

Ph.D. Student Handbook

School of Literature, Media, and Communication
Ivan Allen College of Liberal Arts
Georgia Institute of Technology

Admission's Information:

<http://dm.lmc.gatech.edu>

Faculty & Research Interests:

<http://dm.lmc.gatech.edu>

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Program Description

The School of Literature, Media, and Communication at Georgia Tech is unique in housing within a single academic unit a faculty of internationally known practitioner-theorists who combine scholarship in the arts and humanities with a depth of experience in computationally sophisticated environments. Faculty in the program hold degrees in English, Art, Law, Classics, Film, Performance Studies, Mathematics, Computer Science, and other fields. The research areas within the Digital Media (DM) program fall into two main categories: digital expression and civic media. They include critical design, interaction design, augmented reality, educational computing, on-line communities, responsive environments, artificial intelligence, bio-informatics, interactive video, and game design.

The Georgia Tech Digital Media (DM) Ph.D. provides both the theoretical and the practical foundation for careers as digital media researchers in academia and industry. The advent of a new technology for communication and representation is a significant event in human social and cultural history and introduces the possibility of new genres of artistic expression as well as new forms of information and knowledge transmission. The study of these new forms – from the point of view of the creators and the analysts – suggests a convergence of the methodologies of several traditional disciplines, as well as the development of appropriate new approaches in research and practice.

The DM Ph.D. program usually enrolls 3-5 full-time students each Fall Semester. DM students come from a range of educational backgrounds and have diverse intellectual and creative objectives. Many have significant work experience in a professional field. Students come with academic backgrounds from such fields as acting, anthropology, architecture, communications, computer science, engineering, English studies, graphic design, history, journalism, law, library science, management, marketing, philosophy, social work, software development, technical writing, and television production. The program welcomes a socially diverse and international student body.

Among the corporate partners who have provided internships or participated as research partners are: Alcatel-Lucent, Cisco Systems, Direct TV, Microsoft, Amazon, Yahoo, Google, Turner Broadcasting, CNN, nurun | ant farm, Schematic, IBM, Childrens Television Workshop, ABC, Disney Imagineering, Electronic Arts, LucasArts, Disney Interactive, Kaneva, IQ TV, Alcatel Lucent, Cisco/Scientific Atlanta. Non-profit partners include GPTV, WABE, the High Museum, the Museum of Modern Art (NYC), National Academy of Television Arts and Sciences, Bremen Jewish Heritage Museum,

Other Sources of Information

Program website: <http://dm.lmc.gatech.edu>

For Prospective Applicants: <http://www.gradadmiss.gatech.edu/>

Office of the Dean of Students: <http://www.deanofstudents.gatech.edu/>

Office for Graduate Studies and Research: <http://www.gradadmiss.gatech.edu/>

Calendar and Registration: <http://registrar.gatech.edu/>

Tuition and Fees

Annual tuition and fees are listed in the Georgia Tech catalog or the Office of the Bursar website at: <http://www.bursar.gatech.edu/tuiandfee.php>. Please note that though some students receive Assistantships that cover tuition costs, all students are responsible for the fees, which are substantial, and due each semester.

Graduate Assistantships and Other Funding

The DM program offers most Ph.D. students support on a year-to-year basis in the form of one half time (20 hours/week). Graduate Assistantships provide \$2130 and are usually for one term but are often extended. There are two forms of assistantships: Graduate Teaching Assistants teach one undergraduate course per semester; Graduate Research Assistants work under the supervision of DM faculty on a variety of research projects. Support is sometimes available for the summer as well. Students are not expected to require support for more than 4 years. Assistantships include remission of all tuition, but **students are required to pay student fees each semester.**

For information on fellowships and loans, visit: <http://www.finaid.gatech.edu/graduate/>.

Special Instructions for International Students

Before international students may be granted an I-20 visa, they are required to provide evidence of independent financial support to cover the cost of attendance for the first year at Georgia Tech. *Cost of attendance* includes tuition, room/board, and books. The amount that must be verified is set by the Graduate College at Georgia Tech, and varies slightly on an annual basis to reflect changes in tuition, room/board, and fees found here: bursar.gatech.edu

More information can be found on the Office of International Education website: <http://www.oie.gatech.edu/pre-arrival>.

Facilities

Digital Media Learning and Research Labs

The DM Program has dedicated learning and research labs on the third floor of the Skiles Classroom Building. The Program also has offices, workspaces, and labs in the Technology Square Research Building (TSRB) on the 3rd floor. This is where the core DM faculty offices are located and the Ph.D. students have their desks. The DM computer labs offer an extensive range of equipment for digital media production in hard- and software as well as for analysis and evaluation. Different research groups work under DM faculty guidance and usually provide specialized approaches and equipment ranging from hardware prototyping equipment to interactive television technologies and a dedicated game lab. Although each DM student is allocated personal storage space on the common LMC server, DM students are encouraged to keep personal back ups.

Georgia Tech requires all students to own a laptop computer. Information about the technical specs can be found here: <http://sco.gatech.edu/>

Digital Media Ph.D. Program Dedicated Space

The Ph.D. program has carrels on the third floor of the TSRB for the Ph.D. candidate. This area includes access to project studio labs; both Mac and PC workstations with a complete suite of digital media software; a kitchen, and an adjacent seminar room, and other common meeting and lounge spaces.

Digital Media Ph.D. Travel Grants

The program actively encourages Ph.D. candidates to participate in national and international conferences and events. This is supported by in-house travel grants as well as travel support on the college and GVU level.

DM Ph.D. candidates regularly present at and attend events such as SIGGRAPH, CHI, ISEA, DiGRA, TEI, Creativity and Cognition, and other international conferences. More information regarding the travel grants is located on the [DM website](#).

Digital Media as Part of the Interdisciplinary GVU Center

The DM program participates in the GVU, an interdisciplinary research center that brings together people and expertise from all six Georgia Tech colleges in order to solve complex problems. The GVU offers DM students further access to high-end graphics and computational environments. GVU research interests include projects in three-dimensional computer graphics, data and program visualization, Human Computer Interaction, medical informatics, augmented reality, virtual reality, ubiquitous computing, digital video effects, and animation. DM faculty regularly collaborates with faculty from other Georgia Tech colleges within the GVU center, as well as beyond.

All DM students are invited to take part in GVU events and to attend the weekly “Brown Bag” Thursday lunches, in which GVU members report on their research. Brown Bag Lunch can be taken as a one-credit course. (Past GVU Brown Bag events and detailed GVU information can be seen online at <http://gvu.gatech.edu>). The GVU also provides

limited travel funds for graduate students, and DM PhD students are eligible to apply for such funds.

As additional lab space, the GVU provides its own prototyping lab equipped with 3D printer, 3D scanner, laser cutter, and other tools and equipment available for research projects.

The Georgia Tech Library

The Georgia Tech Online Library (GTEL) provides access to the holdings in Georgia Tech's library, other library catalogs, and selected commercial databases. Students can access GTEL from one of the dedicated terminals in the library or from a remote location. The library catalog can also be accessed through the library's website at <http://www.library.gatech.edu>. The DM program has a library liaison that is available to assist students with program-related research.

Program Requirements for the Ph.D. in Digital Media

Curriculum and Course of Study

Students will take 60 graduate credits from the following categories:

Foundational and Required Courses (36 credits)

The core curriculum is designed to cover three fundamental areas:

- (1) critical history, theory, and practice of using of computing technologies for expressive purposes
- (2) advanced principles of interaction design
- (3) applied research methods in digital media

Bolded courses are not open to waiver or substitution. Other courses may be substituted with equivalent previous work or alternate courses. Students should consult their advisors and the Director of Graduate Studies to determine the appropriate individual course of study.

LMC 6310 The Computer as an Expressive Medium (3 credits)

LMC 6313 Principles of Interactive Design (3 credits)

LMC 6316 Historical Approaches to New Media (3 credits)

LMC 6399 Discovery & Invention (3 credits)

LMC 6650 Project Studio (3 credits) x2

LMC 6800 Master's Project OR LMC 7000 Master's Thesis (6 credits)

LMC 8000 Pro-Seminar I (3 credits)

LMC 8001 Pro-Seminar II (3 credits)

LMC 9000 Doctoral Dissertation (6 credits)

Required Minor Concentration (9 credits):

Three related courses outside of the School of Literature, Media, and Communication. These courses may be in any school within the Ivan Allen College, or in other colleges at Georgia Tech.

Examples of a minor concentration in Computer Science:

CS 6750 Introduction to Human Computer Interaction (3 credits)

CS 6460 Foundations of Educational Technology (3 credits)

CS 6470 Online Communities (3 credits)

This requirement must be certified by filing a form signed by the DGS with the Georgia Tech graduate office. The form is available online at

http://www.gradadmiss.gatech.edu/thesis/forms/Minor_form.pdf

Elective Courses (15 hours)

Students can choose from a wide variety of course in LMC and other schools to fulfill their Electives. A sample of classes includes:

LMC 6311 Visual Culture and Design (3 credits)

LMC 6312 Design, Technology, and Representation (3 credits)

LMC 6314 Design of Networked Media (3 credits)

LMC 6315 Project Production (3 credits)
LMC 6317 Interactive Fiction (3 credits)
LMC 6318 Experimental Media (3 credits)
LMC 6319 Intellectual Property Policy and Law (3 credits)
LMC 6213 Educational Applications of New Media (3 credits)
LMC 6215 Issues in Media Studies (3 credits)
LMC 6320 Globalization and New Media (3 credits)
LMC 6321 Architecture of Responsive Spaces (3 credits)
LMC 6650 Project Studio (repeatable) (3 credits)
LMC 7999 Preparation for Qualifying Examination (variable credit)
LMC 8803 Special Topics (repeatable) (3 credits)
LMC 8813 Advanced Issues in Interactive Narrative (repeatable) (3 credits)
LMC 8823 Special Topics in Game Design (repeatable) (3 credits)
LMC 8930 Special Problems (repeatable) (3 credits)
LMC 8831 Special Topics in Technologies of Representation (repeatable) (3 credits)
LMC 8999 Preparation for Doctoral Dissertation

Elective courses from other academic units may be substituted with approval of the DGS.

RCR Requirements:

- **NEW Doctoral Students**

As part of the ethics and Responsible Conduct of Research practices at Georgia Tech, each Ph.D. student has to:

___ Successfully complete an online CITI RCR course within 90 days of beginning your first full semester in your doctoral program (see www.rcr.gatech.edu/online-training)

AND

___ Successfully complete PHIL 6000 (preferably during your first summer session if full time then)

For more information refer to: <http://www.rcr.gatech.edu/doctoral-policy/>

Portfolio Review

The Director of Graduate Studies will consult the Chair of the Individualized Comprehensive Exam (who is also the presumptive Dissertation Chair) at the end of the first year of graduate work to do the portfolio review. The review covers three areas:

- Students need to demonstrate programming competency through course work and/or research projects completed in the past year. Students who were not required to take 6310 can submit projects from previous advanced degree work.
- Students need to write a brief research statement that synthesizes the course work and project work they have undertaken in the past year and which plots a research trajectory as they begin to construct their reading list for the second-year exam. The research statement should include current research questions, a brief contextualization

of those questions (why it is interesting to pursue it), and a description of the methods or approach under consideration (how students will pursue this projected research). The document aims to begin the process of articulating and refining a student's research and scholarship trajectory.

- Students need to present their work in a well designed, professional manner to fulfill the DM design requirement. The faculty expects this to take the form of a professional website showcasing the candidate's work and research statement. The portfolio site needs to reflect mastery of the principles of information and interaction design and it needs to clearly communicate how students identify as researchers.

Fulfilling the portfolio requirement is a pre-requisite for taking the Individualized Comprehensive Examination.

Comprehensive Examination (Qualifier)

All Digital Media PhD students will take a comprehensive qualifier exam. The exam is to allow the student to demonstrate competency in research methods, theory, and synthesis across fields related to Digital Media.

The qualifier exam is administered in three parts:

Part 1 The first part is based on the two major areas the student chose out of the four offered *HCI, STS, Design, & Media Studies). It is comprised of six (6) questions (three (3) from each chosen major field), of which the student will answer two (2) from each field. Questions are written by the student's committee or appointed DM faculty.

Part 2 The student's committee will write two (2) questions based on materials from the student's individual reading list, which is developed with their advisor and committee. The student will answer 1 of the 2 questions.

The two written parts of the exam are administered on two consecutive days. The student will have 8 hours the first day to answer the questions from Part 1; on the next day, the student will have 4 hours to answer the question from Part 2.

Part 3 Within two (2) weeks of satisfactorily completing the written parts of the qualifying exam, the student will take a two-hour Oral Exam administered by their Committee. The Oral Exam will cover the written responses (including any questions the student chose not to answer). Students should prepare a short (20-minute) preliminary statement on their research, which the Committee will help the student to refine during the Oral Examination.

The Qualifying Committee will inform the student if the Oral Exam has been passed at the end of the two-hour examination.

If the student fails any part of the exam they must retake the exam in the following academic term. Failing the written exam will prevent the student from taking the oral exam; the new exam will follow the same process and include new questions. If a student fails the oral exam the committee may, at its discretion, issue new questions or topics for the repeated exam, although the student will not be required to prepare a written response in advance. If a student fails the exam twice, they will be subject to program dismissal at the discretion of the Director.

Sample examination lists and reading are available online:

<https://b.gatech.edu/2ZuLjrm>

Ph.D. Dissertation

Proposing the Dissertation Topic

After passing the Comprehensive Exam, the student will identify a Dissertation Committee Chair from the Digital Media faculty and two Dissertation Committee members from the Digital Media faculty and/or other units in the School of LMC. The student will meet with the Dissertation Committee Chair regularly to prepare a Dissertation Prospectus. When the Dissertation Committee Chair deems the student is ready, usually within six months of the Oral Comprehensive Examination, a Dissertation Prospectus Defense will be scheduled.

Written Dissertation Prospectus

The written prospectus is a document intended to demonstrate that the student is poised to make a unique contribution to a research or scholarly field. There may be significant differences between a Dissertation prospectus making theoretical arguments and one that centers upon the design and implementation of a new digital media system. Additionally, a prospectus may contain a rationale for radical interdisciplinary methods, results, specification and/or implementation documentation, and evaluation sections.

The prospectus document will include:

- 1) A statement of the Dissertation claim(s), a significant part of the argument of the Dissertation in support of the claims making clear the theoretical and technical context of the work, the methods it will employ, and the original contribution to knowledge it offers,
- 2) A literature review (including non-print media) and a complete (i.e. updatable but not infinitely expandable) bibliography,
- 3) An appropriate representation of the structure, components, and scope of the document and associated artifacts that will constitute the Dissertation work as determined by the dissertation Chair(s) and Committee Members (e.g. a table of contents, chapter outlines, completed chapters, wire frames, a prototype, and/or detailed specifications).
- 4) A timeline for completion

Oral Defense of Dissertation Prospectus

The oral presentation should summarize the contents of the written Dissertation Prospectus and demonstrate evidence of significant completed work, including an implementation demonstration when appropriate.

The oral Dissertation proposal presentation will be performed before the student's 3 member Digital Media dissertation committee and will be open to other DM faculty and to students in the DM Ph.D. program. As during the Comprehensive Examination, the student will have an opportunity to present ideas and engage in a constructive dialogue about the work. Unlike the Comprehensive Examination, this presentation is focused on depth rather than breadth, and the crux of the dialogue will be the student's focused original and intended contributions to the field. The student and the student's Dissertation Chair and Dissertation Committee Members will decide upon the exact scheduling and time of the oral presentation. The non-Committee members will be present for the formal presentation

and a brief public question period. They will then be asked to leave and the Committee will discuss the Prospectus with the student. If the Committee determines that the Prospectus is acceptable, then they will sign the Georgia Tech Dissertation Topic Approval Form, which the student will file with the Georgia Tech Graduate Office.

Advancing to Candidacy

Ph.D. students advance to candidacy when they have finished all required course work, excluding the minor, have passed the two written and one oral Comprehensive Examinations, and have successfully identified a Dissertation Committee. Advancement to candidacy requires filing the Request for Admission to Ph.D. Candidacy Form, included in the Appendix and also available online: grad.gatech.edu

Although it is not necessary for Candidacy, most students also file the Certification of Minor form at the same time.

Time Limit for Completion: 7 Year Rule

Students must complete all degree requirements within seven years from the end of the term in which they pass the comprehensive examinations.

Preparation of the Dissertation

Students will meet with their advisors regularly while working on the Dissertation and establish a timeline with deliverables at clear milestones. It is expected that students will complete the Dissertation within two years of advancing to candidacy. Usually this process takes place while in residence and registered full time in the Ph.D. program, with support from a research or teaching assistantship. Students who work on the Dissertation away from Georgia Tech are expected to enroll part-time in order to receive appropriate Dissertation supervision.

Once the topic has been approved, students should identify at least 1 external member for their Dissertation Committee, who must have an earned Ph.D. and may come from other units at Georgia Tech or from other institutions. It is advisable to show them the prospectus and ask them to serve on the committee. These external member/s will attend the Dissertation Defense along with the 3 internal committee members.

The student should submit the Dissertation drafts chapter-by-chapter to the Dissertation Chair, and should consult with the Chair on how best to employ the other members of the Dissertation Committee during the drafting period. The student should also take advantage of Demo Days, conference calls, and journal publication opportunities during this time to establish interim deadlines and receive wider visibility and feedback on the work in progress.

Defending and Submitting the Dissertation

When the Dissertation Chair and Committee members agree that the Dissertation is ready to proceed, the student should distribute a proposed final copy to all members of the Committee and arrange with the Digital Media Program office to schedule an Oral Defense. The final draft of the dissertation should be submitted at least 3 weeks before the scheduled

Oral Defense. All members of the Dissertation Committee must be present at the Dissertation Defense, preferably in person, but audio or video link are permissible if necessary. Distant members must be able to see the same slides and demonstration as members who are physically present. The student makes a formal presentation of about 45 minutes, employing appropriate visuals. The presentation should present the main arguments of the Dissertation and demonstrate all interactive elements either live or (if the Chair approves) by video. The Oral Ph.D. Dissertation Defense includes a period of questions from a public audience and then a private session of questioning by the Committee. The Committee then consults briefly without the Candidate, and the Candidate is informed of approval/disapproval or requirements for changes.

When a final version of the Dissertation text is prepared, the student should obtain signatures on the Certification of Thesis Approval For Doctoral Students Form of the Georgia Tech Graduate Office available at <http://www.grad.gatech.edu/thesis/forms.php>. All theses and dissertations must be submitted electronically via the GT Library-Graduate Studies joint ETD web site at <http://etd.gatech.edu>. For more information see <http://www.gradadmiss.gatech.edu/thesis.php>.

The Candidate has to upload the dissertation and the presentation material used for the Oral Defense to the designated T-Square site for the DM program.

Graduation Procedures

During the semester preceding the semester of anticipated graduation, the student must submit petition online. Information is available [here](#).

In order to participate in commencement, the approved Dissertation and all associated forms must be submitted by the date and time specified by the Registrar: <http://www.gradadmiss.gatech.edu/thesis.php>.

The Institute requires that students be enrolled during the term of graduation. Students can request a waiver of this requirement by completing an **Enrollment Requirement Waiver Form**. The form is available online at http://www.gradadmiss.gatech.edu/thesis/forms/Enrollment_Waiver_form.pdf. Waiver will be granted only to students, who have completed all requirements for the degree.

Sample Program of Study

Year One – Fall

LMC 8000 Pro-Seminar I for Ph.D. Students	3
LMC 6310 Computer as an Expressive Medium	3

LMC 6313 Principles of Interaction Design	3
LMC 6650 Project Studio (with prospective Dissertation Director)	3
LMC 8997 Research Assistantship or	3*
LMC 8801 DM Talks	1
LMC 8998 Teaching Assistantship	
Total Semester Hours	16
Year One – Spring	
LMC 8001 Pro-Seminar II for Ph.D. Students	3
LMC 6399 Discovery and Invention	3
LMC 6650 Project Studio (with prospective Dissertation Director)	3
LMC 6316 Historical Approaches to Digital Media	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	15
Advisor Chosen	
Year Two -- Fall	
Elective (LMC 7999 Preparation for Qualifying Examination)	3
Minor (graduate class counting toward your minor)	3
LMC 6800 Master’s Project	6
OR LMC 6650 Project Studio (with prospective Dissertation Director) (3)	
LMC 6650 Project Studio (with prospective Dissertation Director) (3)	
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	15
Quals/Thesis Committee Chosen; Specialty List Approved	
Year Two -- Spring	
Elective (e.g. LMC 6650 Project Studio (with Dissertation Director))	3
Elective (LMC 6500 Project Studio (with prospective Dissertation Director))	3
LMC 6316 Historical Approaches to New Media	3
Minor (graduate class counting toward your minor)	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	15
Year Three -- Fall	
Elective (LMC 8999 Preparation of PhD Dissertation)	6
Minor (graduate class counting toward your minor)	3
LMC 8997 Research Assistantship or	3*
LMC 8998 Teaching Assistantship	
Total Semester Hours	12
Dissertation Prospectus Approved – Advance to Candidacy	
Year Three -- Spring (and subsequent semesters if necessary)	
LMC 9000 Doctoral Dissertation	6
Elective (e.g. LMC 6650 Project Studio (with Dissertation Director))	3
LMC 8997 Research Assistantship or	3*
LMC 8999 Teaching Assistantship	
Total Semester Hours	12
Dissertation completed and defended 1-2 years after Comprehensive Examination	

Other Requirements of the Degree

Teaching Requirement

All Ph.D. students are encouraged to teach a minimum of two courses (one per semester) as part of their graduate preparation. Teaching may be in the form of assisting in a course primarily taught by a faculty member or it may involve taking sole responsibility for an undergraduate course offered by LMC. Students will be matched with courses in the area of their expertise and will be appropriately compensated with a Teaching Assistantship which also includes a tuition waiver.

Full-time Residency Requirement

The DM program requires a minimum of two semesters in residence with full-time study. Students are expected to remain in residency and enroll full-time at least until the point of Advancing to Candidacy.

Course Load Requirements

Although the Institute sets the minimum course load for part-time students at 3 hours per term, **the DM program does not enroll part-time students.** Students with GRAs, fellowships, tuition waivers, or student visas, and students assigned to the Institute by the armed forces for the purpose of pursuing a degree, are required to be enrolled for a minimum of **12 credit hours** of letter grade or Pass/Fail credit per term. Graduate Research Assistants (GRAs) typically enroll in LMC 8998 for 3 hours of audit credit as a means to remain full-time. **LMC 8998 does not count toward the 60 credits required for the degree.**

Annual Review of Progress toward the Degree

Every Spring term, all Ph.D. students have to submit a report on the work they have undertaken in the past academic year. The report consists of a one-page narrative of the student's overall work and an updated CV. Students also have to update their Progress to Degree form with the ADGS, who will attach the current Progress to Degree form to the report.

This report will be reviewed by the DM faculty and comments will be summarized by the student's advisor and the DGS. The faculty will vote on the submitted reports along three categories: 1) pass (the work is sufficient; this does not preclude the faculty from providing suggestions for improvement) 2) pass with warning (the work is overall sufficient but needs improvement in particular areas; these areas are identified and possible steps for improvement are provided in the feedback) 3) fail to pass (the work does not meet the standards of the program; the insufficiencies are identified and necessary steps for improvement are provided). Students who receive a "warning" or a "fail" have to submit a new report the following term. The new report has to show that the deficiencies have been addressed in an effective manner. Students receiving two "fails" in a row may lose eligibility for Assistantships and may be asked to withdraw from the program.

The reports will be archived by the ADGS.

Academic Standing in the DM Program

Note that the DM Program's standards are in addition to the standards for *Good Academic Standing* at the Institute.

To be in Good Academic Standing within the Digital Media Ph.D. Program, students must:

- Take at least 3 academic (non-audit, graduate level, approved) courses per semester
- Complete the work of paid Research Assistantships to the satisfaction of the supervisor
- Complete all course work with a grade of B or higher and or receive a pass in pass/fail courses
- Complete all core courses by the end of the first year of study
- Not be in violation of the *Honor Code* or program standards of *Professional Conduct*
- Demonstrate acceptable written and oral skills in English
- Make clear and timely Progress to the Degree according to the guidelines on the Progress to the Degree Form (see appendix)

Students who are not in *Good Academic Standing* within the DM Program will not be eligible for Assistantships and may be put on probation or dismissed from the program, based on the decision of the DGS in consultation with the Graduate Faculty. Students placed on probation will be given one semester in which to remedy deficits in performance. Students may be dismissed without prior probation at the discretion of the DGS and faculty.

Expectations of Paid Graduate Assistants

Research and Teaching Assistantships are contracts for a specific numbers of hours of work under the supervision of a faculty member. Students are expected to meet weekly with the supervising faculty and to fulfill all assigned tasks in a timely manner. Most Ph.D. Assistantships are for 1/2 time, or 20 hours per week for the duration of the semester (including finals week). Students may be asked by supervising faculty to account for the time with timesheets. It is acceptable to work extra hours one week and fewer hours the next, but the average should conform to 20 hours per week.

The scope of duties will be determined by the research supervisor or the DGS. Students should never be asked to perform personal services of any kind for a faculty member or to apply assistantship hours for any purpose other than their explicit research or teaching responsibilities, and any associated writing, technical support, or demonstration requirements.

Students who find they do not have the skills or are otherwise unable to perform their assigned tasks must make the situation known to their supervisor immediately. Students who receive Assistantships but do not perform assigned tasks in a conscientious and

timely manner may be asked to repay the funds, and will not be eligible to receive further funding. Georgia Tech might require certain training e.g. for ethical conduct and for qualification for IRB work.

Students who have concerns regarding their Assistantship should feel free to talk to the DGS or LMC Chair if they are unable to reach an understanding with their supervisor.

Honor Code and Professional Conduct

The *Honor Code* at Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards and to uphold the *Honor Code* <http://www.catalog.gatech.edu/rules/18b.php> as a condition of participation in the Georgia Tech DM Program. Students who are found to be in violation of the *Honor Code* may be placed on probation or dismissed from the program. Examples of violation of the *Honor Code* include (but are not limited to) violations of copyright using Institute machines (e.g. illegal downloads), presenting the work of others as one's own, falsifying credits or recommendations, falsifying CV information or skill qualifications.

In addition, students who behave in ways that are inconsistent with professional responsibility or that impede the work of others will not be considered in good standing in the program and will be subject to probation or dismissal. Examples of unprofessional behavior include (but are not limited to) failure to perform assigned work for Assistantships, failure to keep research or advising appointments, carelessness or mishandling of program equipment, violation of security procedures that puts equipment or people at risk, disruptive behavior that impedes the work of others.

Students who witness violations of the *Honor Code* or *Standards of Professional Conduct* are asked to report them to the faculty and the Director of Graduate Studies.

Optional Internships

Ph.D. students who can choose to participate in the established internship program of the M.S. program, which customarily takes place during the summer months. The program has contacts in corporate and academic research labs, arts and cultural institutions, and across the several industries involved in creating Digital Media. Students are responsible for identifying their own internships, but the DGS and other DM faculty can often be helpful in making suggestions. It is also useful to attend the M.S. students' reports on their summer internships, which occur at a meeting usually held during the first few weeks of the Fall semester.

Co-Op Program

With the approval of the DGS and Committee Chair, Ph.D. students may also participate in the Georgia Tech Graduate Co-Op Program, which allows students to earn pay from a job in the commercial sector while enjoying partial credit toward full-time enrollment status. More information about the program can be found at <http://www.gradcoop.gatech.edu/>.

Policies and Procedures

Waivers of Core Courses

Students may have had courses they feel are quite similar to the core courses which are at the heart of the DM M.S. degree and required for the Ph.D. as well: LMC 6310, LMC 6313, LMC 6316, and LMC 6399. A waiver from one of these core course may be granted when the student can provide evidence of comparable course content (syllabi) and performance (transcripts) that satisfies the Director of Graduate Studies. Students may also request substitution of another Georgia Tech graduate course in the case of specialty interests, such as a 3D course in substitution for LMC 6311 or LMC 6312. **The waiver of core courses does not change the requirement of 36 credits of DM graduate work.**

Policy on Transfer Credits

Work taken at other institutions is not accepted for transfer credit toward the DM Degree.

Course Grades and Repetition of Courses

The DM Ph.D. Program will not accept credit toward the degree for any course in which a student receives a grade less than a letter grade of “B.” Students receiving a “C” or below in an LMC required course must repeat the course or take an acceptable substitute with the guidance of their advisor and approval by the DGS. **Students receiving more than one grade of C or below may be asked to withdraw from the program.**

Credit for Georgia Tech Courses Outside the DM Program

The DM Ph.D. Program will not accept undergraduate courses or graduate courses outside of the DM program for credit toward the degree, unless they are taken at Georgia Tech and have been approved in advance in writing by a DM faculty advisor or the DGS.

Courses listed as suggestions in official program handouts or emails from the Director of Graduate Studies are assumed to be approved in advance for all students. In general, students are encouraged to take courses at the graduate level in closely related and overlapping subjects in the College of Computing, the Industrial Design Program of the College of Architecture, and Digital Music.

For other courses, check with your advisor or the DGS. Taking courses without permission that are not considered by DM faculty to be directly related to progress toward the DM Ph.D. will have a negative impact on a student’s academic standing and may result in loss of eligibility for GRA support.

Taking Upper Level Undergraduate Courses

In general, students interested in taking upper-level undergraduate courses in highly relevant subjects not offered within the graduate curriculum should see the instructor and the DGS to arrange to take a concurrent (jointly meeting) graduate level version of the course with different assignments and a graduate course number. When enrolling for a jointly meeting course that is listed in the catalog under both UG and G numbers, be sure to sign up for the Graduate version. Graduate courses have numbers of 6000 or above.

Students who have taken jointly meeting graduate/undergraduate courses while undergraduates at Georgia Tech must get permission of the DGS before enrolling for the same course at the graduate level. In cases where the course varies widely in content from year to year or instructor to instructor (such as courses in Experimental Media and Digital Art), it may be appropriate to repeat it for credit. It is also appropriate to take LMC 6650 Project Studio for graduate credit even if the student has taken undergraduate research courses that meet concurrently with LMC 6650.

Undergraduate and Other Courses Not Credited toward the Degree

Students lacking in preparation may be required to take an undergraduate course for undergraduate credit, or a not-for-credit English as a Second Language course or other basic skills course in addition to their graduate course requirement. Such remedial courses will not count toward the degree.

Policy on Academic Performance and Incompletes

Students must maintain a minimum overall GPA of 3.0. Students who fall below that minimum GPA for two consecutive semesters are no longer in Good Standing and will be subject to dismissal from the program.

Under Georgia Tech rules, the faculty of the School of LMC may assign a grade of “Incomplete” (I) only when a student has been unable to complete the requirements of a course by reason of illness, extensive travel, commitments to employers, and other unexpected and unavoidable situations over which the student had no control. Grades of Incomplete can only be assigned to courses designated as letter grade. Pass/Fail courses must be completed by the end of the semester, or a failed grade will be issued. The student may work out an arrangement with the professor involved to complete the work in the following semester and have the grade changed. If the student has an Incomplete lasting more than one semester, the Registrar will automatically convert that Incomplete into a grade of “F” (without sending a warning). The student must successfully complete at least 75% of the credits the student registers for, or the Registrar will automatically place the student on academic probation, and the student will not be eligible for financial aid.

Students who do not complete Incompletes and receive a letter grade of “F” will have that grade counted toward their GPA, and will therefore be at risk for dismissal from the program.

Readmission Policy

Any student in *Good Standing* who is not enrolled for a single term will be allowed to re-enroll without applying for readmission to the Institute. There is no distinction between the terms of the regular academic year and the summer term.

Students who are not enrolled (and not on “coop at work” status) for TWO or more semesters, excluding the summer term, must apply for readmission.

A student who is on *Academic Warning* or *Probation* who is not enrolled for a single term will have an automatic hold placed on his/her registration which must be cleared by the student's major school.

Any student, except a part-time graduate student, who withdraws and wishes to return the following term, must complete a readmission application and a Faculty Petition. Part-time graduate students are required to complete only a readmission application. The deadline for these documents is set by the Registrar's Office.

The **Application for Readmission form** is available in the Registrar's Office and must be submitted along with the required documentation by specific deadlines.

Alumni Policies

Alumni are always welcome guests of the program and are strongly encouraged to come back for visits and to keep us posted on their activities. Reunions of alumni are arranged from time to time by the DGS and alumni are encouraged to seek help from and be helpful to fellow graduates and current students in the program.

Graduated or unenrolled students do not have access to program resources (such as computer facilities) by virtue of previous or anticipated student status. Students who are interrupting or terminating their enrollment at Georgia Tech are required to return all keys to the appropriate administrator, and should make their own copies of all server-based computer files, since their accounts may be deleted.

Digital Media Graduate Course Descriptions

LMC 6310: The Computer as an Expressive Medium

Required course. Explores the development of the representational power of the computer and the interplay between digital technology and culture. Topics include computer code, structured documents, databases, hypertext, graphical user interface, simulations, online communities, gaming, artificial life, artificial intelligence, and virtual reality.

LMC 6311: Visual Culture and Design

Explores visual media through a mutually instructive and integrated interplay between critical analyses and the creation of digital artifacts.

LMC 6312: Design, Technology, and Representation

Explores historical, cultural, and theoretical issues raised by technologies of representation through critical analyses and the creation of digital artifacts.

LMC 6313: Principles of Interactive Design

Required course. Design principles for exploiting the affordances of the digital medium, including large information spaces and procedural environments. Topics include: shaping participation, scripting behaviors, segmentation and navigation of encyclopedic environments, assessing legacy conventions, and defining new genres.

LMC 6314: Design of Networked Media

Issues in hypertextual and multimedia design in networked environments, including the World Wide Web, interactive television, and wireless applications.

LMC 6315: Project Production

Focuses on defining user and client needs, analysis of competing products, budgeting, scheduling and management of the production process, and the design of the testing process.

LMC 6316: Historical Approaches to Digital Media

Required course. Explores the place of digital media in the context of earlier media, including various forms of writing as well as the visual media.

LMC 6317: Interactive Fiction

Students create interactive fictions in a variety of formats, including intersecting story worlds, interactive characters, simulations, and replay worlds. Models include films, print stories, hypertexts, online virtual worlds, and electronic games.

LMC 6318: Experimental Media

Familiarizes students with several areas of emerging technologies by critically examining texts and artifacts within the context of their technical, historical, and cultural antecedents, with a focus on how technologies and culture mutually influence one another. Our underlying mission is to question the assumptions under which one works

when designing, and to understand how emerging technologies and critical practices may offer us a way to reshape and rethink the world.

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 6213: Educational Applications of New Media

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

LMC 6215: Issues in Media Studies

Seminar in mass media and formats of representation from multiple perspectives. Topics announced as offered. May be repeated.

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 6321 Architecture of Responsive Spaces

Students explore the architecture of hybrid computational and physical spaces, how we can build habitation configured of physical matter and responsive computational media.

LMC 6399: Discovery & Invention

Required course. 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 6650: Project Studio (Multiple Sections)

Required courses. At least two semesters required of all DM students. LMC 6650 Project Studio carries 3 credits and involves 9 hours of lab work per week and 1 hour of group seminar. Faculty members teach different formats of Project Studios, depending on their particular field. Project Studios 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. But classes include critical review sessions and regular presentations. Students can join a Project Studio group at varying levels of expertise. Individual learning goals are established to ensure that students extend their knowledge in the Project Studio, rather than merely working out of existing skills. Each student's individual work should provide a substantial practicum in digital project development, and the work of the group as a whole is expected to result in regular presentations and prototypes delivered to other scholars, sponsors, end-users, or professional society audiences. Students can enroll in more than one Project Studio simultaneously. Project Studios are repeatable courses.

May be repeated. Topics announced each year. Admission by permission of each section instructor.

LMC 8801 Special Topics in Digital Media

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

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 OR

LMC 7000 Master's Thesis

Required course. Students enroll for 6 credits in their final M.S. semester (for those pursuing the M.S.)

LMC 7999 Preparation for Qualifying Exam

Credit hours to be arranged

LMC 8000 Pro-Seminar in Media Theory

Required course. Required for all Ph.D. students in Digital Media. Others admitted by permission of instructor. (Offered Fall only)

LMC 8001 Pro-Seminar in Digital Media Studies

Required course. Required for all Ph.D. students in Digital Media. Others admitted by permission of instructor. (Offered Spring only)

LMC 8999 Preparation for Ph.D. Dissertation

Credit flexible. Open to students who have qualified for candidacy.

LMC 9000 Ph.D. Dissertation

Required of Ph.D. students. Taken in final semester of studies.

Administrative Credit Courses:

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).

Examples of Minor / Elective Courses 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
ARCH 6426 3D Modeling

DM Online Archiving and Conference/Journal submission

- All Specialized Reading Lists need to be submitted and will be made available to the PhD student body.
- Students are strongly encouraged (and may be required by individual advisors) to submit their Project/Thesis work to appropriate conferences and journals.

Event or Demo Day Presentations

Ph.D. students are expected to present their theses and projects at official program events or Demo Days during the year, but particularly during the year they receive their degree.

Administration

Brian Magerko, Ph.D.
Director of Graduate Studies (DGS), LMC
magerko@gatech.edu

TSRB, Room 320B

DM Email Lists

(these lists are mostly for internal use)

dm@lists.gatech.edu	faculty and students
dm-ms@lists.gatech.edu	DM Masters students
dm-phd@lists.gatech.edu	DM PhD students
dm-alumni@lists.gatech.edu	DM alumni
dm-fac@lists.gatech.edu	DM faculty
dm-students@lists.gatech.edu	DM student only list

DM Ph.D. Progress to Degree

Name: _____

Semester Entered: _____

Preliminary Advisor: _____

Requirements (certify by entering date and initials of advisor)

Required Milestones		expected	Date certified	Certified by
Proficiency Requirement	LMC 6310 The Computer as an Expressive Medium	Year 1		
Proficiency Requirement	Portfolio Review Passed	Year 1		
Course Requirement	Project Studio (repeatable)	Year 1		
Course Requirement	LMC 8000 Pro-Seminar in Media Theory	Year 1		
Course Requirement	LMC 8001 Pro-Seminar in Digital Media Studies	Year 1		
Exam Requirement	Pass 8000 & 8001	Year 1		
RCR Requirement	Must take Phil 6000 and online citi training	Year 1		

Name of Project Studio and Instructor: _____

Grade on 1st Year Exam: _____ Date of 1st Year Exam _____

Flexible Course Requirements:

Advisor may accept alternatives, waive for cause, and/or assign additional requirements

Flexible Core Courses	Alternative or Reason for Waiver	Semester	Date Certified	Certified by
LMC 6399 Discovery & Invention				
LMC 6313 Principles of Interactive Design				
LMC 6316 Historical Approaches to New Media				
LMC 6650 Project Studio				
LMC 6650 Project Studio				

Flexible Electives

Students and advisor should decide on at least 5 electives. Can include independent studies, special topics

5 Flexible Electives	Semester	Date certified	Certified by

Required Minor Concentration

Students should also file the Minor Requirements form with the Graduate Office. Requirement is 3 courses outside of LMC. These may be completed before or after the completion of the Comprehensive Examination.

Required Minor Graduate Courses Course Number and Name	University	Semester Taken	Date Certified	Certified by
1				
2.				
3.				

Chair, Specialist Quals:

Specialist Committee Members (at least 2 in addition to Chair):

Members of Thesis Committee

3 Internal (LMC):

_____ (CHAIR)

2 External to LMC

Milestones Years 2-4

Milestone	Expected	Date Certified	Certified By
Pass General Qual	Spr year 1		
Choose Chair of Specialist Quals	By Fall Year 2		
Chose Quals Committee	By Fall Year 2		
Submit Specialist Reading List	Fall Year 2		
Reading List Approved	Fall Year 2		
Pass Written Specialist Exam	Spring Year 2		
Pass Oral Quals	Spring Year 2		
Choose Thesis Chair and Committee (3 LMC + 2 outside)	By Fall year 3		
Submit Thesis Proposal	Fall Year 3		
Thesis Proposal Defended and Approved	Fall Year 3		
Submit Thesis Proposal Form (Admission to Candidacy)	Year 3		
Thesis Completed	Year 4		
Thesis Defended	Year 4		
Thesis Handed in to Grad Office	Year 4		
GRADUATE!	Year 4		

PhD Thesis Defense Guidelines

Digital Media Program
School of Literature, Media, and Communication
Georgia Institute of Technology

A) Before the Defense

- 1) A date for the candidate's defense is agreed upon by the candidate and all committee members roughly two months in advance. This can be done via email communication between the candidate and committee, and can only happen once the candidate's advisor and any committee members who have been following the candidate's progress closely agree that the candidate is ready to defend.
- 2) The candidate sends a complete draft of the dissertation document to all committee members at least one month before the defense. In most cases, committee members will have received and commented on partial drafts of the document during the candidate's writing process.
- 3) Two weeks prior to the defense, an announcement is circulated on all relevant mailing lists at Georgia Tech. This should include the date, time, location, dissertation title, abstract, candidate's name and committee member names.

B) At the Defense (estimated duration = 1.5-3 hours)

Note: Remotely located committee members may join the defense via audio/video connection. In this case, the candidate must provide their slides to the remote committee member at least two days in advance.

- 1) The advisor and committee chair does a brief introduction to open the session, introduce the candidate, and inform the audience about the order of events.
- 2) The candidate presents their thesis defense with the help of slides or other visual aids. The presentation should last ~45 minutes.
- 3) The floor opens for questions from the general audience.
- 4) When there are no further questions from the general audience, the audience is asked to leave for the closed session. Committee members must remain, and other faculty members may choose to stay as well. Committee members and faculty ask any further questions they have about the defense or document.
- 5) When there are no further questions from the committee and faculty, the candidate is asked to leave the room while the committee deliberates.
- 6) The candidate is invited back into the room and informed of the committee's decision and feedback. The committee may ask for changes to the written document and the candidate must make note of these.

C) After the Defense (if the candidate passed their defense)

- 1) The candidate finalizes the dissertation document, addressing any changes that were requested by the committee during the defense.
- 2) The final document is reviewed and approved by committee members.
- 3) The candidate gathers signatures from committee members.
- 4) The candidate submits their dissertation in time for the graduation deadline.