one item in Section 2 related to the faculty member under review.

1. Qualifications of Graduate Faculty. Does the faculty member under review meet one or more of the following criteria? (Circle all that apply.)

   a. Possesses experience and continued interest in the conduct of research.
   b. Has the necessary background for, and a continued interest in, teaching graduate courses.
   c. Has continuing interest in serving as a graduate student advisor.

2. Evidence of Qualifications. Does the faculty member under review meet one or more of the following criteria? (Circle all that apply.)

   a. Is currently involved in research work or graduate instruction or in advising graduate students.
   b. Regularly publishes articles in recognized journals having national distribution or books related to their field of study.
   c. Has earned the terminal degree in his/her field.

Response by reviewee:

Faculty members should indicate in writing below whether or not they concur with the unit chair’s/dean’s review. If the faculty member does not concur, the member should support their argument with reasons, providing relevant evidence.
1.5.3 Graduate Faculty Status

A. Membership

The Graduate Faculty consists of tenured and tenure-track members of the academic faculty holding the rank of ASSISTANT PROFESSOR, ASSOCIATE PROFESSOR, or PROFESSOR who have been appointed by the Dean of the Graduate School. Tenured and tenure-track faculty who are awarded EMERITUS status upon retirement remain members of the Graduate Faculty.

The Dean of the Graduate School may also grant graduate faculty status to others with an on-going professional relationship with Michigan Tech, including RESEARCH, PART-TIME, VISITING, or ADJUNCT faculty members, LECTURERS and INSTRUCTORS, RESEARCH ENGINEERS, and RESEARCH SCIENTISTS.

Under special circumstances, the graduate dean may appoint individuals with special technical expertise to the Graduate Faculty for a specific term and purpose, such as serving as a member of a student's advisory committee.

Graduate faculty members are eligible to teach graduate courses (5000 level and above), serve as examining members on Masters and PhD committees, and supervise Masters and PhD students.

Persons who are not members of the Graduate Faculty may teach 5000 and 6000 level courses only after obtaining written approval from the Dean of the Graduate School.

B. Qualifications of Graduate Faculty

1. Qualifications expected for graduate faculty appointment:
   a. Experience and continued interest in the conduct of research.
   b. The necessary background for, and a continued interest in, teaching graduate courses.
   c. Continued interest in serving as a graduate student advisor.

2. Evidence of Qualifications
Faculty may meet the qualification requirements if they:

a. Are currently involved in research work or graduate instruction or in advising graduate students.

b. Regularly publish articles in recognized journals having national distribution or books related to their field of study.

c. Have earned the terminal degree in their field.

C. Appointment Procedures

Graduate Faculty appointment and retention decisions are made by the Dean of the Graduate School with recommendations and advice from department chairs, deans of colleges and schools, and the Graduate Faculty Council.

Recommendation for Graduate Faculty status is made in writing by the department chair of the appropriate academic unit or by the dean of the appropriate School. These recommendations are forwarded to the college dean, where appropriate, and then to the Graduate Dean.

D. Review of Graduate Faculty

It is expected that department chairs/school deans will continually review the performance of all individuals holding graduate faculty status in their respective units using criteria outlined in Section B above.

When, in a department chair/school dean's professional judgement, a faculty member holding a graduate faculty appointment is no longer satisfactorily functioning in this capacity, s/he must recommend that the individual in question be removed from graduate faculty status. The Dean of the Graduate School may also initiate the removal process in consultation with the appropriate chair/dean. The Dean of the Graduate School will act on recommendations with the advice and consent of the Graduate Faculty Council.
The University Senate of Michigan Technological University

Proposal XX-15

(Voting Units: Academic)

“Definition of “Joint” Faculty Appointments”

I. Background

This proposal is to formalize the definition of a term applied to tenured or tenure-track faculty who contribute scholarship in more than one discipline at the University.

This proposal also rectifies the current situation regarding the use of the term “adjunct” at Michigan Tech. At Michigan Tech, the term “adjunct” is currently applied to faculty members who contribute scholarship in more than one discipline at the University but only receive financial compensation from one discipline. This use of the term “adjunct” is not in alignment with the usage of the term at other institutions of higher education.

II. Proposal

The proposed changes are intended to be added to the Tenured/Tenure-Track Faculty Handbook.

II.a. Joint Faculty Appointments

JOINT FACULTY APPOINTMENT (Professor, Associate Professor, Assistant Professor):

Joint faculty appointments are used to acknowledge and support the scholarly contributions that faculty may make in more than one discipline.

All faculty members holding joint appointments must have a primary affiliation within an academic department or school. The primary department or school will be responsible for annual reviews for the faculty member’s reappointment, tenure, promotion, and salary consideration. The primary department/school will seek and consider written input from the chair of the department(s) and/or dean of the school(s) hosting the faculty member’s joint appointments.

Joint faculty appointments may or may not be associated with the distribution of salary for a faculty member among two (or potentially more) academic units at Michigan Tech.

Joint faculty appointments are at the same rank (i.e., professor, associate professor, or assistant professor) as a faculty member’s primary appointment.
Joint faculty appointments are possible with non-departmental and interdisciplinary programs as well as with departments or departmental programs.

All requests for joint appointments must be approved by the provost. Requests for joint appointments also need approval from the:

- faculty member’s primary academic department chair or school dean,
- dean of the faculty member’s primary college (if in a college)
- faculty member’s joint-appointment discipline’s department or school (for disciplinary appointments) or the appropriate executive group or director and Graduate Dean for interdisciplinary appointments.
- dean of the faculty member’s joint appointment college (if the joint-appointment discipline is housed in a college)
Graduate Certificate in STEM (Science, Technology, Engineering and Mathematics) Education

December 8, 2014
Revised January 29, 2015

Contacts: Shari Stockero, Director of Teacher Education, Cognitive and Learning Sciences
Jacqueline Huntoon, Associate Provost and Dean of the Graduate School
Susan Amato-Henderson, Chair, Cognitive and Learning Sciences

1. General Description and Characteristics of Program

The Department of Cognitive and Learning Sciences proposes the establishment of a “Graduate Certificate in STEM (Science, Technology, Engineering and Mathematics) Education”. Students completing this certificate will develop competencies in planning and delivering effective STEM instruction and conducting research on topics related to teaching and learning in the STEM disciplines.

The certificate will be available to all degree seeking students enrolled in the Graduate School at Michigan Technological University as well as non-degree seeking students at MTU. Degree seeking students will be required to complete 12 credits for the certificate and non-degree seeking students will be required to complete 15 credits. The Graduate Program Director for the Masters in Applied Science Education (MSASE) program will serve as the Graduate Certificate Director for the certificate program. The Graduate Certificate Director will oversee the certificate program and make day-to-day decisions regarding operations of the certificate program. The Graduate Certificate Director will collaborate with a Graduate Certificate Committee, consisting of members drawn from various STEM departments, to make strategic decisions regarding the program.

Catalog Description—The Graduate Certificate in STEM (Science, Technology, Engineering and Mathematics) Education provides graduate students and non-degree seeking students with at least a bachelor’s degree in a STEM discipline with the skills to develop and implement effective STEM instruction and conduct research related to teaching and learning in the STEM disciplines. The certificate is available to all degree seeking students enrolled in the Graduate School at Michigan Technological University as well as non-degree seeking graduate level students.

2. Rationale

Developing high-level skills in STEM content areas has become a national priority, as such skills are essential both to improving access to advanced educational opportunities and to workplace success. There is widespread interest in ensuring that more students pursue and succeed in the STEM fields in colleges and universities.

Improvements in undergraduate teaching practices will contribute to the goal of encouraging and enabling more students to persist and earn degrees in STEM fields (see, for example,
Preparing current graduate students and current/future university and community college faculty to develop, teach and study the outcomes of STEM instruction will contribute to the necessary improvements.

This certificate program is aligned with similar graduate certificate (and Ph.D.) programs at other universities that aim to improve STEM teaching and research (see below). Developing such a program at Michigan Tech has the potential to both attract new graduate students who have an interest in STEM education and to better prepare our current graduate students for careers in STEM education.

3. Related Programs

Similar certificate programs are offered at Virginia Tech and Clemson. A number of universities, including Virginia Tech, Clemson, Purdue, Ohio State, University of Minnesota and Dartmouth offer graduate degrees in STEM Education.

4. Projected Enrollment

Over the past several years, a number of graduate students working on education-related projects (e.g., projects funded by the National Science Foundation including an MSP, GK-12, IGERT, etc.) have expressed an interest in enrolling in education coursework that would allow them to earn a specific acknowledgement.

Additionally, current PhD students are finding that prospective academic employers are interested in knowing more about their teaching philosophy and in some cases ask to see a teaching portfolio. At the current time, students in many programs receive no formal training related to teaching and learning, and these students have found themselves at a disadvantage when searching for an academic position because students from other schools are receiving this training.

Finally, students who are serving as GTAs or GTIs at Michigan Tech would benefit from opportunities on campus for professional development and academic growth in the area of education. Having a certificate program available will assist students and advisors in identifying appropriate coursework.

Having a certificate would provide a mechanism for “badging” students who have completed a course of study in the area of STEM education and would help students to prepare portfolios in advance of seeking employment for which training in STEM education is desirable.

Because this certificate program will potentially be of interest to students who wish to conduct education-related research and/or plan to pursue an academic career, it is projected that on the order of 5 students per year will earn this certificate at steady-state.
5. Scheduling

No change in the regular scheduling of the existing courses is anticipated. ED5700 is an online course; the remaining courses are regular on-campus courses. The Department of Cognitive and Learning Sciences will fit the proposed new course, STEM Education Practicum (see below), into their regular scheduling plans.

6. Curriculum Design

A total of 12 credits are required for the STEM Education Certificate for degree seeking students and 15 credits are required for non-degree seeking students. Students must earn a grade of B or higher in each of the courses counting toward the certificate. The only new course that will be developed for the certificate program is ED5860.

ED5110  Psychological Foundations of Education (2)
ED5100  College Teaching (1)
ED5700  Introduction to Education Research (2)

Teaching Methods (one of the following or approved equivalent course):
- ED4720  Methods of Teaching Science (2)
- MA4905  Methods of Teaching Mathematics (2)
- PH4710  Methods of Teaching Physics (2)

Statistics (one of the following or approved equivalent course)
- MA5701  Statistical Methods (3)
- PSY5210  Advanced Statistical Analysis and Design I (4)
- SS5004  Statistics for the Social Sciences (3)

ED5860  STEM Education Practicum (2-5 credits)

Together, these courses will provide students an overview of current research and issues in STEM teaching and learning, knowledge of and practice in developing lessons that engage STEM students in inquiry and sense-making, and practical experience in STEM teaching, curriculum development, or research. As interest and participation in the certificate program grows, it is anticipated that CLS or other departments may develop courses that could be approved as alternatives to one or more of the courses listed above. For example, a department might develop a content-specific teaching methods or practicum course to better meet the needs of its students if that department serves a population of students of sufficient size. Another possibility is developing an integrated STEM teaching methods course that focuses on integrating content and scientific practices across the STEM disciplines. As a key component of the program, the STEM Education Practicum provides practical experience in STEM teaching, curriculum design, assessment, and/or research. Modeled after a “student teaching” experience, students will work closely with one or more faculty mentors to develop the skills necessary to engage in high-quality STEM education instruction or research. All students completing a
practicum will also attend a seminar led by a CLS faculty member; this seminar will promote students’ reflection on the experience, focusing on connections between the work in the practicum and research-based strategies to improve teaching and learning.

7. New Course Descriptions

**ED5860  STEM Education Practicum (2-5 credits, may be repeated with different focus)**
This course provides practical experience in teaching, and/or education research, and/or assessment in a STEM discipline, under the supervision of one or more faculty mentors. A teaching practicum will include teaching or mentoring undergraduate students in a STEM content area. A research practicum will involve working with a faculty member on a STEM education research project. An assessment practicum will involve work with STEM assessment activities. A seminar is a required component of all practicum experiences; the focus of the seminar is reflecting on the practicum experience and making connections between the students’ work and research-based strategies to promote teaching and learning. Non-degree seeking students will be required to complete two practicums with different foci.

8. Model Schedule Demonstrating Completion Time

We anticipate that degree-seeking students will take one course toward the certificate each semester. Courses are offered on the following schedule, which will allow degree-seeking students to complete the certificate in 4-5 semesters. Non-degree seeking students could complete the certificate in as little as 2 semesters.

**Fall Courses**
- ED5110
- ED5100
- ED5700
- ED4720
- MA5701

**Spring Courses**
- ED5110
- ED5100
- MA4905
- PH4710

**Courses Offered on Demand:** PSY5210, SS5004, ED5860

9. Library and other Learning Resources

Students in this program will need only the library and other learning resources presently available to all enrolled students.

10. Faculty Resumes

The following faculty contributed to the development of this proposal and will serve this program. Their vitas are available at https://drive.google.com/a/mtu.edu/folderview?id=0B7awkpcWWsEjemtVUzJUemUySzA&usp=sharing

Shari Stockero
Jackie Huntoon
Susan Amato-Henderson
11. **Equipment**
No additional equipment is needed.

12. **Program Costs**
The only additional cost associated with this certificate program is offering the ED5860 STEM Education Practicum course. We do not anticipate that this course will be offered in the Year 1. This course will become part of the Department of Cognitive and Learning Sciences’ regular teaching schedule in Years 2 and 3. The Department is in the process of hiring a new STEM Education faculty member who will support this program, along with other new and ongoing education initiatives. We anticipate that the program will have a positive effect on enrollment in the existing courses, since the enrollment in most of these courses are not typically at capacity.

Some faculty in other departments may be asked to mentor students during the practicum. We anticipate, however, that the students enrolled in this program will be able to positively contribute to faculty members’ work in teaching, curriculum development, assessment, and research.

13. **Space**
No additional space is required.

14. **Policies, Regulations, and Rules**
Credits earned for this certificate may also be applied toward a single graduate degree at Michigan Technological University.

15. **Accreditation Requirements**
None

16. **Planned implementation date**
Fall semester 2015.
Graduate Writing Groups

At the Multiliteracies Center, in Walker room 107, we offer Graduate Student Writing Groups for graduate students at any level. The groups are available for working on projects (planning and writing), proposals, conference papers, posters, presentations and defenses. They are discussion based to allow students to explain their project to other students and get feedback from peers. Evidence shows that we retain 75 - 90% of what we teach others as opposed to only 10% of what we read.

These groups are there to help motivate students, to overcome procrastination, provide organizational strategies, to provide accountability and deadlines and ultimately to help students progress with their projects and get writing done! The groups meet for 1 hour a week in the Multiliteracies Center and are starting now. Please join us to help get writing done.

If you have any questions or would like to make another type of appointment you can reach us at mtmc@mtu.edu or 906-487-2007.

Your username (hlsuokas@mtu.edu) will be recorded when you submit this form. Not hlsuokas? Sign out

* Required

Name *

Email *

Please select the group that works best for you *

- Wednesday 7 - 8 pm (Theses & Dissertations)
- Thursday 4 - 5 pm (Abstracts, Proposals, Articles)
- Friday 1 - 2 pm (Any work)

Please select the block you would prefer to attend *

- Block 1 - Weeks 3 - 8
- Block 2 - Weeks 9 - 14
- Both of these

Send me a copy of my responses.
Results of Benchmarking Study of Number and Roles of External Graduate Committee Members

Summary

The policies for external committee members on thesis or dissertation examining committees of 13 universities were examined. When policies were set by graduate programs, the policies of Mechanical Engineering programs were examined.

- At the PhD level:
  - Ten of the universities require an external committee member.
  - Eleven universities require four committee members, one requires five committee members, and one requires three committee members.
  - For reference purposes, Michigan Tech requires an external committee member and a total of four committee members (including the advisor). If co-advisors are chosen and one co-advisor is from outside the student’s home department or school, it recommended, but not required, than an additional external member be chosen.

- At the MS level:
  - No programs required an external committee member.
  - Committee member requirements were three for nine universities, two for two universities, and one for one university.
  - For reference purposes, Michigan Tech requires an external committee member and a total of three committee members. If co-advisors are chosen and one co-advisor is from outside the student’s home department or school, it recommended, but not required, than an additional external member be chosen.

Recommended Changes to Michigan Tech Graduate School Policies and Procedures

Based on the results of the benchmarking the Graduate School proposes the following changes to the requirements for graduate committee membership at Michigan Tech.

1. The requirement that master’s committees include an “external” member be eliminated.
2. The definition of “external” member for PhD committee be revised so that the external member is defined as a member of the Graduate Faculty who has a 50% or greater appointment outside of the student’s academic home department. If a student is advised by two co-advisors, the external member must be from outside the administrative home(s) of both co-advisors. The role of the external member role is to promote cross-disciplinary scholarly collaboration and consideration of the dissertation research from a perspective that might not be available if all committee members were drawn directly from the student’s field of specialization.
# Appendix 1.
## Doctoral committee requirements

<table>
<thead>
<tr>
<th>University</th>
<th>External required?</th>
<th>Number of members</th>
<th>Definition of external</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado School of Mines</td>
<td>Yes</td>
<td>4</td>
<td>The fourth, required member of the Committee must be a full-time permanent CSM faculty member, may not be an advisor, and must be from outside of the student's doctoral degree program, home department and minor program area(s) – if appropriate. This committee member acts as Thesis Committee Chairperson.</td>
</tr>
<tr>
<td>Michigan State*</td>
<td>Yes</td>
<td>4</td>
<td>At least three members of the guidance committee shall be from the Mechanical Engineering Department and at least one member shall be from a different academic department at Michigan State University. The outside member may be from another department within the College of Engineering or from a department outside the College.</td>
</tr>
<tr>
<td>Missouri University of Science and Technology</td>
<td>Yes</td>
<td>4</td>
<td>The advisory committee must include at least one member from outside the candidate’s major department. One member of the committee should also be designated to represent the department most closely associated with any minor field of study elected by the student.</td>
</tr>
<tr>
<td>North Carolina State University</td>
<td>Yes</td>
<td>4</td>
<td>One of these faculty members must be from the minor field if the student has declared a minor. If a doctoral graduate committee has no representation outside of the student’s graduate program, a Graduate School Representative is required.</td>
</tr>
<tr>
<td>Northwestern Univ.</td>
<td>No</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>University</td>
<td>External required?</td>
<td>Number of members</td>
<td>Definition of external</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Penn State</td>
<td>Yes</td>
<td>4</td>
<td>At least one regular member of the doctoral committee must represent a field outside the candidate’s major field of study in order to provide a broader range of disciplinary perspectives and expertise. This committee member is referred to as the “Outside Field Member.” In cases where the candidate is also pursuing a dual-title field of study, the dual-title representative to the committee may serve as the Outside Field Member. Additionally, in order to avoid potential conflicts of interest, the primary appointment of at least one regular member of the doctoral committee must be in an administrative unit that is outside the unit in which the dissertation/performance adviser's primary appointment is held (i.e., the adviser's administrative home; in the case of tenure-line faculty, this is the individual's tenure home). This committee member is referred to as the “Outside Unit Member.” In the case of co-advisers, the Outside Unit Member must be from outside the administrative home(s) of both co-advisers. In some cases, an individual may have a primary appointment outside the administrative home of the student’s dissertation/performance adviser and also represent a field outside the student’s major field of study; in such cases, the same individual may serve as both the Outside Field Member and the Outside Unit Member.</td>
</tr>
<tr>
<td>Purdue</td>
<td>No</td>
<td>4</td>
<td>NA</td>
</tr>
<tr>
<td>Stony Brook University</td>
<td>Yes</td>
<td>4</td>
<td>One member external to the program. The outside member should have expertise in the student’s research field so as to be able to understand, criticize, and contribute to the dissertation, as well as to judge the quality and significance of the research.</td>
</tr>
<tr>
<td>UCLA</td>
<td>Yes</td>
<td>4</td>
<td>One of the four doctoral committee members must hold an appointment at UCLA in a department &quot;outside&quot; the student's major department. (Note: Faculty who hold multiple appointments count as &quot;inside&quot; if one of those appointments is in the student's department.)</td>
</tr>
<tr>
<td>Univ. of Illinois (Urbana-</td>
<td>No</td>
<td>4</td>
<td>NA</td>
</tr>
<tr>
<td>Champaign)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>University</td>
<td>External required?</td>
<td>Number of members</td>
<td>Definition of external</td>
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<td>---------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>University of Michigan</td>
<td>Yes</td>
<td>4</td>
<td>Committees must have a cognate member who is familiar with the standards for doctoral research. The cognate member’s role is to broaden the scholarly representation of the dissertation committee beyond the candidate’s home program and to provide a perspective on the quality of the dissertation from outside the field of specialization of the candidate. Except for the committee of a student in an interdepartmental program, the cognate member must hold at least a 0.50 appointment in a Rackham doctoral program other than the student’s home department/program, and may not hold a sole appointment as research or clinical faculty, instructor, or lecturer. For committees formed after July 1, 2007, the cognate member may not serve as chair or co-chair.</td>
</tr>
<tr>
<td>U. Wisconsin - Madison</td>
<td>Yes</td>
<td>5</td>
<td>At least one of the 5 members must be from outside of the student’s major program or major field (often from the minor field).</td>
</tr>
<tr>
<td>Virginia Tech</td>
<td>No</td>
<td>4</td>
<td>It is appropriate, but not required, that the Advisory Committee includes at least one faculty member from outside the student's major department.</td>
</tr>
</tbody>
</table>

*Committee requirements are set by graduate programs. Data for Mechanical Engineering is used, when available.*
## Appendix 2.
Master’s committee requirements

<table>
<thead>
<tr>
<th>University</th>
<th>External Required?</th>
<th>Number of members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado School of Mines</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>Michigan State*</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>Missouri University of Science and Technology</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>North Carolina State University</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>Northwestern University</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Penn State*</td>
<td>No</td>
<td>1</td>
</tr>
<tr>
<td>Purdue</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>Stony Brook University*</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>U. Wisconsin - Madison</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>UCLA</td>
<td>No</td>
<td>3</td>
</tr>
<tr>
<td>University of Illinois (Urbana-Champaign)*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>University of Michigan*</td>
<td>No</td>
<td>2</td>
</tr>
<tr>
<td>Virginia Tech</td>
<td>No</td>
<td>3</td>
</tr>
</tbody>
</table>

*Committee requirements are set by graduate programs. Data for Mechanical Engineering is used, when available.*
## Appendix 3.
Data sources.

<table>
<thead>
<tr>
<th>University</th>
<th>Source of information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colorado School of Mines</td>
<td><a href="http://bulletin.mines.edu/graduate/programs/">http://bulletin.mines.edu/graduate/programs/</a></td>
</tr>
<tr>
<td>Michigan State</td>
<td><a href="http://www.egr.msu.edu/me/sites/default/files/content/Grad_Handbook_10_8_2013Current_1.pdf">http://www.egr.msu.edu/me/sites/default/files/content/Grad_Handbook_10_8_2013Current_1.pdf</a></td>
</tr>
</tbody>
</table>
| Missouri University of Science and Technology | [http://registrar.mst.edu/cataloginfo/gradcat10-12rev/](http://registrar.mst.edu/cataloginfo/gradcat10-12rev/)  
| North Carolina State University           | [http://www.ncsu.edu/grad/handbook/sections/3.2-advisory-committees.html](http://www.ncsu.edu/grad/handbook/sections/3.2-advisory-committees.html) |
| Northwestern University                   | [http://www.tgs.northwestern.edu/about/policies/phd-degree-requirements.html](http://www.tgs.northwestern.edu/about/policies/phd-degree-requirements.html)  
[http://www.tgs.northwestern.edu/about/policies/masters-degree-requirements.html](http://www.tgs.northwestern.edu/about/policies/masters-degree-requirements.html) |
| Penn State                                | [http://bulletins.psu.edu/graduate/degreerequirements/degreeReq1#doctoralAdvisers](http://bulletins.psu.edu/graduate/degreerequirements/degreeReq1#doctoralAdvisers) |
[https://www.purdue.edu/gradschool/current/resources.cfm](https://www.purdue.edu/gradschool/current/resources.cfm) |
| Stony Brook University                    | [http://sb.cc.stonybrook.edu/gradbulletin/current/degrees/phd/dissertation_committee.php](http://sb.cc.stonybrook.edu/gradbulletin/current/degrees/phd/dissertation_committee.php)  
| U. Wisconsin - Madison                    | [https://grad.wisc.edu/acadpolicy/](https://grad.wisc.edu/acadpolicy/) |
| UCLA                                      | [https://grad.ucla.edu/gasaa/etd/committeereg.htm](https://grad.ucla.edu/gasaa/etd/committeereg.htm) |
| University of Illinois (Urbana-Champaign) | [http://www.grad.illinois.edu/gradhandbook/chaptervi/section04#DissCommittee](http://www.grad.illinois.edu/gradhandbook/chaptervi/section04#DissCommittee) |
| University of Michigan                    | [http://me.engin.umich.edu/academics/gsh/masters](http://me.engin.umich.edu/academics/gsh/masters)  
[http://www.rackham.umich.edu/current-students/policies/academic-policies/section5#553](http://www.rackham.umich.edu/current-students/policies/academic-policies/section5#553) |
| Virginia Tech                             | [http://graduateschool.vt.edu/graduate_catalog/policies.htm?policy=002d14432c654287012c6542e38200d8](http://graduateschool.vt.edu/graduate_catalog/policies.htm?policy=002d14432c654287012c6542e38200d8) |