MS-HCI Project Requirements

Students in the MS-HCI program complete a 6-credit project. This typically (but not necessarily) is to design, implement and test an operational user interface – be it web-based, smart phone app, desktop app, physical device with embedded computation, or any other artifact that embodies human-computer interaction.

For all four schools, there is a common process of filing a signed project proposal form and a signed project completion certificate, as outlined in this document.

You develop a project proposal in the spring of the first year, in consultation with an HCI faculty project advisor working in an area of interest to you. In some cases you may have a “Project Supervisor” – typically an expert in the domain of your project, but not an HCI faculty member – in addition to an HCI faculty advisor. Your faculty project advisor need not be in your home school, but must be an academic faculty member. If you want to work with a faculty project advisor not listed on the MS-HCI web site, speak with your

It is your responsibility to identify a project and a faculty project advisor, and you are encouraged to begin exploring ideas during your first semester. Your School’s MS-HCI faculty coordinator is not your faculty project advisor, however you may consult with him or her to identify potential faculty project advisors whose research best aligns with your interests and project.

The signed project proposal form is due by the end of the 12th full week of classes in the spring semester of your first year of study.

Actual project work is typically performed during the third and fourth semesters of study, but can start earlier, including during the intervening summer during your industrial internship. In your third and fourth semesters, you register for an aggregate total of 6 credits of CS/ID/LCC/PSYC 6998 – whichever school your faculty project advisor is in (or for your home school is the advisor is not in one of these four. Your faculty project advisor in consultation with your School’s MS-HCI faculty coordinator assigns grades.

Toward the end of your final semester of study, you present your work to the program director and associate program directors (the four schools’ MS-HCI faculty coordinators) and fellow students. The presentation is for 15-20 minutes including a brief demonstration of your system via a YouTube video, with 5 minutes for Q&A.

The signed project completion form is due by the last day of finals in the semester you expect to graduate. It is signed only after all project deliverables have been submitted.

Project Proposal

Your project proposal is a roughly 10-page document in which you address the following:
1. What is the problem you seek to solve, and what are the characteristics of those for whom this is a problem? Why is it a problem?
2. What is the general nature of the solution? What is the general functionality? The platform?
3. Methods you expect to use for each stage of the project (many of the steps listed in the schedule will be discussed in this section. How will you understand your users and their needs? How will you test the prototype? The functional system?
4. Description of computing/testing resources you will need, and how you will obtain them.
5. Schedule including but not limited to:
   - Understanding the users and users’ needs
   - Defining functionality
   - Defining final user testing processes
   - Submission to IRB (Institutional Review Board)
   - Rough prototype
   - User testing of rough prototype
   - Poster for Interactivity (February of each year)
   - Implementation of a functional system
   - User testing of functional system
   - First draft final report submitted to advisor and your school’s MS-HCI faculty coordinator.
   - Final report and other deliverables
   - Presentation to MS-HCI faculty advisors and students
6. If you will be doing this project as part of paid job (summer internship, research assistantship, etc), a clear discussion of what elements of the project you are being paid to do, and what elements you are doing for academic credit (the two are mutually exclusive). As a general guideline, one credit hour translates into 60 hours of work (four hours a week over 15 weeks). This translates to 240 hours for a 4-credit project and 360 hours for a 6-credit project. The most common scenario is that you are being paid to implement your system.

This list of milestones is suggestive, not definitive. You may adapt it, in consultation with your advisor, based on the specific characteristics of your work.

You include, with your project proposal form, your proposal and the certification that you have passed the training for the protection of human subjects.

If your status with respect to item six of the proposal changes after your proposal is approved, you are expected to submit (or re-submit) item six.
Project Deliverables

These deliverables will be archived on the HCI T-Square web site, and form a valuable part of your portfolio.

Final report: This is an expanded and updated version of your project proposal, typically 30-50 pages, including screen shots and appendixes containing things like questionnaires/results used in your requirements gathering and/or usability evaluations. A typical outline is:

1. Statement of problem, why it is a problem, intended user characteristics, general capabilities of your solution.
2. Previous work, theoretical foundations. Literature review. Describe the general application domain; what else has been done, what is the context of thinking and making things in which your work is situated.
3. How you studied user characteristics and needs, and what you concluded. Include personas and critical use cases.
4. How you did your rough prototype, how you tested the rough prototype, and what you learned (include a few sketches or screen shots).
5. How you implemented your system – a page or two about the technologies involved (include screen shots).
6. How you tested your system, and what you learned (testing details, such as scripts and questionnaires, should be in an appendix).

Sections 3 and 6 will be the longest.

This outline is suggestive, not definitive. You may adapt it, in consultation with your faculty project advisor, based on the specific characteristics of your work.

If you are writing a full-length conference or journal paper about your work, that paper is acceptable as your final report. The paper may be co-authored with your advisor and others; you need to be the first author.

Presentation: PDF of your final presentation.

Video: Three to five minute narrated screen-captured demonstration of your project, on YouTube.

When the deliverables are on the web site, you are ready to have your project completion form signed by your faculty advisor and your school’s MS-HCI faculty coordinator. Include with the form hard copy of your final report and (letter size) poster.

As per your project proposal milestones, you must have a draft final report for your faculty project advisor prior to the due date (last day of exams) for the completion form to be signed. Confer with your advisor to determine how far in advance of the due date the draft is expected to be ready for review.
MS-HCI Project Proposal Approval Form

This form is for students enrolled in the Master of Science in Human-Computer Interaction (MS-HCI) Program. This is NOT the MS Special Problems (8903) Form. The semester prior to undertaking the project, the student must find a faculty member willing to supervise the project and develop a project proposal. Complete this form in consultation with the faculty member who will be responsible for supervising your project and assigning your grade.

Bring the completed form to the School of Interactive Computing Graduate Programs Office in TSRB 224. You will receive an email when your permit is entered.

Student Name (Please print):____________________  GT ID Number: _______________

Email:________________________

Project Title:____________________________________________

Please attach your project proposal and certification that you have passed the IRB training for protection of human subjects. Refer to the document “MS-HCI Project Requirements” for proposal details.

The attached proposal was developed under the advisement of a faculty member and represents the work I expect to accomplish to complete the MS-HCI Project.

Student’s Signature: ___________________________  Date: _______________

Approvals:

1. Project Supervisor (please print): __________________________________________
   (Required only if your project is under the immediate supervision of someone other than your faculty advisor, such as at a company or GTRI.)

   Signature: ___________________________  Date: _______________

   Title: ___________________________  Organization: ___________________________

   Email: ___________________________  Phone: ___________________________

2. Faculty Project Advisor (please print): ___________________________

   Signature: ___________________________  Date: _______________

3. MS-HCI Faculty Coordinator (please print): ___________________________

   Signature: ___________________________  Date: _______________
MS-HCI Project Completion Form

This form is for students enrolled in the Master of Science in Human-Computer Interaction (MS-HCI) Program. This is NOT the Project Proposal Approval (8902) Form. Complete this form in consultation with the faculty member who is responsible for supervising your project and assigning your grade. Bring the completed form to the School of Interactive Computing Graduate Programs Office in TSRB 224. You will receive an email when your form is entered.

Student Name (Please print): _______________________________ GT ID Number: __________

Email: ________________________________

Project Title: _______________________________________________________________________

Academic Term:  Spring    Summer   Fall     Year: 20____

URL of your YouTube video: __________________________________________________________

Please attach your final report and PPt presentation.

The materials attached, described, and linked to were developed solely by the undersigned student, under the advisement of a faculty member, to complete the MS-HCI Project.

Student’s Signature: _______________________________ Date: __________________________

Approvals:

1. Project Supervisor (please print):

   ______________________________________________________________________

   (Required only if your project is under the immediate supervision of someone other than your faculty advisor, such as at a company or GTRI.)

   Signature: _______________________________ Date: ______________

   Title: ____________________________ Organization: ____________________________

   Email: ____________________________ Phone: ________________________________

2. Faculty Project Advisor (please print): ______________________________________________________________________

   Signature: _______________________________ Date: ________________

3. MS-HCI Faculty Coordinator (please print): ______________________________________________________________________

   Signature: _______________________________ Date: ________________

MS-HCI Project Requirements – Revised September 2013