

LMC 6319: Intellectual Property Policy and Law

Students examine constitutionally informed policy and pragmatic legal issues in intellectual property law, focusing on the effects of power structures and information digitization.

LMC 6320: Globalization and New Media

Historical and theoretical overview of the connections between modes of global integration and modes of representing information, and the application of these insights to globally conceived information design projects.

LMC 6399: Discovery & Invention

Required course for all DM majors. The purpose of this course is to give students a suite of methods they can use in professional settings to discover opportunities for inventive new computational products and services. It complements the design and production skills developed in 6310 and 6313 with applied research skills. For students in the MS DM and MS HCI programs it will also help them in the development of their MS proposals.

LMC 6213: Educational Applications of New Media

Investigates the educational theory and pedagogical uses of new media applications.

LMC 6215: Issues in Media Studies

Topics may include new media formations, technology and performance, the history of television, audience studies.

LMC 6650 Project Studio (Multiple Sections)

Required courses: At least two semesters are required of all DM students. Project Studio carries 3 credits and involves 9 hours of lab work per week and 1 hour of group seminar. Students work in small research groups headed by a DM faculty member. Admission by permission of each section instructor.

LMC 8801 Special Topics – The Digital Media Talks

The faculty of Digital Media and associated researchers from within as well as outside the program will take turns to give weekly talks that cover one faculty member's research. The course aims to provide an overview of the work conducted at the DM unit. Each presentation will lead up to a discussion of the particular topic and students are expected to engage in these discussions.

LMC 8803 Special Topics in Digital Media

Topics vary by semester. May be repeated. May require permission of instructor.

LMC 8813 Advanced Issues in Interactive Narrative

Topics vary by semester. May be repeated. May require permission of instructor.

LMC 8823 Special Topics in Game Design and Analysis

Topics vary by semester. May be repeated. May require permission of instructor.

LMC 8831 Special Topics in Technologies of Representation

Topics vary by semester. May be repeated. May require permission of instructor.

LMC 6800 Master's Project: Digital Media

Students enroll for 6 credits in their final semester unless they take LMC 7000 instead.

LMC 7000 Master's Thesis: Digital Media

Students enroll for 6 credits in their final semester unless they take LMC 6800 instead.

LMC 8997 Graduate Teaching Assistantship (3 hours of audit credit: counts toward full-time semester enrollment but not toward the degree)

LMC 8998 Graduate Research Assistantship (3 hours of audit credit: counts toward full-time semester enrollment but not toward the degree)

Project Studio

All DM students must take at least two semesters of Project Studio (LMC 6650). This course provides studio based instruction, typically on team projects, focused on computational artifacts and design challenges in digital expression and/or civic media. Students work in studio courses headed by a DM faculty member. Faculty members teach different formats of Project Studios, depending on their particular field. Project Studios differ in their design. They can focus on an ongoing, long-term project, topic, or question, which students join at different stages of development or they might be more explorative. Classes can include critical review sessions, discussions of assigned readings, and regular presentations as well as practical implementations.

Project Studios vary from year to year. Each faculty member overseeing a Project Studio will post a description and the Project Studio Section Number prior to registration. Admission by permission of instructor.

DM Masters Projects and Theses

Establishing DM Masters Project/Thesis Topic and Committee

Students should consult with professors as soon as possible during the first year of study to identify a Chair and an appropriate topic and to decide on whether to present a Thesis or a Project. Often the Chair will be the leader of a Project Studio for which the students will enroll in the first term and the Project or Thesis topic will be related to the focus of the Project Studio. The student should consult the Chair about the choice of other Committee Members. The DGS is also available for advice on choosing a Topic, Chair, and Committee.

By the end of the first semester of study: Students should identify and select a committee chair, committee members (if possible), whether they will do a Project or Thesis, and what the general topic of the Project or the Thesis will be. These factors may change during the following term, but students are expected to enter the program with some beginning sense of their area of study, and to find some focus by the end of the first term.

By the end of the first semester, students should send an email to the Director of Graduate Studies (DGS) and the Associate Director, stating the *preliminary* topic, chair, committee, and a short description of the Project or Thesis.

The Committee Chair (also called the Thesis or Project Advisor) must be a member of the DM faculty, and so must at least one other member of the Committee. Thesis committees have 4 members, and Project committees have 3 members.

Masters Project / Masters Thesis Proposals

Length: approximately 5 pages (including a timeline for the proposed project)

Proposals are prepared near the end of the Spring semester. Students should consult at least bi-weekly with the Committee Chair starting with the first week of the Spring semester. The final Proposal and Topic Approval Form should be submitted in full to all members of the Committee, the Director of Graduate Studies, and the Associate Director **no later than April 1st.**

A faculty committee will review all the proposals. If the faculty approves the proposal then the Topic Approval Form will be returned to the ADGS with the appropriate signatures. A copy of the Approval Form is kept in the student's file. If revisions are required, the student will be expected to complete them before the end of the term to the satisfaction of the committee chair and the DGS.

Theses (unlike **Projects**) require an additional Georgia Tech Topic Approval forms to be submitted to the Institute Graduate Office. These forms are available at <http://gradadmiss.gatech.edu>.

Students will only be allowed to register for the required credits of LMC 6800 Masters Project or LMC 7000 Masters Thesis if their Proposal has been approved.

Elements and Format of a DM Masters Project Proposal

The following sections and material should be included in the proposal. Please use this format when creating your proposal.

- Student name, Title, Type of Proposal (Project)
- Committee Chair and Committee members (if known)
- Abstract: a short summary of the problem, approach, solution, and implementation.
- Statement of problem: what is missing from the world that needs to be invented? Who needs this thing and why?
- Proposed solution: why is this the way to make it? Why is this a compelling thing to make? What design problems or method will you use?
- Review of Existing Material: What are the antecedents to your Project? Description of knowledge base and domain of investigation: What else has been done in this area? What is the context of thinking and making things in which your work is situated?
- Deliverable: A description of the artifact you will create, with as detailed a description of its proposed operation, platform, technical details, and context of use as possible.
- Timetable: with significant milestones going from Summer or Fall semester through the Project presentation week in Spring semester
- Resources: Description of any resources you will need and how you will obtain them
- As necessary: Permissions for copyright works, testing of human subjects, or evidence that a specific user community (e.g., a school system) is likely to adopt the outcome of your work
- References, bibliography, including digital artifacts
- (Throughout or in an Appendix:) Charts, screenshots, storyboards, etc., as needed

Elements and Format of a DM Masters Thesis Proposal

The following sections and material should be included in the proposal. A standard proposal template appears as an appendix to this handbook; please use this format when creating your proposal.

- Student name, Title, Type of Proposal (Thesis)
- Committee Chair and Committee members (if known)
- Abstract: a short summary of the problem, approach, solution, and implementation.

- Statement of research problem: What do we need to understand better, and why do we not understand it already?
- Proposed solution: What approach are you taking and why is it the right one? Make clear the methodology you are pursuing: Is it an empirical approach? Is it a cultural studies approach? How do we judge its rigor and success? What methods will you use, and why? What is the outcome you expect?
- Review of Existing Work: Establish the specific theoretical and practical domains in which this research is being conducted – naming the works in the field(s) that are most similar to what you are doing, or most important to your thinking. Make clear the boundaries of your investigation. How will you go about surveying the domain and evaluating the most productive approaches?
- Annotated Table of Contents: Provide an annotated TOC with a short description of each chapter's contents. What in particular are you going to look at in close detail? What are your chapter titles? What are the key works you will analyze? What specific issues will you be addressing within the problem domain you have identified in each? How do the components fit together?
- Resources: Description of any resources you will need and how you will obtain them
- Timetable for research and writing, and for Project creation if there is also an artifact, going from Fall semester through Thesis Defense Week in Spring semester
- As necessary: Permissions for copyright works, testing of human subjects, or evidence that a specific user community (e.g., a school system) is likely to adopt the outcome of your work
- References, bibliography, including digital artifacts
- (Throughout or in an Appendix:) Charts, screenshots, storyboards, etc., as needed

Deliverable for a Masters Thesis (archived in DM and in GT Library)

- The **written document** (about 100 pages) is the Thesis, and must cover the literature of the field and contribute to that literature at the level of scholarly completeness
- Can have an artifact associated with it or not
- Must conform to Graduate Office presentation requirements (3 copies) and be submitted by the Institute Deadline: see <http://gradadmiss.gatech.edu> for full Institute requirements
- Must be submitted to the DM Archive in electronic form. The DM program requires that all graduating students **submit their final documentation and presentation material** (their presentation slides from the final presentation, their thesis or final design document as well as other material as seen fit by the advisor) to a T-Square site for the archive for the DM students and faculty. The DGS will ask students to create a web site hosted on Georgia Tech servers that documents their final work and may stay online for later documentation and reference as a deliverable for LMC 6800/7000.

Deliverable for a Masters Project (archived in DM)

- The complete and functional digital artifact
- A Design Document of a length to be agreed upon by the student and his or her committee chair that surveys the relevant design traditions, problems, solutions; details the design process; and indicates the criteria by which the artifact can be evaluated
- Must be submitted for the DM Archive in electronic form :
The DM program requires that all graduating students **submit their final documentation and presentation material** (their presentation slides from the final presentation, their thesis or final design document as well as other material as seen fit by the advisor) to a T-Square site for the archive for the DM students and faculty. The DGS will ask students to create a web site hosted on Georgia Tech servers that documents their final work and may stay online for later documentation and reference as a deliverable for LMC 6800/7000.

Thesis or Project Presentations

Students are expected to present and demonstrate their findings in a public presentation near the end of the Spring term of the second year. Presentations are usually scheduled during one or more afternoons of the second to last week of classes. These presentations represent the culmination of the work of the Thesis or Project and allow students to share their work with their peers, colleagues, faculty, and friends. The presentations will be part of the final grade for the student's LMC 6800/7000 course.

General guidelines for thesis and project presentations:

Digital Media MS students are required to make an oral presentation of their project or thesis work before they graduate. Each candidate will have approx. 12 minutes for their presentation, with 3 minutes for questions (total 15 minutes). All MS students in both their first and second years should attend the presentations of their peers. There is no formalized presentation template. Each student should find the best way to present their project or thesis work in an informed and intelligent way, demonstrating their fluency in their chosen area of digital media research or practice. A presentation might include the following components:

- Introduction or motivation for the work
- Explanation of the problem or question the project or thesis is trying to address
- Brief overview of related work or literature
- Presentation of the designed artifact or argument
- Brief overview of the design process and implementation
- Short video or demo of the work
- Lessons learned and/or evaluation/results

Students should rehearse and time their presentations in advance. During the presentation, students are advised to speak slowly and clearly, and not to read their slides (slides should be used as props, not as a script). It is also advisable to use more graphics than text on the slides.

Submitting the Thesis

Rules for formatting and submitting the masters Thesis are available at grad.gatech.edu the Georgia Tech Graduate Office. Note that all Theses must be submitted electronically according to a strict set of deadlines, and students must also submit a signed paper copy of the Thesis Certification Form. The schedule for submission is available at <http://www.gradadmiss.gatech.edu/thesis/thesisdeadlines.php>

In addition, students should prepare and submit an Archive of the work, as described above, and submit it to the Associate Director of Graduate Studies (renee.jamieson@gatech.edu).

Submitting the Project

Submission of the final version of the Project must be made before the last day of finals week to the DM Program office. The Project Chair should also have a copy of the final version, as should any members of the committee requesting one. The final version should include all the running code and the complete, revised design document.

Instead of handing in physical media the student may submit the final version on the web as part of the required DM Web Page Archive.

DM Online Archiving and Conference/Journal submission

All Projects and Theses must include a DM Program web page containing screen shots, brief summary, thumbnail image, and pdf copy of the Project proposal and the final Thesis or design document. Where feasible and appropriate the code or a video of the running application should also be included. Slides from the final presentation are also appropriately archived here.

- Students are also strongly encouraged (and may be required by individual advisors) to submit their Project/Thesis work to appropriate conferences and journals.
- The DM program hopes to showcase the Projects for publicity and as models for future students. Students who do not wish for their work to be shared publicly may make a request to exclude it from public access.

Event or Demo Day Presentations

Masters students are expected to present their Theses and Projects at official program events or Demo Days during the year, but particularly during the final term of study.

Sample Program of Study

Year One – Fall

LMC 6310 The Computer as an Expressive Medium (core)	3
LMC 6399 Discovery and Invention in Digital Media (core)	3
LMC 6650 Project Studio	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	(9 to degree) 12

Year One – Spring

LMC 6313 Principles of Interactive Design (core)	3
LMC 6650 Project Studio	3
Elective (e.g. CS 6750 Intro to Human Computer Interaction)	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	(9 to degree) 12

Internship during summer

Year Two – Fall

Elective (e.g. LMC 6311, 6312, ...)	3
Elective (e.g. LMC 6650 Project Studio)	3
LMC 6800/ 7000 Masters Project	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	(9 to degree) 12

Year Two – Spring

LMC 6800/ 7000 Masters Project	3
Elective (e.g. LMC 6650 Project Studio)	3
Elective (e.g. LMC 6650 Project Studio)	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	(9 to degree) 12

* 3 Hours of LMC 8997 or LMC 8998 count toward full-time student credit per term but not toward degree credit hours.

Sample Electives Outside of LMC

CS 6750 Introduction to Human-Computer Interaction
CS 6460 Foundation of Educational Technologies
CS 6470 Online Communities
CS 7450 Information Visualization
CS 8803 Web Usability

Program Contact Information

Administration

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Offices and Labs

TSRB, Room 320B

DM Email Lists (for internal use only)

dm@lists.gatech.edu faculty and students

dm-alumni@lists.gatech.edu DM alumni
dm-fac@lists.gatech.edu DM faculty
dm-students@lists.gatech.edu DM Student only

Appendices

DIGITAL MEDIA DEPARTMENT REQUIRED FORMS:

Thesis/ Project Topic Approval Form

GEORGIA TECH UNIVERSITY REQUIRED FORMS:

Request for Approval of Masters Thesis Topic (office of Graduate Studies)

Available at:

<http://www.gradadmiss.gatech.edu>

Certificate of Thesis Approval for Masters Students (office of Graduate Studies)

Available at:

<http://www.gradadmiss.gatech.edu/thesis/forms/CertifiMS.pdf>

The Official Graduate Office forms and information necessary for graduation are available online at

<http://gradadmiss.gatech.edu/thesis/forms.php>