

# Graduate Program Handbook

human factors & ergonomics



Revised June 2014

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## General Information

### Introduction to the Handbook

The Human Factors and Ergonomics Graduate Program Handbook provides faculty and students with information about the program's policies and procedures.

The Handbook is supplemental to information provided on the University of Minnesota Graduate School Website: <http://www.grad.umn.edu/>.

**Policies and procedures specific to the Human Factors and Ergonomics Graduate Program are enclosed in a text box.**

The information in this handbook and other University catalogs, publications, or announcements is subject to change without notice. University offices can provide current information about changes. Advisers and students are responsible for keeping current on updates to policies and procedures. Changes are indicated in the minutes of the meetings of the Graduate Faculty, and are distributed to graduate faculty and students via e-mail.

### Graduate School Website

The Graduate School website is a central information resource for graduate students, faculty, and staff. Many downloadable documents may be found in the Students section. <http://www.grad.umn.edu>.

### One Stop

The University of Minnesota's One Stop student services website is a central information resource for students, faculty, and staff. Information related to registration, finances, and services is available at this site. <http://onestop.umn.edu>.

### University of Minnesota Policies: Graduate Education Policies

University policies related to graduate education are located at this site: [http://www.grad.umn.edu/deans-office/policies\\_governance/index.html](http://www.grad.umn.edu/deans-office/policies_governance/index.html)

The following policies are included:

[Adding, Changing, or Discontinuing Academic Plans](#)

[Admission for Master's and Doctoral Degrees](#)

[Application of Graduate Credits to Degree Requirements](#)

[Appointments to Graduate Examination Committees](#)

[Appointments as Director of Graduate Studies](#)

[Credit Requirements for Master's and Doctoral Degrees](#)

[Doctoral Degree: Performance Standards and Progress](#)

[Doctoral Degree: Completion](#)

[Leave of Absence and Reinstatement](#)

[Master's Degree: Performance Standards and Progress](#)

[Master's Degree: Completion](#)

[Post-baccalaureate Certificate Plans Approved by the Board of Regents](#)

[Readmission or Changes to Doctoral or Master's Degree Objectives](#)

[University-Administered Graduate Student Fellowships and Traineeships](#)

### **University of Minnesota Policies: Student Conduct and Research Ethics**

Graduate School follows the standards of student conduct enforceable by University agencies, written for the University and available through Student Conduct and Academic Integrity.

[http://www1.umn.edu/regents/policies/academic/Student\\_Conduct\\_Code.html](http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.html)

Research Education and Oversight Program, a unit in the Office of the Vice President for Research, provides independent oversight and monitoring of research compliance activities at the University of Minnesota. Specific functions of REO include:

- Educating employees in policies and procedures related to research compliance
- Facilitating the development and enforcement of research policies
- Coordinating university-wide research integrity and compliance functions
- Maintaining a program that aligns with the strategic vision of university leadership

More information:

[http://www.research.umn.edu/reo/index.html#.UbtjQHeH\\_To](http://www.research.umn.edu/reo/index.html#.UbtjQHeH_To)

Core Curriculum:

[http://www.research.umn.edu/reo/education/core.html#.Ubte93eH\\_Tp](http://www.research.umn.edu/reo/education/core.html#.Ubte93eH_Tp)

## Program Overview

The Human Factors and Ergonomics Graduate Program is an interdisciplinary program with graduate faculty representing the College of Design, the College of Science and Engineering, the College of Education and Human Development, the College of Liberal Arts, the School of Public Health, and the Carlson School of Management. The administrative home of the program is the College of Design. The website: <http://humanfactors.design.umn.edu/>

### The College of Design

The College of Design was created in 2006 in response to the University of Minnesota's Strategic Positioning agenda. The College of Design is comprised of the Department of Design, Housing, and Apparel; the Department of Architecture; and the Department of Landscape Architecture.

Mission. Common values infuse the college's mission, which is to advance the following through research, education, and public engagement:

- Innovation in sustainable, socially responsible design, through a commitment to equity, diversity, and to ecologies both human and natural.
- Engagement with the ongoing and emerging issues, opportunities, and problems that face our world today.
- Creative synergies, through interdisciplinary exploration.
- Speculative, theoretical, and historical inquiry, to expand the critical understanding of design's past, current, and potential significance within diverse contexts.
- Collaboration and partnerships, within the University, and with communities, institutions, business, and government – locally, regionally, nationally, and globally.

### Human Factors and Ergonomics Graduate Program: General Description

Human Factors and Ergonomics is the study of how to create things and processes that effectively support people in their work and living activities. They are essential considerations in making technological systems safe, effective, easy and enjoyable to use. Human Factors are relevant in all things that people use or touch, all things with which they interact, and all activities in which they participate. They are a part of:

- *Physical systems* such as cell phones, blood sugar monitoring meters, and building designs;



- *Information systems* such as web pages, web tools that support the formation of virtual communities, and the controls and displays in the cockpits of automobiles and airplanes;
- *Management systems*, such as training programs, systems of recognition and reward for tasks well done.

## **Degree Objectives**

Degree objectives include Master of Science (M.S.) available as Plan A or Plan C, and Doctor of Philosophy (Ph.D.).

The Master of Science Plan A requires 30 credits and culminates in a thesis; the Master of Science Plan C requires 30 credits and is a coursework-only degree. The Doctor of Philosophy degree requires 66 credits and culminates in a dissertation.

Human Factors and Ergonomics is also available as a minor.

## **Program Administration**

Director of Graduate Studies. The Human Factors and Ergonomics Graduate Program is guided by the Director of Graduate Studies (DGS). The DGS is appointed by the Dean of the College of Design based on the election results of the Graduate Program Faculty (GPF) to serve for a three-year period.

Advisory Committee. The Human Factors and Ergonomics Advisory Committee is composed of five individuals representing the interdisciplinarity of the program. This committee convenes a minimum of once each semester to discuss program policy refinements to bring to the graduate faculty for vote, and approves additions to the curriculum. The Advisory Committee is responsible for admissions review.

Appointment and Continuation of Graduate Faculty. New faculty are nominated by existing graduate faculty, and voted on by the same, for five year terms. Voting may take place either in a meeting of the graduate faculty or by e-mail vote. Renewal of terms will be conducted via the same process.

Graduate faculty are expected to participate in teaching, program governance, and advising graduate students.

For criteria related to graduate faculty service on examining committees, see University Policy *Appointments to Examination Committees*:

<http://www.policy.umn.edu/Policies/Education/Education/APPOINTGRADCOMM.html>

Members of the Human Factors and Ergonomics graduate faculty -- including their departments, colleges, and contact information -- may be found on the website:

<http://humanfactors.design.umn.edu/faculty.html>

Administrative support for the graduate program consists of one staff member, shared with other programs. The responsibilities of the graduate program staff include prospective student advising, recruitment, communications, application and admissions processing, creating and maintaining data bases, report generation, information resource for students and faculty, and University document preparation.

### **Electronic Mail (E-Mail) Accounts**

The University of Minnesota e-mail account is the official means of communication, and students are held accountable for all information sent to this account. The e-mail account is initiated online at [www.umn.edu/initiate](http://www.umn.edu/initiate). Forwarding U of MN e-mail to another account is not recommended.

## Resources

**University of Minnesota Libraries:** <https://www.lib.umn.edu/>

Workshops, Tutorials, and Guides: <https://www.lib.umn.edu/instruction/tutorials>

Topics include Tutorials and Recorded Workshops, Finding and Evaluating Information, Research Tools, Reading Scholarly Articles, Organizing and Citing Research, Communicating Research, Tutorials for Grant Funding.

**Office of Information Technology:** <http://www.oit.umn.edu/index.php>

Tech Stops provide face-to-face technology consultations, support and training. For locations and hours: <http://www.oit.umn.edu/tech-stop/locations/index.htm>

Locations include 90 Blegen Hall, West Bank; 101 Coffman Memorial Union, East Bank; and 50 Coffey Hall, St. Paul Campus.

### Technology Training and Usability Services

*Technology Training* offers in-person & online technology training opportunities for University of Minnesota students, faculty, & staff. <http://www.oit.umn.edu/training/index.htm> Of particular interest to students is *Lynda.com*, a library of online training videos, available at no cost to current University of Minnesota students, faculty, and staff on all campuses. It provides access to nearly 2,000 courses for all skill levels in more than 140 specialties.

<http://www.oit.umn.edu/training/online-training/lynda/>

*Usability Services* is a common good service offered by the Office of Information Technology; work done for the University of Minnesota comes at no or minimal cost. The labs are located in B-18 Walter Library. To reserve facilities, please contact the department well in advance.

<http://www.oit.umn.edu/usability/index.htm>

### **Computer Labs, University of Minnesota**

Lab locations and hours: <http://www.oit.umn.edu/computer-labs/locations-hours/>

East Bank:

Coffman Memorial Union B060

Walter Library 103

West Bank:

Blegen Hall 90

Hubert H. Humphrey Center 50

St. Paul:

Coffey Hall 50

Learning and Environmental Sciences 220/230

Magrath B50

### **Computer Labs, College of Design**

Human Factors and Ergonomics graduate students have access to computer labs in the College of Design: the 305 suite of McNeal Hall and in 127 Rapson Hall. Both facilities have special laser and large-format printing equipment, as well as special software for the various College of Design programs. Printing is paid for by using the GopherGold account on the student's UCard. <http://design.umn.edu/about/offices/it/services.html>

### **Human Dimensioning Lab, College of Design**

The Human Dimensioning© Laboratory (HDL) is one of the lab/studios in the Wearable Product Design Center. Researchers in the HDL focus on measuring and analyzing the shapes and dimensions of the human body to develop wearable products that provide good fit and function. HDL body analysis equipment includes a 3D topical body scanner that can scan a human body in 8 seconds-- from top of head to tips of toes. The system captures surfaces of the human body and produces a precise 3-D representation within the computer—a “digital twin” of the person. A digital tape measure can then automatically extract approximately 100 surface measurements from the scan. Cross sections, profiles and volumes can also be analyzed. The scanner can be used to analyze body shape and size of one person or to compare shapes and sizes of many people. [http://dha.design.umn.edu/research/Human\\_Dimensioning\\_Lab.html](http://dha.design.umn.edu/research/Human_Dimensioning_Lab.html)

### **Wearable Technology Center, College of Design**

Research in the Wearable Technology Center focuses on the intersection between apparel and new technology: for instance, in expanding garment functionality through dynamic aesthetics and new sensing functions; in improving the way we use, manage, and consume clothing; and in streamlining the design and manufacturing processes of smart clothing. Many projects deal with translating technological potential into the real, everyday world: understanding human physical and emotional comfort and balancing these variables with tradeoffs of performance variables in a smart system design. The WTL is managed by Dr. Lucy Dunne, and is part of the Wearable Product Design Center . <http://faculty.design.umn.edu/dunne/>

## Career and Internship Services

Located in 198 McNeal Hall, St. Paul Campus, Career and Internship Services provides career-related information via online workshops (resumes, curriculum vitae, cover letters, interviewing, job search strategies, job offers and salary negotiation).

Website: <http://www.careerhelp.umn.edu/index.html>

email: [careerhelp@umn.edu](mailto:careerhelp@umn.edu)

St. Paul: [198 McNeal Hall](#)

Minneapolis: [411 ST&SS Building](#)

(612)624-2710

## Student Degree Progress

### Registration for Non-Degree Students

The University of Minnesota restricts credits taken as a non-degree students to a maximum of 12 credits. Policy:

<http://www.policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html>

Students who wish to take courses for graduate credit contact the graduate program staff for information about the approval process. The Registration Form for Non-Degree Students:

<http://www.policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html>

### Admission Requirements

January 15 is the sole application deadline, for admission for the next Fall semester. Incomplete applications are not reviewed. There is no Spring semester admission.

Review of applications is holistic. Applications are reviewed by the Admissions Appraisal Committee on the basis of the following:

- Transcripts. An undergraduate GPA of 3.0 is operational standard. If the admissions committee feels strongly that the individual should be admitted, a letter is prepared for Graduate Student Admissions explaining which strengths outweigh the lower-than-standard GPA.
- Goal Statement. Does the applicant's goal statement align with what the program can provide? Are there advisers who can guide the proposed research?
- GRE Scores. GRE scores are to be sent from ETS to the University of Minnesota; scores older than five years are not accepted. The institution code for the University of Minnesota is 6874.
- TOEFL (Test of English as a Foreign Language) Scores. TOEFL scores must be sent directly from TOEFL. The operational standard for this program is a total score of 96. The institution code for the University of Minnesota is 6874.
- Letters of Recommendation. Letters usually include the following: unique positive factors, relevant research or other scholarly experience, professional promise, ability to express views orally and in writing, ability to conceptualize and integrate knowledge.

Admissions Review Process. Graduate applicants' files are prepared for review by graduate program staff. The files are reviewed by the Human Factors and Ergonomics Advisory Committee, which meets to discuss admission and adviser assignments. The proposed advisers are contacted to verify their willingness to advise. Although a student may be qualified for admission, if no member of the graduate faculty indicates a willingness to advise the student,

the student will not be admitted. University of Minnesota policy requires that every student be assigned an adviser.

Decisions are sent to the graduate program staff, who enters the faculty's recommendation for each student via the official online appraisal process, in the ApplyYourself system. The University of Minnesota Graduate Student Admissions office notifies the applicants of the program's decision via e-mail.

## **After Admission**

Adviser assignments are identified by the Human Factors and Ergonomics Advisory Committee at the time admissibility is determined, and verified with the prospective adviser. The student's research interests are carefully considered in determining the adviser. Students can change advisers as they become acquainted with faculty. Each request is handled individually. While students are informed of the right to change advisers, not all requests may be possible because of faculty work load.

Newly admitted students are sent a welcome message from the graduate program staff which includes contact information for the adviser and information about courses from the program's approved list offered for Summer and Fall.

New Graduate Student Orientation takes place the week before classes begin. Newly admitted students are notified of this and other events via e-mail during the summer.

## **Registration**

Registration. Students meet with their advisers prior to registering. Courses not on the approved list must be cleared with the adviser prior to registration.

Maintaining Active Student Status. Students are required to register fall and spring semesters in order to maintain active student status. Students must maintain active status until the degree is conferred. For information about registration, deadlines, late registration, cancellation, and other issues related to registration:

<http://onestop.umn.edu/registration/index.html>

Registration Requirements.

From the University of Minnesota Policy, "Application of Credits to Degree Requirements",  
<http://www.policy.umn.edu/Policies/Education/Education/GRADCREDITDEGREE.html>:

**For master's degrees** – A minimum of 60% of total course credits (not including thesis credits) required for a specific master's degree must be taken at the University. Transferred credits can include a maximum of 12 graduate course credits taken as non-degree seeking or non-admitted status. Transfer of thesis credits is not allowed.

**For doctoral degrees** – Individual programs may determine, on a case-by-case basis, how many transfer course credits doctoral students may apply toward their degree requirement. However, doctoral students must take a minimum of 12 course credits at the University. Transferred credits can include a maximum of 12 graduate course credits taken as non-degree seeking or non-admitted status. Transfer of thesis credits is not permitted.

Doctoral Pre-Thesis Credits (8666) cannot be used to meet any degree requirements. Students should meet with their advisers to discuss the appropriateness of taking Dissertation Credits (8888) instead.

1. To maintain active status, graduate students must at minimum register as a graduate student once each term. Those who do not register are considered to have withdrawn; their records are deactivated. Deactivated students may not register for courses, take examinations, submit degree program or thesis proposal forms, file for graduation, or otherwise participate in the University community as Graduate School students. Those who wish to resume graduate work must apply for readmission.

**Human Factors and Ergonomics Policy and Procedure for registering for GRAD 999 Graduate School Active Status. Effective Spring 2014.**

Registration for GRAD 999 is only possible with the permission of the Director of Graduate Studies.

Students with extenuating circumstances may apply for a **Leave of Absence**. The policy, leave of absence request form, and reinstatement request form are located here:

<http://www.policy.umn.edu/Policies/Education/Education/GRADSTUDENTLEAVE.html>

2. Graduate students holding appointments as teaching assistants, research assistants, or administrative fellows must be registered each semester of their appointment; this applies to appointments of any percentage or any number of hours. Graduate assistants and fellows must register for at least 6 graduate course credits.

3. Students receiving other types of financial aid from the University or from other agencies, international students with certain types of visas, and students who wish to use



various University services and facilities may have specific registration requirements; these students are responsible for obtaining information about such requirements from the appropriate offices.

### Registration Procedures

*Course Permission.* If the course for which you wish to register indicates that instructor's permission must be obtained, a permission number must be obtained from the instructor prior to registration.

*Holds.* Registration holds can be placed on a student's record for non-compliance with completion of Annual Evaluation of Academic Progress, and may be placed on students who do not meet the standards for academic achievement and degree progress.

Registration holds also can be placed by other University units, such as the University Libraries and Student Accounts Receivable. Students must contact the specific unit for instructions on how to clear such holds.

*Thesis Credit Registration.* Students pursuing a Plan A Master's are required to take 10 semester credits of HumF 8777. PhD students are required to take 24 semester credits of HumF 8888. You must register for all thesis credits under HumF. Thesis credits taken in fulfillment of another program are not applicable.

### **Minimum Credit Requirements, Grade Requirements, and Incompletes**

#### Minimum credit requirements.

Masters Plan A, with thesis, requires a minimum of 30 credits, including 10 thesis credits  
Master's Plan C, with minor, no thesis: 30 credits minimum, including a minimum of 6 credits in the minor field for students admitted prior to Fall 2015. Fall 2015 and after, 30 credits from the approved course list.

Ph.D. requires a minimum of 42 credits + 24 dissertation credits.

The grade level requirements of the University of Minnesota:

- Master's students are required to maintain a minimum GPA of 2.8 for courses included on the official degree program.
- Ph.D. students are required to maintain a minimum GPA of 3.0 for courses included on the official degree program.

The number of 4xxx level credits on the official program is not to exceed nine credits.

## Program Planning: Filing the Graduate Degree Plan

Students develop the Graduate Degree Plan in consultation with their advisers.

### **Human Factors and Ergonomics Policy and Procedure for Filing Degree Plan. Effective Fall 2014.**

Master's students file the Graduate Degree Plan the semester prior to graduation.  
Doctoral students file the Graduate Degree Plan prior to scheduling the Preliminary Oral Examination.

The adviser and Director of Graduate Studies approve the Graduate Degree Plan.

The Graduate Degree Plan form is an interactive .pdf document located on the Graduate School website.

Forms for Master's students: <http://www.grad.umn.edu/students/forms/masters/index.html>

Forms for Doctoral students: <http://www.grad.umn.edu/students/doctoral/index.html>

Planning Documents to ensure the program requirements are met are located on the Human Factors and Ergonomics website under Requirements and the degree objective:

Planning Document for Master's Plan A: [http://humanfactors.design.umn.edu/ms\\_plan\\_a.html](http://humanfactors.design.umn.edu/ms_plan_a.html)

Planning Document for Master's Plan C: [http://humanfactors.design.umn.edu/ms\\_plan\\_c.html](http://humanfactors.design.umn.edu/ms_plan_c.html)

Planning Document for PhD: [http://humanfactors.design.umn.edu/phd\\_requirements.html](http://humanfactors.design.umn.edu/phd_requirements.html)

Once the Graduate Degree Plan is completed by the student and approved by the adviser, the adviser signs the Graduate Degree Plan form and sends it and the Planning Document to the program staff to review for compliance with University of Minnesota Graduate Education Policies. Program staff then submits the degree plan for the Director of Graduate Studies approval before it is forwarded to Graduate Student Services & Progress.

## Annual Academic Progress Review

Annual reviews of students' academic progress are required by University of Minnesota Graduate Education Policy "Master's Degree: Performance Standards and Progress", II, a;

<http://www.policy.umn.edu/Policies/Education/Education/MASTERSPERFORMANCE.html>

and "Doctoral Degree: Performance Standards and Progress", II, a.

<http://www.policy.umn.edu/Policies/Education/Education/DOCTORALPERFORMANCE.html>

“Annual Review. Programs must review the progress of each master’s student annually. Students deemed not to be in good standing must be informed of the results of the review in writing, with a copy to the student’s advisor.”

**Human Factors and Ergonomics Policy and Procedure for Annual Academic Progress Review. Effective Spring 2014.**

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress. Topics to be addressed include the following:

- Grades (student brings unofficial transcript to meeting)
- Milestones
- Presentations
- Publications
- Strengths
- Areas that need work

A five-point scale will be used to rank progress: 1= outstanding, 5=dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, to track progress.

Form follows and is available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## Human Factors and Ergonomics: Annual Academic Progress Review

Date \_\_\_\_\_

Rank \_\_\_\_\_

Student \_\_\_\_\_

Adviser \_\_\_\_\_

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress, and bring an unofficial transcript to the meeting.

A five-point scale will be used to rank progress: 1 = outstanding, 5 = dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Grades
Milestones (such as filing degree plan, written and oral examinations)
Presentations
Publications
Strengths
Areas that need work

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, for tracking purposes.

## **Change of Status from MS to PhD**

After one year of the master's degree is completed, a student is eligible to apply for a change of status to the PhD, via the online application system. Included in the application are the following:

- goal statement
- transcripts
- two letters of recommendation
- sample of written work (e.g., a paper completed for class)

The application deadlines:

- October 1 for admission for Spring
- April 1 for admission for Fall

The Advisory Committee reviews, approves/declines the applications.

## **Readmission**

Active status as a graduate student terminates when a student has not registered for one term. In order to complete the degree, the student must apply for readmission.

Readmission site: <http://www.grad.umn.edu/admissions/readmission/index.html>

Readmission requests are reviewed by the advisers and DGS. If the adviser is no longer available, a more extensive review may take place.

### Express Readmission

If the student has registered within the past year and has been in contact with the adviser, an Express Readmission is possible.

The Director of Graduate Studies confers with the student's faculty adviser to determine if the student may be readmitted without a formal review process.

If the adviser and Director of Graduate Studies determine that the student may be readmitted without the formal review process, the Director of Graduate Studies notifies the graduate program staff, who updates the online application system accordingly. The Admissions Appraisal document in the ApplyYourself system is printed and kept in the student's file.

If additional information or deliberation is required, the application for readmission is reviewed at the next application appraisal meeting. The Graduate Student Admissions Office notifies the student of the final decision.

## **Graduation**

Degrees are awarded at the end of each month. To qualify for graduation for a particular month, students must submit the Application for Degree form before the first workday of that month and must complete the examination and all other requirements (including necessary forms and fees) by the last workday of that month.

## **Commencement**

Commencement ceremonies occur each May and are managed by the College of Design. Graduates are encouraged, but not required, to attend. In March, the College of Design's Registrar sends an e-mail message to graduate students with instructions for participating in the ceremony.

## **Student Records**

Program copies of graduate student records are located in the office of the graduate program staff. Students may obtain access to the information in their departmental files by written request to the Director of Graduate Studies. In compliance with the Family Educational Rights and Privacy Act (FERPA), faculty and staff have access to student files on a need-to-know basis.

## **Publishing**

Students are encouraged to submit articles based upon their research to journals appropriate to their field of study. It is not necessary to wait until the completion of the degree.

# Master of Science: Plan A with Thesis and Plan C without Thesis

## General Information

### Projected Time Table

According to University policy, *Master's Degree: Performance Standards and Progress* <http://www.policy.umn.edu/Policies/Education/Education/MASTERSPERFORMANCE.html> all requirements for the master's degree must be completed and the degree awarded within five years. The five-year period begins with the earliest work included on the official degree program, including any transfer work.

To maintain active status, graduate students must register Fall and Spring semesters.

### Selection of Adviser and Committee

Graduate students are assigned an adviser upon admission into the program; the advisory committee carefully determines the best fit, which must be confirmed by the proposed adviser. Adviser assignments are based on the student's area of interest and the availability of advisers. Students may choose to change advisers once they become familiar with faculty and their expertise. With the approval of the Director of Graduate Studies, students have the option of changing advisers if the new adviser is available and willing.

An examining committee is formed by the student in consultation with the adviser, and be comprised of faculty representing the interdisciplinarity of the program. A minimum of three committee members must be selected. If the student pursues a Minor, a member of the faculty from the Minor program must serve on the committee. Students should discuss appropriate examining committee members with their advisers, then make an appointment to ask the proposed committee members if they would be willing and available to serve on the examining committee.

An approved degree program must be on file before the student is permitted to schedule the final examination.

### Guidelines for Change of Adviser and Change of Committee

Students are allowed to change advisers and committee members without penalty. A form is submitted to the Director of Graduate Studies for review and approval. Adviser changes are forwarded to program staff to update the information via an online system. Committee

changes are made by the students (after approval by the Director of Graduate Studies) via the Examination Committees page of the Graduate School website:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

### **Human Factors and Ergonomics Policy: Change of Adviser + Change of Committee**

Students are allowed to change advisers without penalty.

Change of Adviser: Student obtains the signatures of the former adviser, the new adviser, and the DGS on the Change of Adviser form. Once approved, program staff updates adviser information online.

Change of Committee: Student obtains the signatures of the new committee member and the DGS on the Change of Committee form. Once approved, student enters new committee via the Examination Committees page of the Graduate School website:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

Electronic signatures are acceptable.

The signed form is sent to program staff for action and/or reference.

Forms follow and are available on the website: <http://humanfactors.design.umn.edu/Forms.html>



## Human Factors and Ergonomics: Change of Adviser

Date \_\_\_\_\_

Student \_\_\_\_\_

Students are allowed to change advisers without penalty.

### Change of Adviser.

Student obtains the signatures of the former adviser, the new adviser, and the Director of Graduate Studies. Electronic Signatures are acceptable. Once approved, program staff enters the new adviser into the system.

\_\_\_\_\_  
Name of current adviser

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of new adviser

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Director of Graduate Studies

Forward signed document to program staff for action and reference.

## Human Factors and Ergonomics: Change of Committee

Date \_\_\_\_\_

Student \_\_\_\_\_

### Change of Committee.

Student obtains the signature of the new committee member and the Director of Graduate Studies. Electronic Signatures are acceptable. Once approved, student updates committee online, via the Examination Committee webpage:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Director of Graduate Studies

Forward signed document to program staff for action and reference.

## Preliminary Examinations

There are no preliminary written or oral examinations for the Master's Plan A or Plan C degree in the Human Factors and Ergonomics Graduate Program.

## Academic Progress Annual Evaluation for Graduate Students

Annual reviews of students' academic progress is required by University of Minnesota Graduate Education Policy "Master's Degree: Performance Standards and Progress", II, a;

<http://www.policy.umn.edu/Policies/Education/Education/MASTERSPERFORMANCE.html>

and "Doctoral Degree: Performance Standards and Progress", II, a.

<http://www.policy.umn.edu/Policies/Education/Education/DOCTORALPERFORMANCE.html>

"Annual Review. Programs must review the progress of each master's student annually. Students deemed not to be in good standing must be informed of the results of the review in writing, with a copy to the student's advisor."

### **Human Factors and Ergonomics Policy and Procedure for Annual Academic Progress Review. Effective Spring 2014.**

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress. Topics to be addressed include the following:

- Grades (student brings unofficial transcript to meeting)
- Milestones
- Presentations
- Publications
- Strengths
- Areas that need work

A five-point scale will be used to rank progress: 1= outstanding, 5=dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, to track progress.

Form follows and is available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## Human Factors and Ergonomics: Annual Academic Progress Review

Date \_\_\_\_\_ Rank \_\_\_\_\_

Student \_\_\_\_\_ Adviser \_\_\_\_\_

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress, and bring an unofficial transcript to the meeting.

A five-point scale will be used to rank progress: 1 = outstanding, 5 = dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Grades
Milestones (such as filing degree plan, written and oral examinations)
Presentations
Publications
Strengths
Areas that need work

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, for tracking purposes.

## **Master's Plan A (with thesis)**

### **Degree Requirements**

#### **Master's Plan A: Coursework Required and Recommended**

Total credit hours: 20 course credits + 10 thesis credits = 30 credits total

Major Course Requirements: 14 credits total from the course list, including

- Psy 8114 Analysis of Psychological Data (required effective Fall 2014 admission)
- Psy 8115 Analysis of Psychological Data (required effective Fall 2014 admission)
- 1 course in statistics (required prior to Fall 2014)
- 1 course in experiment design (required prior to Fall 2014)
- 1 course in Human Factors Foundations
- 1 course in Physical Human Factors
- 1 course in Cognitive Human Factors

The balance of course credits may come from any category on the course list. To insure that students receive *interdisciplinary* exposure to multiple perspectives, they must choose courses (excluding statistics and experimental design courses) from at least three different departments.

Research Ethics Requirement: Students must complete training in Research Ethics.

Thesis credits: 10 thesis credits

Specification of examinations, papers, thesis: Students must complete a thesis.

Final Exam: An oral defense of the students' thesis work is required.

#### **Transfer of Credits**

A minimum of 60% of total course credits (not including thesis credits) required for a specific master's degree must be taken at the University. Transferred credits can include a maximum of 12 graduate course credits taken as non-degree seeking or non-admitted status. Transfer of thesis credits is not allowed.

## **Program Planning: Filing the Graduate Degree Plan**

Students develop the Graduate Degree Plan in consultation with their advisers.

### **Human Factors and Ergonomics Policy and Procedure for Filing Degree Plan. Effective Fall 2014.**

Master's students file the Graduate Degree Plan the semester prior to graduation. Doctoral students file the Graduate Degree Plan prior to scheduling the Preliminary Oral Examination.

The adviser and Director of Graduate Studies approve the Graduate Degree Plan.

The Graduate Degree Plan form is an interactive .pdf document located on the Graduate School website.

Forms for Master's students: <http://www.grad.umn.edu/students/forms/masters/index.html>

Planning Documents to ensure the program requirements are met are located on the Human Factors and Ergonomics website under Requirements and the degree objective:

Planning Document for Master's Plan A: [http://humanfactors.design.umn.edu/ms\\_plan\\_a.html](http://humanfactors.design.umn.edu/ms_plan_a.html)

Once the Graduate Degree Plan is completed by the student and approved by the adviser, the adviser signs the Graduate Degree Plan form and sends it and the Planning Document to the program staff to review for compliance with University of Minnesota Graduate Education Policies. Program staff then submits the degree plan for the Director of Graduate Studies' approval before it is forwarded to Graduate Student Services & Progress.

### **Online Submission of Committee Members**

Effective Fall 2012, students are responsible for submitting the committee information online. This submission takes place after the student's degree plan has been approved by Graduate School Student Services & Progress. Committees submitted prior to filing the degree plan are rejected.

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

## **Thesis Completion Procedures**

Graduate students set up a schedule to meet regularly with the adviser for the completion of the thesis.

## **Graduation Packet**

After the Degree Program has been filed and approved by Graduate School, the student may request a Graduation Packet online:

[http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master\\_scompletion\\_appa.pdf](http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master_scompletion_appa.pdf)

The Graduation Packet contains important information such as graduation instructions, the Application for Degree form, and the Reviewer's Report form.

## **Policies Related to Research**

For more information about research involving human subjects:

<http://www.research.umn.edu/subjects>

## **Changing Approved Program**

Once approved, the degree program must be fulfilled in every detail to meet graduation requirements. Changes in the approved program must be requested with an online interactive form, Petition (GS 59):

<http://policy.umn.edu/forms/otr/otr190.pdf>

## **Preparation of Master's Thesis**

Instructions for the preparation of the master's thesis:

<http://www.grad.umn.edu/current-students-graduate-student-services-progress/thesis-submission>

## **Thesis Reviewers**

The thesis is read by the entire examining committee. The examining committee consists of at least three members: two representatives from the major field and one from the minor or related field.

To allocate sufficient time for faculty to read the thesis and decide whether it is ready for defense, students notify their adviser and other members of the examining committee at least two weeks in advance that the thesis will be delivered on a particular date. All members of the examining committee must then have at least two weeks to read the thesis after it has been delivered.

The entire examining committee must be unanimous in certifying that the thesis is ready for defense, as indicated by their signatures on the thesis reviewers report form (the student receives this form as part of the Graduation Packet). Once signed, a photocopy of the form is provided the graduate program staff for the student's permanent file. When the signed form is returned to Graduate Student Services and Progress, the student is provided with the final examination report form.

## **Changes in the Examining Committee**

Substitutions on the examining committee may be necessitated by such circumstances as a faculty member's temporary absence or leave from the University. Students

Student obtains the signatures of the new committee member and the DGS on the Change of Committee form. The form is available on the Forms page of the website:

<http://humanfactors.design.umn.edu/Forms.html>

Once the changes are approved, the student is responsible for entering the committee changes via an online system:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

## **Master's Plan A Final Oral Examination**

For students submitting a Plan A thesis, the final examination requires an oral component. The final oral examination is a closed examination open only to the final oral examination committee and the student.

The student is responsible for room scheduling for the examination and for notifying the committee and staff.



The Final Oral Examination Report must be submitted no later than the last business day of anticipated month of graduation.

### **Degree Completion**

All other forms and degree completion procedures are provided in the graduation packet. Note that the Application for Degree form must be submitted by the **first day** of the anticipated month of graduation.

## **Master's Plan C (without thesis)**

### **Degree Requirements**

#### **Master's Plan C: Coursework Required and Recommended**

Total credit hours: 30 course credits

#### Major Course Requirements:

- Psy 8114 Analysis of Psychological Data (required effective Fall 2014 admission)
- Psy 8115 Analysis of Psychological Data (required effective Fall 2014 admission)
- 1 course in statistics (required prior to Fall 2014)
- 1 course in experiment design (required prior to Fall 2014)
- 1 course in Human Factors Foundations
- 1 course in Physical Human Factors
- 1 course in Cognitive Human Factors
- 2 courses with substantial projects comprising at least 50% of the course total

The balance of credits may come from any category on the course list. To insure that students receive *interdisciplinary* exposure to multiple perspectives, they must choose courses (excluding statistics and experimental design courses) from at least three different departments.

Research Ethics Requirement: Students must complete training in Research Ethics.

Thesis credits: None.

Minor or supporting area course requirements: Prior to Fall 2015, 6 credits.

Specification of examinations, papers, thesis: There is no final examination or thesis.

Final Exam: From the Degree Completion Policy:

Plan C master's degrees typically do not include standard final examination formats like those for Plan A and Plan B master's degrees. However, students must satisfy all of the course and other requirements specified by the program in order to complete the degree.

**Human Factors and Ergonomics Policy for Plan C Master's. Effective Spring 2014.**

Two classes with substantial projects comprising at least 50% of the course total are required.

## Transfer of Credits

A minimum of 60% of total course credits (not including thesis credits) required for a specific master's degree must be taken at the University. Transferred credits can include a maximum of 12 graduate course credits taken as non-degree seeking or non-admitted status. Transfer of thesis credits is not allowed.

## Program Planning: Filing the Graduate Degree Plan

Students develop the Graduate Degree Plan in consultation with their advisers.

### **Human Factors and Ergonomics Policy and Procedure for Filing Degree Plan. Effective Fall 2014.**

Master's students file the Graduate Degree Plan the semester prior to graduation. Doctoral students file the Graduate Degree Plan prior to scheduling the Preliminary Oral Examination.

The adviser and Director of Graduate Studies approve the Graduate Degree Plan.

The Graduate Degree Plan form is an interactive .pdf document located on the Graduate School website.

Forms for Master's students: <http://www.grad.umn.edu/students/forms/masters/index.html>

Planning Documents to ensure the program requirements are met are located on the Human Factors and Ergonomics website under Requirements and the degree objective:

Planning Document for Master's Plan C: [http://humanfactors.design.umn.edu/ms\\_plan\\_c.html](http://humanfactors.design.umn.edu/ms_plan_c.html)

Once the Graduate Degree Plan is completed by the student and approved by the adviser, the adviser signs the Graduate Degree Plan form and sends it and the Planning Document to the program staff to review for compliance with University of Minnesota Graduate Education Policies. Program staff then submits the degree plan for the Director of Graduate Studies' approval before it is forwarded to Graduate Student Services & Progress.

## Graduation Packet

After the Degree Program has been filed and approved by Graduate School, the student may request a Graduation Packet online:

[http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master\\_scompletion\\_appa.pdf](http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master_scompletion_appa.pdf)

The Graduation Packet contains important information such as graduation instructions, the Master's Final Report form, and the Application for Degree form.

## Policies Related to Research

For more information about research involving human subjects:

<http://www.research.umn.edu/subjects>

## Changing Approved Program

Once approved, the degree program must be fulfilled in every detail to meet graduation requirements. Changes in the approved program must be requested with an online interactive form, Petition (GS 59):

<http://policy.umn.edu/forms/otr/otr190.pdf>

## Degree Completion

All other forms and degree completion procedures are provided in the graduation packet. Note that the Application for Degree form must be submitted by the **first day** of the anticipated month of graduation.

## **Doctor of Philosophy (with thesis)**

### **General Information**

#### **Projected Time Table**

All requirements for the doctoral degree must be completed and the degree awarded within eight calendar years after admission.

#### **Selection of Adviser and Committee**

Graduate students are assigned an adviser upon admission into the program; the advisory committee carefully determines the best fit, which must be confirmed by the proposed adviser. Adviser assignments are based on the student's area of interest and the availability of advisers. Students may choose to change advisers once they become familiar with faculty and their expertise. With the approval of the Director of Graduate Studies, students have the option of changing advisers if the new adviser is available and willing.

An examining committee is formed by the student in consultation with the adviser, and be comprised of faculty representing the interdisciplinarity of the program. A minimum of four committee members must be selected, including one from the related area. If the student pursues a Minor, a member of the faculty from the Minor program must serve on the committee. Students should discuss appropriate examining committee members with their advisers, then make an appointment to ask the proposed committee members if they would be willing and available to serve on the examining committee.

An approved degree program must be on file before the student is permitted to schedule the final examination.

#### **Guidelines for Change of Adviser and Change of Committee**

Students are allowed to change advisers and committee members without penalty. A form is submitted to the Director of Graduate Studies for review and approval. Adviser changes are forwarded to program staff to update the information via an online system. Committee changes are made by the students (after approval by the Director of Graduate Studies) via the Examination Committees page of the Graduate School website:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

### **Human Factors and Ergonomics Policy: Change of Adviser + Change of Committee**

Students are allowed to change advisers without penalty.

Change of Adviser: Student obtains the signatures of the former adviser, the new adviser, and the DGS. Once approved, program staff updates adviser information online.

Change of Committee: Student obtains the signatures of the new committee member and the DGS. Once approved, student enters new committee via the Examination Committees page of the Graduate School website:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

Electronic signatures are acceptable.

The signed form is sent to program staff for action and/or reference.

Forms follow and are available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## Human Factors and Ergonomics: Change of Adviser

Date \_\_\_\_\_

Student \_\_\_\_\_

Students are allowed to change advisers without penalty.

### Change of Adviser.

Student obtains the signatures of the former adviser, the new adviser, and the Director of Graduate Studies. Electronic Signatures are acceptable. Once approved, program staff enters the new adviser into the system.

\_\_\_\_\_  
Name of current adviser

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name of new adviser

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Director of Graduate Studies

Forward signed document to program staff for action and reference.

## Human Factors and Ergonomics: Change of Committee

Date \_\_\_\_\_

Student \_\_\_\_\_

### Change of Committee.

Student obtains the signature of the new committee member and the Director of Graduate Studies. Electronic Signatures are acceptable. Once approved, student updates committee online, via the Examination Committee webpage:

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature of Director of Graduate Studies

Forward signed document to program staff for action and reference.



## Preliminary Examinations

Preliminary written and oral examinations are required. See section on Degree Requirements for greater detail.

## Academic Progress Annual Evaluation for Graduate Students

Annual reviews of students' academic progress is required by University of Minnesota Graduate Education Policy "Master's Degree: Performance Standards and Progress", II, a;

<http://www.policy.umn.edu/Policies/Education/Education/MASTERSPERFORMANCE.html>

and "Doctoral Degree: Performance Standards and Progress", II, a.

<http://www.policy.umn.edu/Policies/Education/Education/DOCTORALPERFORMANCE.html>

"Annual Review. Programs must review the progress of each master's student annually. Students deemed not to be in good standing must be informed of the results of the review in writing, with a copy to the student's advisor."

### **Human Factors and Ergonomics Policy and Procedure for Annual Progress Review. Effective Spring 2014.**

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress. Topics to be addressed include the following:

- Grades (student brings unofficial transcript to meeting)
- Milestones
- Presentations
- Publications
- Strengths
- Areas that need work

A five-point scale will be used to rank progress: 1= outstanding, 5=dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, to track progress.

Form follows and is available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## Human Factors and Ergonomics: Annual Academic Progress Review

Date \_\_\_\_\_

Rank \_\_\_\_\_

Student \_\_\_\_\_

Adviser \_\_\_\_\_

Annual Academic Progress Review takes place October and November each year. Students schedule a meeting with their advisers to discuss expectations for academic progress, and bring an unofficial transcript to the meeting.

A five-point scale will be used to rank progress: 1 = outstanding, 5 = dismissal from the program. Faculty meet to discuss student progress; students with scores of 3-5 will meet with the adviser and Director of Graduate Studies to discuss plan for improving.

Grades
Milestones (such as filing degree plan, written and oral examinations)
Presentations
Publications
Strengths
Areas that need work

Student receives a copy of the form. The original is turned into the DGS for review. Program staff will enter the information into a database, for tracking purposes.

## Degree Requirements

### Doctoral Degree: Coursework Required and Recommended

Total credits: 42 course credits + 24 dissertation credits = 66 total

#### Major Course Requirements:

- Psy 8114 Analysis of Psychological Data (required effective Fall 2014 admission)
- Psy 8115 Analysis of Psychological Data (required effective Fall 2014 admission)
- 1 course in statistics (required prior to Fall 2014)
- 1 course in experiment design (required prior to Fall 2014)
- 1 course in Human Factors Foundations
- 1 course in Physical Human Factors
- 1 course in Cognitive Human Factors

The balance of course credits may come from any category on the course list. To insure that students receive *interdisciplinary* exposure to multiple perspectives, they must choose courses (excluding statistics and experimental design courses) from at least three different departments.

Research Ethics Requirement: Students must complete training in Research Ethics.

Thesis credits: 24 dissertation credits

Specification of examinations, papers, thesis: Students complete the following milestones:

- Preliminary Written Examination
- Preliminary Oral Examination
- Dissertation
- Final Oral Examination

Final Exam: An oral defense of the students' thesis work is required.

### Transfer Credits for the Doctoral Degree

Course credits from other than the University of Minnesota are transferred to the proposed degree program when the program is transmitted and approved. Coursework from other institutions must appear on a graduate level transcript. Thesis credits are not transferrable.

A minimum of 12 course credits must be taken at the University of Minnesota.

## Possible Minors and Related Fields

Appropriate minors and coursework in related fields should be discussed with your faculty adviser and committee members.

## Program Planning: Filing the Graduate Degree Plan

Students develop the Graduate Degree Plan in consultation with their advisers.

### **Human Factors and Ergonomics Policy and Procedure for Filing Degree Plan. Effective Fall 2014.**

Master's students file the Graduate Degree Plan the semester prior to graduation.  
Doctoral students file the Graduate Degree Plan prior to scheduling the Preliminary Oral Examination.

The adviser and Director of Graduate Studies approve the Graduate Degree Plan.

The Graduate Degree Plan form is an interactive .pdf document located on the Graduate School website.

Forms for Doctoral students: <http://www.grad.umn.edu/students/doctoral/index.html>

Planning Documents to ensure the program requirements are met are located on the Human Factors and Ergonomics website under Requirements and the degree objective:

Planning Document for PhD: [http://humanfactors.design.umn.edu/phd\\_requirements.html](http://humanfactors.design.umn.edu/phd_requirements.html)

Once the Graduate Degree Plan is completed by the student and approved by the adviser, the adviser signs the Graduate Degree Plan form and sends it and the Planning Document to the program staff to review for compliance with University of Minnesota Graduate Education Policies. Program staff then submits the degree plan for the Director of Graduate Studies' approval before it is forwarded to Graduate Student Services & Progress.

## **Online Submission of Committee Members**

Effective Fall 2012, students are responsible for submitting the committee information online. This submission takes place after the student's degree plan has been approved by Graduate School Student Services & Progress. Committees submitted prior to filing the degree plan are rejected.

<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

## **Policies Related to Research**

Information about research involving human subjects:

<http://www.research.umn.edu/subjects>

## **Changing Approved Program**

Once approved, the degree program must be fulfilled in every detail to meet graduation requirements. A minor may not be added to the program after the Preliminary Oral Examination has been passed. Changes in the approved program are requested by completing a Petition: <http://policy.umn.edu/forms/otr/otr190.pdf>

## **Preliminary Written Examination and Preliminary Oral Examination**

The Preliminary Written Examination and Preliminary Oral Examination are scheduled the semester following the completion of coursework.

## Preliminary Written Examination

### **Human Factors and Ergonomics Policy and Procedure for Preliminary Written Examination. Effective Spring 2014.**

The Preliminary Written Examination is the dissertation proposal. The proposal demonstrates the student's ability to proceed with the PhD and lays the foundations for the dissertation research.

Student develops research concept in consultation with the Committee.

The dissertation proposal includes:

- identifying the proposed research, the gap in knowledge supported by a literature review, and why the research is significant
- theory and methods used in conducting the proposed dissertation research, and why

Once the examining committee determines the outcome of the examination, the adviser sends the results to the graduate program staff, who enters the decision into an online document.

### **Dissertation Credits: HumF 8888**

### **Human Factors and Ergonomics Policy and Procedure for registering for HumF 8888 Doctoral Dissertation Credits. Effective Spring 2014.**

Doctoral students may register for a maximum of 6 credits of HumF 8888 the semester they complete the Preliminary Written and Oral Examinations.

A contract will be required, signed by the student and adviser, and sent to the program staff to enable registration.

Form follows and is available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## Human Factors and Ergonomics: Dissertation Credit Contract

Date \_\_\_\_\_

Student \_\_\_\_\_

Adviser \_\_\_\_\_

**Human Factors and Ergonomics Policy and Procedure for registering for HumF 8888 Doctoral Dissertation Credits. Effective Spring 2014.**

Doctoral students may register for a maximum of 6 credits of HumF 8888 the semester they complete the Preliminary Written and Oral Examinations.

A contract will be required, signed by the student and adviser, and sent to the program staff to enable registration.

Student signature: \_\_\_\_\_

Adviser signature: \_\_\_\_\_

Send to program staff to enable registration.

## Preparation of Doctoral Dissertation

Instructions for the preparation of the doctoral dissertation:

<http://www.grad.umn.edu/current-students-graduate-student-services-progress/thesis-submission>

## Preliminary Oral Examination

### **Human Factors and Ergonomics Policy and Procedure for the Preliminary Oral Examination. Effective Spring 2014.**

The Preliminary Oral Examination is the defense of the proposed dissertation research. During the examination, the committee asks questions about the proposed research and about the field in general.

### Preliminary Oral Examination Scheduling.

The student must schedule the preliminary oral examination with Graduate Student Services and Progress (GSSP) online as soon as a date is set, but *no later than one week* prior to the examination. <http://www.grad.umn.edu/students/prelimschedule/index.html>

Once the student schedules online, a confirmation email will be sent to the student's UMN email account.

Upon initial review of the student's record, an email will be sent to the student's UMN email account regarding any outstanding preliminary oral exam requirements, and how to fulfill those requirements.

About one week prior to the exam, an email will be sent to the student's UMN email account confirming authorization of the exam or reminding the student of remaining outstanding requirements.

Please note that the student is responsible for scheduling and confirming the time and place of the examination with all committee members and for following their program's internal scheduling procedures.



## **Thesis Completion Procedures**

Graduate students set up a schedule to meet regularly with the adviser for the completion of the thesis.

## **Graduation Packet**

After the Degree Program has been filed and approved by Graduate School, the student may request a Graduation Packet online:

[http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master\\_scompletion\\_appa.pdf](http://policy.umn.edu/prod/groups/president/@pub/@policy/@esl/documents/policy/master_scompletion_appa.pdf)

The Graduation Packet contains important information such as graduation instructions, the Application for Degree form, and the Reviewer's Report form.

## **Thesis Reviewers**

The thesis is read by the entire examining committee. The examining committee consists of at least three members: two representatives from the major field and one from the minor or related field.

To allocate sufficient time for faculty to read the thesis and decide whether it is ready for defense, students notify their adviser and other members of the examining committee at least two weeks in advance that the thesis will be delivered on a particular date. All members of the examining committee must then have at least two weeks to read the thesis after it has been delivered.

The entire examining committee must be unanimous in certifying that the thesis is ready for defense, as indicated by their signatures on the thesis reviewers report form (the student receives this form as part of the Graduation Packet). Once signed, a photocopy of the form is provided the graduate program staff for the student's permanent file. When the signed form is returned to Graduate Student Services and Progress, the student is provided with the final examination report form.

## **Changes in the Examining Committee**

Substitutions on the examining committee may be necessitated by such circumstances as a faculty member's temporary absence or leave from the University.

Student obtains the signatures of the new committee member and the DGS on the Change of Committee form. The form is available on the Forms page of the website:  
<http://humanfactors.design.umn.edu/Forms.html>

Once the changes are approved, the student is responsible for entering the committee changes via an online system:  
<http://www.grad.umn.edu/students/examiningcommitteesnew/index.html>

### **Scheduling Final Oral Examination with the Graduate School**

The student must schedule the examination at least one week in advance via the online scheduling system: <http://www.grad.umn.edu/students/finalschedule/index.html>

When the examination is scheduled, the student's file is checked to determine if the student can be cleared to take the examination as stipulated. If so, the report form for the final oral examination will be forwarded to the chair of the examining committee. If difficulties are apparent, the adviser and the student will be contacted immediately.

Note: A minimum of ten weeks must intervene between the preliminary oral and the final oral examinations. Also, the final oral should not be scheduled from the beginning of the summer term to the opening of fall semester unless the committee members can be assembled without substitution.

The chair of the final defense cannot be the student's adviser. The chair presides over both the preliminary oral examination and the final examination.

### **Ph.D. Final Oral Examination**

The final oral examination consists of a seminar in which the candidate presents the dissertation; the scholarly community is invited. The seminar may take place only after the dissertation has been judged ready for defense. The examination is limited to the candidate's dissertation subject and relevant areas.

Notification of the final oral examination is sent to the academic community, faculty, and students by the graduate program staff, notified well in advance by the student's adviser. The public presentation for the final oral examination for Ph.D. will not exceed 45 minutes. A closed meeting between the candidate and the examining committee immediately follows the public presentation. The candidate is then excused, and the vote is taken on whether the candidate passed the examination.

The student is responsible for room scheduling for the examination and for notifying the committee and staff.

### **Dissertation Submission**

Ph.D. students are required to submit the final dissertation to the Graduate School in order to receive their degrees. To submit your dissertation electronically, go to <http://www.etsadmin.com/umn>.

### **Degree Completion**

All other forms and degree completion procedures are provided in the graduation packet. Note that the Application for Degree form must be submitted by the **first day** of the anticipated month of graduation.

## Employment, Financial Aid, and Career Resources

University of Minnesota Human Resources. Graduate Assistant Employment Services posts positions for graduate students. Graduate assistantships of more than 25% include pro-rated tuition and other benefits, including resident tuition rates.

<http://www1.umn.edu/ohr/gae/index.html>

Research Assistantships. Human Factors faculty write grant proposals, and include research assistantships in those proposals. Consult with your adviser and other faculty about their research grants and the potential for research assistantships.

International Students. Non-native English speakers are required to take the SETTA (Spoken English Test for Teaching Assistants). For more information about this test:

<http://www1.umn.edu/ohr/teachlearn/graduate/itap/settaeligibility/index.html>

International Student Visas. Federal law prohibits the University from employing students with an F-1 visa for more than 20 hours per week.

Graduate School-Administered Fellowships and Scholarships. For more information about fellowships and scholarships: <http://www.grad.umn.edu/fellowships/>

Federal Loans and Grants. U.S. citizens and eligible non-U.S. citizens may submit the Free Application for Federal Student Aid (FAFSA), due in early May. For more information about FAFSA: <http://www.fafsa.ed.gov/>. Contact One Stop Student Services for more information, 612-624-1111, [helping@umn.edu](mailto:helping@umn.edu). One Stop's

Career Services. St. Paul Campus Career and Internship Services serves students in this program. Their main office is located in 198 McNeal Hall on St. Paul Campus, but they also have a satellite office in the STSS building on the East Bank of Minneapolis Campus. Call [612-624-2710](tel:612-624-2710) to schedule appointments for either location. For more information: <http://www.careerhelp.umn.edu/>

## Student Life

Security. The Security Monitor Program, a branch of the University of Minnesota Police Department, offers free walking and biking security escorts to and from campus locations and nearby adjacent neighborhoods for all students, staff, faculty and visitors. Security Monitors are given training in First Aid, CPR, and use of an AED. Security Monitors are equipped with a First Aid Kit and a portable police radio in the event of an emergency. To request an escort from a trained student security monitor, please call 612-624-WALK (9255), or 4-WALK from any campus phone, shortly before your desired departure time. Your safety is our first priority!

Health Care. The University of Minnesota has the following health care plans for graduate students:

Office of Student Health Benefits. <http://www.shb.umn.edu/twincities/students/student-health-benefit-plan.htm>

Graduate Assistant Health Plan. <http://www.shb.umn.edu/twincities/graduate-assistants/graduate-assistant-health-plan.htm>

Housing. The Office of Housing and Residential Life offers options for graduate students. <http://www.housing.umn.edu/graduate/index.html>

University of Minnesota Libraries. <https://www.lib.umn.edu/>

The award-winning University of Minnesota Libraries, with 13 locations across the Twin Cities Campus, ranks first of 123 North American research libraries for loans to other libraries. The total number of volumes is 7,111,311, with serial subscriptions of 109,681. The libraries have 2.3 million user visits each year, answer 129,000 reference questions annually, and deliver 1,500 workshops over the course of the year.

## How to be Involved

### Council of Graduate Students (COGS)

The Council of Graduate Students (COGS) is the official governing body representing graduate students at the University. COGS provides opportunities for graduate students to participate actively in University administrative and policy decisions. Graduate students in each degree-granting program are entitled to elect one representative to serve on COGS, which also recruits student representatives for the Graduate School Policy and Review Councils, the University Senate, and many College of Liberal Arts and University-wide committees. In addition, COGS assists in providing ombudsman services for graduate students and disseminates information, primarily through the *Gradletter* and through general meetings held twice per semester. Information on housing, University governance, and grievance procedures is available from the COGS office: 303 Johnston Hall, 101 Pleasant Street S.E., Minneapolis, MN 55455. e-mail: [cogs@umn.edu](mailto:cogs@umn.edu); url: <http://www.cogs.umn.edu/about.html>.

## Professional Organizations

Human Factors and Ergonomics Society. <http://www.hfes.org>

From the website:

The Society's mission is to promote the discovery and exchange of knowledge concerning the characteristics of human beings that are applicable to the design of systems and devices of all kinds.

The Society furthers serious consideration of knowledge about the assignment of appropriate functions for humans and machines, whether people serve as operators, maintainers, or users in the system. And, it advocates systematic use of such knowledge to achieve compatibility in the design of interactive systems of people, machines, and environments to ensure their effectiveness, safety, and ease of performance. The Society was founded in 1957.

This organization has a site dedicated to students, including information about Federal programs and fellowships, finding a job in industry, and preparing for a career in human factors.

<https://www.hfes.org/Web/Students/students.html>

## Where to Get Help

*Disability Services.* The University's mission is to provide optimal educational opportunities for all students, including those with disabilities. In general, accommodations are made on an individualized and flexible basis.

It is the responsibility of students to seek assistance at the University and to make their needs known. Disability Services provides direct assistance such as information, referral, advocacy, support, and academic accommodations (e.g., interpreters, readers) for enrolled and prospective students. For more information, contact Disability Services, University of Minnesota, 180 McNamara Center (The Gateway), 200 Oak Street S.E., Minneapolis, MN 55455 612- 626-1333, voice or TTY.

*International Student Services.* Counseling, advising, and educational services are provided for students and scholars from other countries by International Student and Scholar Services (ISSS). Staff members offer counseling and advising services regarding visa requirements and other immigration issues; social, personal, and financial matters; international and intercultural educational opportunities; academic issues; and English language requirements. For more information: <http://www.iss.umn.edu/>

*Statistics Help.* See your adviser.

*Writing Help.* The Center for Writing is located in 10 Nicholson Hall, Minneapolis Campus. The Center offers workshops each semester that range from one to five sessions. Topics vary each term. For more information: <http://writing.umn.edu/>

*Conflict Resolution.* The Student Conflict Resolution Center works with students to resolve university-based problems and concerns. The services are free and confidential. SCRC will help you resolve any campus-based problem or concern. The most common areas of concern include grading disputes, scholastic misconduct, and academic harassment. Location: 254 Appleby Hall, 128 Pleasant St. SE, Minneapolis Campus. Phone: 612-624-7272. E-mail: [sos@umn.edu](mailto:sos@umn.edu). Website: <http://www.sos.umn.edu/students/index.html>

*Sexual Harassment Policy.* Sexual harassment by or toward a member of the University community is prohibited. Definitions and procedures for the University of Minnesota's policy statement of December 11, 1998 may be found here: <http://www1.umn.edu/usenate/scfa/sexualharassment.html>

Individuals who suspect sexual harassment should report it to the Office of Equal Opportunity and Affirmative Action. Location: 274 McNamara Alumni Center, 200 Oak Street SE, Minneapolis Campus. Phone: 612-624-9547. E-mail: [eoaa@umn.edu](mailto:eoaa@umn.edu) Website: <https://diversity.umn.edu/eoaa/>  
All inquiries will be held in strictest confidence.

*Counseling Services.* University Counseling and Consulting Services (UCCS) offers counseling for academic, career, personal, or relationship concerns. Besides counseling, UCCS features a variety of services. The Career Development Center and the Learning and Academic Skills Center offer workshops, courses, and materials for career development or academic skills improvement. The Organizational Development Program offers consultation, assessment, team building, conflict mediation, training, and workshops. UCCS's Measurement Services office administers tests; scores exams, surveys, and research instruments for University faculty; and operates the Minnesota Statewide Testing Program for Minnesota elementary and secondary schools. The Testing Center administers admissions, placement, and national tests.

University Counseling and Consulting Services has two offices:

Minneapolis Campus  
[340 Appleby Hall](#)  
128 Pleasant Street SE  
Minneapolis, MN 55455  
Phone: **612-624-3323**  
Hours: 8:00 a.m.- 4:30 p.m.

St. Paul  
[199 Coffey Hall](#)  
1420 Eckles Avenue  
St. Paul, MN 55108  
Phone: **612-624-3323**  
Hours: 8:00 a.m.- 4:30 p.m.

## **Equal Opportunity Statement**

The University of Minnesota shall provide equal access to and opportunity in its programs, facilities, and employment without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression.

Inquiries regarding compliance may be directed to the Director, Office of Equal Opportunity and Affirmative Action, University of Minnesota, 274 McNamara Alumni Center, 200 Oak Street S.E., Minneapolis, MN 55455, (612) 624-9547, [eoaa@umn.edu](mailto:eoaa@umn.edu). Website at [www.eoaa.umn.edu](http://www.eoaa.umn.edu).

This publication is available in alternative formats upon request. Please contact the graduate program staff, Human Factors and Ergonomics Graduate Program, 240 McNeal Hall, 612-626-1219.