

# Graduate Program Handbook

human factors & ergonomics



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# Contents

<b>General Information</b> .....	<b>6</b>
Introduction to the Handbook .....	6
Graduate School Website .....	6
Graduate Student Services and Progress (GSSP) .....	6
One Stop .....	6
University of Minnesota Policies: Graduate Education Policies .....	7
University of Minnesota Policies: Student Conduct and Research Ethics .....	7
<b>Program Overview</b> .....	<b>8</b>
College of Design .....	8
College of Design Diversity Statement .....	8
Human Factors and Ergonomics Graduate Program: General Description .....	9
Degree Objectives .....	9
Program Administration .....	9
Director of Graduate Studies .....	9
Advisory Committee .....	9
Appointment and Continuation of Graduate Faculty .....	10
Administrative Support .....	10
Electronic Mail Accounts .....	10
<b>Resources</b> .....	<b>11</b>
University of Minnesota Libraries .....	11
Office of Information Technology .....	11
Walk-in Locations .....	11
Technology Training and Usability Services .....	11
Technology Training .....	11
Usability Services .....	11
Computer Labs, University of Minnesota .....	11
Computer Labs, College of Design .....	12
Human Dimensioning Lab .....	12
Wearable Technology Laboratory .....	12
Career and Internship Services .....	13
<b>Student Degree Progress</b> .....	<b>13</b>
Registration for Non-Degree Students .....	13
Admission Requirements .....	13
After Admission .....	15
Registration .....	15
Maintaining Active Student Status .....	15

Registration Requirements.....	15
Grad 999 Policy .....	16
Leave of Absence .....	16
Registration Procedures .....	17
Course Permission .....	17
Holds .....	17
Thesis Credit Registration .....	17
Minimum Credit Requirements, Grade Requirements, and Incompletes .....	17
Program Planning: Submitting the Graduate Degree Plan (GPAS) .....	18
Annual Academic Progress Review .....	19
Change of Status.....	20
Readmission .....	20
Express Readmission .....	20
Graduation .....	21
Commencement.....	21
Student Records .....	21
Publishing .....	21
<b>Master of Science Degrees .....</b>	<b>22</b>
General Information .....	22
Projected Time Table .....	22
Selection of Adviser and Committee .....	22
Guidelines for Change of Adviser and Change of Committee.....	22
Preliminary Examinations.....	24
Master’s Plan A: Degree Requirements .....	24
Coursework Required and Recommended .....	24
Transfer of Credits .....	25
Program Planning: Submitting the Graduate Degree Plan (GPAS).....	25
Degree completion steps for Master’s students .....	25
Transfer Credits.....	25
Course Allocation and Substitutions.....	26
Declare a Minor .....	26
Online Submission of Committee Members .....	26
Thesis Completion Procedures .....	26
Graduation Packet .....	26
Policies Related to Research.....	27
Changing Approved Program .....	27
Preparation of Master’s Thesis.....	27
Thesis Review.....	27
Final Oral Examination .....	28
Changes in the Examining Committee .....	28
Master’s Plan A Final Oral Examination .....	28

Degree Completion .....	28
Master's Plan C: Degree Requirements .....	29
Coursework Required and Recommended .....	29
Transfer of Credits .....	30
Program Planning: Filing Graduate Degree Plan .....	30
Graduation Packet .....	31
Policies Related to Research.....	31
Changing Approved Program .....	32
Degree Completion .....	32
<b>Doctor of Philosophy .....</b>	<b>32</b>
General Information .....	32
Projected Time Table .....	32
Selection of Adviser and Committee .....	32
Guidelines for Change of Adviser and Change of Committee.....	33
Preliminary Examinations.....	34
Degree Requirements.....	34
Coursework Required and Recommended .....	34
Research Ethics Requirements .....	34
Transfer of Credits .....	35
Possible Minors and Related Fields .....	35
Program Planning: Filing Graduate Degree Plan .....	35
Degree Completion Steps.....	35
Online Submission of Committee Members .....	36
Policies Related to Research.....	37
Changing Approved Program .....	37
Preliminary Written Examination .....	37
Dissertation Credits.....	38
Form.....	38
Preparation of Doctoral Dissertation.....	38
Preliminary Oral Examination.....	38
Conducting Preliminary Oral Examination .....	39
Dissertation Completion Procedures .....	40
Thesis Reviewers.....	40
Changes in the Examining Committee .....	41
Scheduling Final Oral Examination with GSSP.....	41
Final Oral Examination .....	41
Final Oral Examination Committee.....	41

Organization of the Final Oral Examination .....	41
Dissertation Submission .....	42
Degree Completion .....	42
<b>Employment, Financial Aid, and Career Resources .....</b>	<b>43</b>
University of Minnesota Human Resources .....	43
Research Assistantships .....	43
International Students .....	43
International Student Visas .....	43
Graduate School-Administered Fellowships and Scholarships .....	43
Federal Loans and Grants .....	43
Career Services .....	43
<b>Student Life .....</b>	<b>44</b>
Security .....	44
Health Care .....	44
Housing .....	44
University of Minnesota Libraries .....	44
How to Be Involved .....	44
Council of Graduate Students .....	44
Professional Organizations .....	45
Where to Get Help .....	45
Disability Services .....	45
International Student and Scholar Services .....	45
Statistics Help .....	46
Writing Help .....	46
Conflict Resolution .....	46
Sexual Harassment Policy .....	46
Counseling Services .....	47
<b>Equal Opportunity Statement .....</b>	<b>47</b>

## 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>.

### Graduate Student Services and Progress (GSSP)

View degree completion steps, exam scheduling, thesis/dissertation submission and formatting, and the Graduate Planning & Audit System (GPAS). <https://onestop.umn.edu/academics/graduate-student-services-and-progress-gssp>

### 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:

<https://grad.umn.edu/about/policies-governance>

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](#)

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

[Master's Degree: Completion](#)

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

[Leave of Absence and Reinstatement](#)

[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://regents.umn.edu/policies/index>

Student Code of Conduct

[https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student\\_Conduct\\_Code.pdf](https://regents.umn.edu/sites/regents.umn.edu/files/policies/Student_Conduct_Code.pdf)

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, and the School of Public Health. The administrative home of the program is the College of Design. The program's website can be found here: <http://humanfactors.design.umn.edu/>

### The College of Design

The College of Design is comprised of the Department of Design, Housing, and Apparel; the Department of Architecture; and the Department of Landscape Architecture. 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.

### College of Design Diversity Statement

In pursuit of a fully inclusive community, the College of Design and Human Factors & Ergonomics Program are committed to supporting diverse people and ways of knowing. We seek to understand and meet the needs of all types of people and to create culturally and socially responsive prototypes, projects, and environments. To achieve this we foster inquiry and responsiveness within our own college by welcoming, affirming, and empowering all students, faculty, and staff.

We welcome people who are innovative thinkers, who are creative, and who are willing to challenge the status quo. Through this commitment we seek to increase diversity within our professions and advocate for true social change via our teaching, research, creative scholarship, and engagement. We know that change is oftentimes an iterative process that requires brainstorming, experimentation, prototyping, successes, and failures. With this understanding

in mind, we pledge to continually engage in the process of enhancing diversity in the College of Design, and to learn from each other as we do so. Also see <https://humanfactors.design.umn.edu/Diversity.html>

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

Human Factors and Ergonomics is the study of how to create things, environments, 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, clothing, 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 60 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 (one faculty member from each participating college, as well as the DGS) 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.

Program Mailing Lists / Email Accounts:

[humanfactors@umn.edu](mailto:humanfactors@umn.edu) – list containing all active graduate students + program administration

[human\\_factors\\_faculty@umn.edu](mailto:human_factors_faculty@umn.edu) – list containing all HFE program faculty

[hfegrad@umn.edu](mailto:hfegrad@umn.edu) – email account managed by HFE administration for program inquiries/information

### **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>

Walk-in Locations provide face-to-face technology consultations, support and training. For locations and hours: <http://it.umn.edu/help/walk-in>  
Locations include 90 Blegen Hall, West Bank; 101 Coffman Memorial Union, East Bank; and 4 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>

*LinkedIn Learning*, is a library of online training videos, available at no cost to current University of Minnesota students on all campuses. LinkedIn Learning is an online educational platform that helps you discover and develop business, technology-related, and creative skills through expert-led course videos. With more than 13,000 courses and personalized recommendations, you can discover, complete, and track courses related to your field and interests.

<https://it.umn.edu/transition-linkedin-learning>

*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.

<https://it.umn.edu/service-details/usability-services?km>

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

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

East Bank:

Coffman Memorial Union B60

Language Center Multimedia Lab Jones Hall 135

Walter Library 103

West Bank:  
Humphrey School of Public Affairs 50

St. Paul:  
Coffey Hall 50  
Learning and Environmental Sciences 220

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

Human Factors and Ergonomics graduate students have access to computer labs in McNeal Hall and Rapson Hall. These labs are available only for students in the College of Design programs. Both facilities include 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.

<https://design.umn.edu/about/offices/it/labs/about.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 Laboratory, College of Design**

Research in the Wearable Technology Laboratory 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 co-directed by Dr. Lucy

Dunne and Dr. Brad Holschuh and is part of the Wearable Product Design Center.  
<http://wtl.umn.edu/>

## 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/>

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

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

Minneapolis: [411 Bruininks Hall](#)

(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 information for Non-Degree Students: <https://onestop.umn.edu/academics/non-degree-graduate-registration>

### Admission Requirements

December 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 HFE Graduate Faculty on the basis of the following:

- Select two faculty members. Select at least two Human Factors and Ergonomics faculty members with whom you would like to work.
- 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?
- Diversity Statement. This is statement 2 in the online application.
- GRE Scores. GRE scores are required. 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 then reviewed by the Human Factors and Ergonomics Faculty. 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 SLATE application system. The University of Minnesota Graduate Student Admissions office notifies the applicants of the program's decision via e-mail.

### **After Admission**

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. Students can change advisers as they become acquainted with faculty, though 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.

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: <https://onestop.umn.edu/academics/classes>

### Registration Requirements.

From the University of Minnesota Policy, "Application of Credits to Degree Requirements", <https://policy.umn.edu/education/gradcreditdegree>

**For master's degrees** – The student's graduate degree plan associated with each University graduate degree must consist of the following minimum number of credits earned while enrolled as a degree-seeking student in a University graduate program and that have not been applied to any other degree:

- a. For a master's Plan A degree, at least 12 University graduate course credits and 10 University master's thesis credits (HUMF8777). In addition, students must meet the University's 30-credit minimum total credits, or the graduate program's minimum credit requirement, whichever is higher.
- b. For a master's Plan B or Plan C degree, at least 20 University graduate course credits. In addition, students must meet the University's 30-credit minimum total credits, or the graduate program's minimum credit requirement, whichever is higher.

**For doctoral degrees** – For a doctoral degree, at least 12 University graduate course credits and 24 University doctoral thesis credits (HUMF8888). For a doctoral degree that does not require doctoral thesis credit (HUMF8888) registration, at least 36 University graduate course credits. In addition, doctoral students must meet the University's 48-credit minimum total credits, or the graduate program's minimum credit requirement, whichever is higher. Up to 6 credits can be taken from any graduate-level course offered at UMN and applied toward your total credit requirement (beyond those listed in the HFE curriculum), with the approval of your committee".

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 and 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.

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.

As a graduate student, there may be a time when you need to register solely to meet your registration requirements and avoid inactive status. Special registration categories are options to help you remain active.

You will need permission from your advisor and the Program DGS to register for Advanced Status.

<https://onestop.umn.edu/academics/special-registration-categories-graduate-and-professional-students>

Grad 999 - Human Factors & Ergonomics Program Policy.

**The Human Factors and Ergonomics Program does NOT permit students to register for Grad 999. Please register for one of the Advanced Status options.**

Leave of Absence Policy.

Graduate students are expected to maintain active status through continuous registration from the time they matriculate until they graduate. Students who are not able to maintain active status are strongly encouraged to consult with their Director of Graduate Studies, advisor, and relevant offices to determine whether requesting a leave of absence is the most appropriate course of action. Students who do not have an approved leave of absence and are not continuously enrolled may experience negative consequences related to academic, visa,

financial aid, and other student issues. <https://policy.umn.edu/education/gradstudentleave-faq>

## 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.

Ph.D. requires a minimum of 36 course credits + 24 dissertation credits. Students can take **up to 6 course credits from any graduate level course offered at the University** (5XXX and above), so long as it relates to your dissertation research and your advisor approves of the selection. The course(s) do not need to be part of the official HFE curriculum, and do not require formal DGS approval.

The grade level requirements of the University of Minnesota:

- Master's students are required to maintain a minimum GPA of 3.0 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.

## **GPAS: Submitting the Graduate Degree Plan**

Students develop the Graduate Degree Plan in consultation with their adviser(s) and committee.

### **GPAS - Graduate Planning and Audit System. Effective Fall 2016**

The Graduate Planning & Audit System (GPAS) allows graduate and professional students to plan future coursework and view student degree progress. Access GPAS through MyU>Academics>Degree Progress>Graduate Planning and Audit System.

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

The adviser and graduate program coordinator approve the student's plan in the GPAS system.

Planning documents to ensure that 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: [University course catalog](#)

Planning Document for Master's Plan C: [University course catalog](#)

Planning Document for PhD: [University course catalog](#)

After meeting with your advisor and committee, log into MyU and select the Academics tab, and then the degree progress sub-tab. Click on the Grad Planning & Audit System link. You do not have to use the "plan by my requirements" button. Scroll to the bottom of the page and click the "submit" button for advisor and Program approval. You'll see the confirmation that your plan was successfully submitted.

### **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://policy.umn.edu/education/mastersperformance> and "Doctoral Degree: Performance Standards and Progress", II, a. <http://policy.umn.edu/education/doctorsperformance>

Each academic year, graduate students are evaluated in terms of their academic performance and progress toward obtaining a graduate degree. All students must participate in this review of academic progress. While Graduate School will notify the Director of Graduate Studies and

the academic advisor if the student's grade point average falls below the minimum required (2.8 for Master's students; 3.0 for Doctoral students), Graduate School requires that additional feedback be given to graduate students concerning their academic performance. The purpose of the evaluation is to provide students with timely feedback concerning their academic progress, and, in cases where the graduate students' academic progress is unsatisfactory, to initiate a process by which students can be assisted in making progress toward obtaining their degrees.

In cases where students may need to reapply to the graduate school in order to progress on their degree work, additional coursework may be required or adjustments may need to be made to their research project to reflect the changing nature of the field. Lack of academic progress jeopardizes a student's status in Graduate School.

Students are evaluated by their academic adviser(s). Once the student has conferred with the adviser, the evaluation form is to be completed and forwarded to the Director of Graduate Studies. Students who are informed that they are not making academic progress will meet with adviser(s) and submit an action plan for successful completion of their degrees.

***Procedure:***

Students will be sent the evaluation document via e-mail the spring semester and will make an appointment to meet with their adviser early spring semester. Students can also download the current form from the program website. **It is the student's responsibility to set up this appointment.**

Students bring the following to the meeting:

- Current Transcript
- Updated CV
- Annual academic progress review form (Part 1 should be filled before the meeting)

Once the student has met with the adviser, the form will be completed and signed. Student scans the signed form and e-mails the electronic file to the graduate program coordinator by February 15.

All students will be notified whether they are or are not making academic progress. Students who are notified that they are not making academic progress will:

1. Schedule an appointment within 2 weeks of the notification with their academic advisor.
2. Present a plan for making academic progress on their degree during that appointment.

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

## 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 deadline is:

- December 15 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: <https://grad.umn.edu/admissions/readmission>

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.

If the adviser and Director of Graduate Studies determine that the student may be readmitted, without a formal review process, download and complete an [Express Readmission Form](#), then submit it to the graduate program DGS and advisor for signature. Submit the signed Readmission Application to the Graduate Program Coordinator for. They will submit the application to the Graduate School on the student's behalf. If your Readmission Application requires a fee, Graduate School Admissions Office staff will contact you via email with payment instructions.

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. Forms are located in your MyU Graduate Packet and include the Graduate Application for Degree form, Final Examination Report form, and Reviewers' Report form <https://apps.grad.umn.edu/secure/gradpacket/>.

## **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://policy.umn.edu/education/mastersperformance>, 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. The committee must consist of a minimum of three faculty, all in HFE (with an extra, external committee member needed if pursuing a minor). 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. <https://onestop.umn.edu/academics/examination-committees>

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 Student Services and Progress (GSSP) website: <https://onestop.umn.edu/academics/examination-committees>

### **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](#). Forward signed document to graduate program coordinator. 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](#). Forward a copy of signed document to graduate program coordinator. Once approved, student enters new committee via the Examination Committees page of the Graduate Student Services and Progress website: <https://onestop.umn.edu/academics/examination-committees>

Electronic signatures are acceptable.

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.

## **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

- HUMF 8901: HFE Graduate Seminar (1 credit) can be repeated up to three times for credit toward degree
- Psy 8814 & 8815: Analysis of Psychological Data
- 3 credits in Statistics
- 3 credits in Experimental Design
- 3 credits in Human Factors Foundations
- 3 credits in Physical Human Factors
- 3 credits in Cognitive Human Factors
- Research Ethics Training

The balance of course credits may come from any category on the course list. To ensure 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: All graduate students must receive [training in the ethical conduct of research](#).

Thesis credits: 10 thesis credits (HumF 8777)

Specification of examinations, papers, thesis: Students must complete a thesis. [Thesis/dissertation submission and formatting](#)

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: Submitting the Graduate Degree Plan

Students develop their Graduate Degree Plan in consultation with their adviser(s) and committee members.

After meeting with your advisor and committee, log into MyU and select the Academics tab, and then the degree progress sub-tab. Click on the Grad Planning & Audit System link. You do not have to use the "plan by my requirements" button. Scroll to the bottom of the page and click the "submit" button for advisor and Program approval. You'll see the confirmation that your plan was successfully submitted.

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

Master's students submit their GPAS the semester prior to graduation.  
Doctoral students submit their GPAS prior to scheduling the Preliminary Oral Examination.

### **Degree completion steps for Master's students:**

[https://assets.asr.umn.edu/files/gssp/otr201g\\_Masters\\_PlanA\\_GPAS.pdf](https://assets.asr.umn.edu/files/gssp/otr201g_Masters_PlanA_GPAS.pdf)

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

[https://humanfactors.design.umn.edu/ms\\_plan\\_a.html](https://humanfactors.design.umn.edu/ms_plan_a.html)

**Transfer Credits:** Please do NOT use the GPAS planner for transfer credits; instead [download the form here](#). Once you have the required signatures, submit the form and a copy of the transcript to the Graduate Program Coordinator.

**Courses Allocation and Substitutions:** Some of your coursework appearing in GPAS will need to be manually moved to the correct requirement group. Use this form [download the form here](#) for the following situations:

Coursework appearing in the “Courses Not Allocated” section of your GPAS record needs approval to move them to the correct requirement. If you are requesting to move a course from one requirement to another. If you are requesting to apply a course not on the HFE approved list to any of your degree requirements. Please submit this to the graduate program coordinator once you have obtained signatures.

**Declared Minor:** If you want to declare a minor, the first step is to visit with the department that offers the minor. The department will direct you to follow a specific application process. This usually includes meeting with the DGS for that department. To [add or remove a graduate minor](#), you will need to submit a form. To move approved courses to the minor field, complete the [Courses Allocation and Substitutions](#) document to the Human Factors & Ergonomics graduate program coordinator.

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

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. <https://onestop.umn.edu/academics/examination-committees>

### **Thesis Completion Procedures**

Graduate students set up a schedule to meet regularly with the adviser for the completion of the thesis. <https://policy.umn.edu/education/masterscompletion>

### **Graduation Packet**

After the Degree Program has been filed and approved by Graduate Student Services & Progress Department, the student will have access to their Graduate Packet: <https://onestop.umn.edu/academics/graduation-checklist-grad-students> 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. Current (active) graduate students who wish to change their graduate major and/or degree level must submit a "Change of Status" application to the Office of Graduate Admissions. There are two types of Change of Status applications – online application and change of status from. See link below to determine which process to complete.

<http://www.grad.umn.edu/current-students-forms/forms-masters>

## Preparation of Master's Thesis

**Thesis:** Graduate students set up a schedule with the adviser for the completion of the thesis.

**Preparation of Master's Thesis:** To obtain instructions for the preparation of the master's thesis, visit the University website:

<https://onestop.umn.edu/academics/thesisdissertation-submission-and-formatting>

**Thesis Review:** The thesis is read by the entire examining committee. To allocate sufficient time for faculty to read the thesis and decide whether it is ready for defense, students must notify their adviser and other members of the examining committee 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.

Students initiate the Reviewers' Report form via a link in their graduation packet. Reviewers will launch the form, record their decision, and submit the form. They will indicate whether the student's dissertation/thesis is acceptable for defense, acceptable with revisions, or not acceptable for defense. Students should initiate the form ***at least one week before their defense***. All reviewers should respond to the form at least 3-4 days before the defense.

The form is complete when every reviewer has responded. Once complete, the Office of the Registrar (OTR) processes the form and updates the student's record. Students in master's programs will have access to the Final Exam form in their graduation packet.

**Final Oral Examination:** The final examination covers the major field and the minor or related fields, and may include any work fundamental to these fields. The final oral examination for the master's degree is conducted as a closed examination, attended by only the student and the examining committee. All committee members must be present; the absence of any member results in an invalid examination.

### **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.

The committee assignment workflow is a student-initiated process used to assign a committee for the first time or update existing committee information. To access workflow go to this link. <https://assets.asr.umn.edu/files/QS-committee-workflow.pdf>

### **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. <https://onestop.umn.edu/academics/apply-graduate>

## **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:

- HUMF 8901: HFE Graduate Seminar (1 credit) can be repeated up to three times for credit toward degree
- Psy 8814 & 8815: Analysis of Psychological Data
- 3 credits in Statistics
- 3 credits in Experimental Design
- 3 credits in Human Factors Foundations
- 3 credits in Physical Human Factors
- 3 credits in Cognitive Human Factors
- Research Ethics Training
- 2 classes of at least 3 credits each with a project comprising 50% of the coursework. Here is the list of approved classes for this requirement.

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

Research Ethics Requirement: All graduate students must receive [training in the ethical conduct of research](#).

Thesis credits: None.

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

Final Exam: No Final Exam.

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

Two classes of at least 3 credits 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 their Graduate Degree Plan in consultation with their adviser(s) and committee members.

After meeting with your advisor, log into MyU and select the Academics tab, and then the degree progress sub-tab. Click on the Grad Planning & Audit System link. You do not have to use the "plan by my requirements" button. Scroll to the bottom of the page and click the "submit" button for advisor and Program approval. You'll see the confirmation that your plan was successfully submitted.

## Degree completion steps for Master's students:

[https://assets.asr.umn.edu/files/gssp/otr202g\\_Masters\\_PlanBC\\_GPAS.pdf](https://assets.asr.umn.edu/files/gssp/otr202g_Masters_PlanBC_GPAS.pdf)

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

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

### **GPAS - Graduate Planning and Audit System. Effective Fall 2016**

The Graduate Planning & Audit System (GPAS) allows graduate and professional students to plan future coursework and view student degree progress. Access GPAS through MyU>Academics>Degree Progress>Graduate Planning and Audit System.

Master's students file the GPAS the semester prior to graduation.

Doctoral students file the GPAS prior to scheduling the Preliminary Oral Examination.

The adviser and graduate program coordinator approve the student's plan in the GPAS system.

**Transfer Credits:** Please do NOT use the GPAS planner for transfer credits; instead [download the form here](#). Once you have the required signatures, submit the form and a copy of the transcript to the Graduate Program Coordinator.

**Courses Allocation and Substitutions:** Some of your coursework appearing in GPAS will need to be manually moved to the correct requirement group. Use this form [download the form here](#) for the following situations:

- Coursework appearing in the “Courses Not Allocated” section of your GPAS record needs approval to move them to the correct requirement.
- If you are requesting to move a course from one requirement to another.
- If you are requesting to apply a course not on the HFE approved list to any of your degree requirements.

Please submit this to the Graduate Program Coordinator once you have obtained signatures.

**Declared Minor:** If you want to declare a minor, the first step is to visit with the department that offers the minor. The department will direct you to follow a specific application process. This usually includes meeting with the DGS for that department. To [add or remove a graduate minor](#), you will need to submit a form. To move approved courses to the minor field, complete the [Courses Allocation and Substitutions](#) document to the Human Factors & Ergonomics Graduate Program Coordinator.

### **Graduation Packet**

After the Degree Program has been filed and approved by Graduate Student Services & Progress Department, the student will have access to their Graduate Packet: <https://onestop.umn.edu/academics/graduation-checklist-grad-students> 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. Current (active) graduate students who wish to change their graduate major and/or degree level must submit a "Change of Status" application to the Office of Graduate

Admissions. There are two types of Change of Status applications – online application and change of status form. See link below to determine which process to complete.

<https://grad.umn.edu/change-add>

## **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. <https://onestop.umn.edu/academics/apply-graduate>

## **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 Ph.D. committee must be comprised of four faculty. Three of which are HFE faculty, and one member who represents a field outside the major. An extra, external committee member is needed if pursuing a minor. If you have declared a minor, at least one member must represent the minor field.

<https://onestop.umn.edu/academics/examination-committees>

The final oral examination committee is not required to include the same members who served on the prelim oral 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 on One Stop Student Services: <https://onestop.umn.edu/academics/examination-committees>

#### **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.

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

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 One Stop Student Services website:

<http://www.grad.umn.edu/current-students-graduate-student-services-progress/examining-committees-new>

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>

### **Preliminary Examinations**

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

## Degree Requirements

### Doctoral Degree: Coursework Required and Recommended

Total credits: 36 course credits + 24 dissertation credits = 60 total

#### Major Course Requirements:

- HUMF 8901: HFE Graduate Seminar (1 credit) can be repeated up to three times for credit toward degree
- Psy 8814 & 8815: Analysis of Psychological Data
- 3 credits in Statistics
- 3 credits in Experimental Design
- 3 credits in Human Factors Foundations
- 3 credits in Physical Human Factors
- 3 credits in Cognitive Human Factors
- Research Ethics Training

Students can take **up to 6 course credits from any graduate level course offered at the University** (5XXX and above), so long as it relates to your dissertation research and your advisor approves of the selection. The course(s) do not need to be part of the official HFE curriculum, and do not require formal DGS approval.

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

#### **Research Ethics Requirement**

All graduate students must receive [training in the ethical conduct of research](#).

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 their Graduate Degree Plan in consultation with their adviser(s) and committee members.

After meeting with your advisor, log into MyU and select the Academics tab, and then the degree progress sub-tab. Click on the Grad Planning & Audit System link. You do not have to use the “plan by my requirements” button. Scroll to the bottom of the page and click the “submit” button for advisor and Program approval. You’ll see the confirmation that your plan was successfully submitted.

#### **GPAS - Graduate Planning and Audit System. Effective Fall 2016**

The Graduate Planning & Audit System (GPAS) allows graduate and professional students to plan future coursework and view student degree progress. Access GPAS through MyU>Academics>Degree Progress>Graduate Planning and Audit System.

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

The adviser and graduate program coordinator approve the student's plan in the GPAS system.

**Degree completion steps for Doctoral students:**

[https://assets.asr.umn.edu/files/gssp/otr204g\\_Doctoral\\_Philosophy\\_Education\\_GPAS.pdf](https://assets.asr.umn.edu/files/gssp/otr204g_Doctoral_Philosophy_Education_GPAS.pdf)

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

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

**Transfer Credits:** Please do NOT use the GPAS planner for transfer credits; instead [download the form here](#). Once you have the required signatures, submit the form and a copy of the transcript to the Graduate Program Coordinator.

**Courses Allocation and Substitutions:** Some of your coursework appearing in GPAS will need to be manually moved to the correct requirement group. Use this form [download here](#) for the following situations:

- Coursework appearing in the "Courses Not Allocated" section of your GPAS record needs approval to move them to the correct requirement.
- If you are requesting to move a course from one requirement to another.
- If you are requesting to apply a course not on the HFE approved list to any of your degree requirements.

Please submit this to the Graduate Program Coordinator once you have obtained signature.

**Declared Minor:** If you need to move a course for a declared minor, you must contact that program's Director of Graduate Studies or Graduate Program Coordinator.

**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/current-students-graduate-student-services-progress/examining-committees-new>

## **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. Current (active) graduate students who wish to change their graduate major and/or degree level must submit a "Change of Status" application to the Office of Graduate Admissions. There are two types of Change of Status applications – online application and change of status form. See link below to determine which process to complete:

<https://grad.umn.edu/change-add>

## **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
- proposed experiments to study gap
- 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 is available on the website: <http://humanfactors.design.umn.edu/Forms.html>

## **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.

***Scheduling the Preliminary Oral Examination:*** The student is responsible for scheduling the date, time, and location of the preliminary oral exam with all members of the examining committee (Design members and those from the minor or supporting area). The student must schedule the exam at least one week in advance via the online scheduling system. Instructions are located in the student's Graduation Packet accessed through MyU.

***Distribution of the Proposal:*** To allocate sufficient time for faculty to read the thesis and decide whether it is ready for the preliminary oral examination, all members of the examining committee must have at least two weeks to read the proposal after it has been delivered.

### ***Conducting the Preliminary Oral Examination: Information for Advisers & Students***

If the preliminary or final oral examination cannot be held on the scheduled date, Graduate Student Services and Progress must be notified by email to [gssp@umn.edu](mailto:gssp@umn.edu) of the cancellation. The Preliminary or Final Oral Examination Report Form must be returned to [Graduate Student Services and Progress \(GSSP\)](#). The student must reschedule the examination online with GSSP at least one week in advance of the rescheduled exam date. A new Preliminary or Final Oral Examination Report Form will be issued.

The outcome of the examination, with all committee members present and voting, is recorded in one of three ways: pass, pass with reservations, or fail. The voting proportions necessary for these decisions are as follows: if the committee consists of four members, a favorable verdict for passing consists of either a unanimous vote or a vote of 3-1; if the committee consists of five members, a favorable verdict for passing consists of either a unanimous vote or a vote of 4-1; if the committee consists of six members, a unanimous vote or a vote of 5-1 or 4-2 is needed; and if the committee consists of seven members, a unanimous vote or a vote of 6-1 or 5-2 is needed. Candidates who do not earn committee votes in these proportions fail the examination. If, in order to achieve the minimum number of votes to reach a verdict of pass, any vote of pass with reservations is included, then the outcome is recorded as a pass with reservations. A vote to pass the student with reservations still constitutes a passing vote.

**Pass with Reservations.** If the student passes the examination with reservations, the student is informed immediately, but the committee is permitted one week in which to convey its reservations to the student in writing, informing the student of the steps that must be taken to remove them, as well as a deadline by which the committee expects the reservations to be removed. A copy of this letter must be sent to GSSP along with the Preliminary Oral Examination Form. When the student has satisfied the committee's reservations, a second letter or e-mail informing the student and GSSP that the reservations have been removed and that the student may proceed toward the degree is also required. The committee chair should write both letters. The final oral examination may not be scheduled until GSSP has received a copy of the letter indicating that the reservations have been removed. If the committee members disagree as to whether the reservations have been satisfactorily removed, the committee chair asks for another vote, the results of which are subject to the same voting proportions as the initial vote.

A student who is unable to satisfy the committee's reservations may be terminated from doctoral candidacy and from the graduate program.

**Failure of the Preliminary Oral Examination.** If the preliminary oral examination committee recesses without having determined whether a student has passed the examination, the chair of the committee must send a letter to the Dean of the Graduate School explaining the reasons for the recess and noting the date on which the examining committee will reconvene. If the recess will be longer than one week, the examination report form will be mailed to the chair of

the committee before the date on which the committee will reconvene. *The reconvened committee must be comprised of the same members as the original preliminary oral examining committee.*

NOTE: If the candidate's research involves human or animal subjects, radioisotopes, hazardous chemicals, or other activities subject to University of governmental regulation, the committee should discuss with the candidate whether s/he is aware of the regulatory requirements and whether they have complied with the requirements or how they plan to do so.

***Dissertation Completion Procedures:*** Graduate students set up a schedule with the adviser for the completion of the dissertation.

The following requirements must be met with GSSP before the Final Oral Examination can be authorized:

- If the Preliminary Oral Examination was passed with reservations, a letter notifying the student and GSSP that those reservations have been removed must be on file.
- The student must have an approved [doctoral final examination committee on record](#).
- The Reviewers Report form must be on file with GSSP before the examination. Note: Students may schedule their exam before submitting the Reviewers Report form.
- All coursework on the doctoral degree program must be complete.
- GSSP must have on file [certification of foreign language proficiency](#) requirement as indicated on the doctoral degree program.
- The student must hold [active status](#) at the time of the examination.
- The Final Oral Examination must be taken within the eight-year time limit for doctoral students, or an approved [Doctoral Degree: Request for Extension to the Maximum Time Limit](#) form must be on file.

***Thesis/Dissertation Reviewers:*** All members of the examining committee read the dissertation, although only those designated as reviewers sign the report form certifying that the dissertation is ready for defense. The designated dissertation reviewers consist of the adviser, representing the major field, and at least two other members of the final oral examining committee, including at least one representative from the major field and one representative from the minor or supporting program.

Certification of the dissertation as ready for defense is a necessary step toward the final oral examination, but in no way diminishes the significance of that examination.

**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. Internal approval processes and guidelines must be followed prior to the online submission. Follow this link to access the examination-committees steps to assign or update members to your final examination committee.

<https://onestop.umn.edu/academics/examination-committees>

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

<https://onestop.umn.edu/academics/examination-committees>

## Final Oral Examination

**Scheduling Final Oral Examination with Graduate Student Services and Progress (GSSP):** The student must schedule the examination at least one week in advance via the online scheduling system:

<https://onestop.umn.edu/academics/doctoral-oral-exam-scheduling>

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. Students in master's programs will have access to the Final Exam form in their graduation packet. Students in doctoral programs will receive an email with a link to complete the Final Exam form workflow **after** they have scheduled their final exam and been cleared by OTR to take their final exam. A [guide to the Final Exam form](#) is available. If any reviewer indicates "not acceptable for defense," the whole process is canceled and the student will need to submit the form again when they are ready. The student, reviewers, and GPCs will all be notified.

*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.

**Final Examination Committee:** 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. The exam may take place only after the dissertation has been judged ready for defense. The student must distribute the dissertation to all members of the examination committee at least two weeks prior to the scheduled examination date.

**Organization of the Final Oral Examination:** The final oral examination consists of a seminar in which the candidate presents the dissertation; the scholarly community is invited. The examination is limited to the candidate's dissertation subject and relevant areas.

Notification of the academic community, faculty, and students is posted by the Design Graduate Program, who is 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.

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

Instructions for the preparation of the doctoral dissertation (select Thesis Formatting and Submission): <https://onestop.umn.edu/academics/thesisdissertation-submission-and-formatting>

### **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://humanresources.umn.edu/find-job/graduate-assistant-jobs>

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: <https://cei.umn.edu/spoken-english-test-teaching-assistants-setta>

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: <https://studentaid.ed.gov/sa/fafsa>. For information about financial aid: <https://onestop.umn.edu/finances/receiving-financial-aid>

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. <https://shb.umn.edu/>

Graduate Assistant Health Plan. <https://shb.umn.edu/health-plans/gahp-home>

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

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

The award-winning University of Minnesota Libraries, with 12 locations across the Twin Cities Campus, ranks first of 1st North American research libraries for loans to other libraries. The total number of volumes is 7.6 million, with serial subscriptions of 86,676. The libraries have 1,860,413 user visits each year, answer 33,000 reference questions annually, have 2.7 million web visits, and deliver 1,121 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: 202 Coffman Memorial Union, 300 Washington Avenue SE, Minneapolis, MN 55455. e-mail: [cogs@umn.edu](mailto:cogs@umn.edu); url: <https://cogs.umn.edu/>.

## Human Factors & Ergonomics Society-Student Chapter

The Human Factors and Ergonomics Society (HFES, <https://www.hfes.org/>) was founded in 1957 and is a member of the International Ergonomics Association (IEA), a federation of the world's ergonomics societies. It supports 24 technical groups and various local and student chapters throughout the country.

The University of Minnesota Human Factors and Ergonomics (UMN HFES) Student Chapter's purpose is to promote the understanding of human factors in the design, manufacture, and use of machines, systems, environments and devices of all kinds. The student chapter welcomes students from all disciplines who are interested in learning about the field of human factors through the interchange of knowledge and methods in the behavioral, biological, and physical sciences and in industrial, computer science and other relevant engineering disciplines. The student chapter is dedicated to expanding the field of human factors through professional development activities and developing an interest among students with a desire to enhance comfort, performance and health of users.

The chapter is also committed to promoting a sense of community within chapter members through social events and activities. Some past and future activities include professional development visits to local companies that are involved in human factors design (e.g. Worrell Inc., Target Corporation, 3M, Medtronic), panel sessions involving invited speakers, participation in the annual national HFES conference and social events.

For more information, please contact Esther Foo (UMN HFES Chapter President 2019-2020) at [efoo@umn.edu](mailto:efoo@umn.edu).

## 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/students\\_home.html](http://www.sos.umn.edu/Students/students_home.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: <https://policy.umn.edu/hr/sexharassassault>

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: <http://eoaa.umn.edu/>

All inquiries will be held in strictest confidence.

*Counseling Services.* University Counseling and Consulting Services (UCCS) <https://counseling.umn.edu> 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**

Office Hours: 8:00 a.m.-4:30 p.m.

Walk-in Hours: 9:00 a.m.-3:30 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 <https://diversity.umn.edu/eoaa/>.

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.