

**PROGRAMS IN  
DIGITAL MEDIA DESIGN FOR LEARNING &  
EDUCATIONAL COMMUNICATION AND TECHNOLOGY**

Department of Administration, Leadership, and Technology



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*Montage by Leonard Majzlin*



**Programs in**  
**Digital Media Design for Learning &**  
**Educational Communication and Technology**



The program in Digital Media Design for Learning (DMDL) awards the Master of Arts degree and the post-masters Advanced Certificate. The program in Educational Communication and Technology (ECT) awards the Doctor of Philosophy degree. DMDL and ECT are in the Department of Administration, Leadership and Technology, in the Steinhardt School of Culture, Education, and Human Development.

Working with established and emergent digital media, DMDL/ECT students and faculty are interested in designing rich technology-based, multimedia learning environments, understanding and evaluating their use in educational settings, and conducting research on the interactions with characteristics and contexts of media with potential to support learning. The program prepares professionals who are educators and designers with specialized expertise in teaching and learning through many technology platforms and forms of digital media and representation. DMDL/ECT faculty and students are especially interested in computer-based, multimedia simulations and games for learning, educational applications of media and technology for international development, advocacy and social justice, the educational potential of social media and mobile platforms, and the power of traditional dramatic and documentary narratives in motion media.

DMDL/ECT is concerned with this intersection of learning and media design as it applies to many content areas, types of learners, learning of many different kinds, and innumerable settings in which media and technology are used for educational purposes. Students and faculty share an equal interest in conducting research on and evaluation of the media characteristics and human factors -- cognitive, affective, social and cultural -- that influence learning when individuals and groups interact with technology-based learning environments.

DMDL/ECT views media design -- the expression of content in various representational and structural forms and the functional and interactive affordances of communication technologies -- as problem-solving; choices are infinite, and those made are pivotal to the quality of engagement in the learning process. From both design and research

perspectives, the program is interested in those characteristics of technology-based learning environments that may, in a particular set of circumstances, have cognitive, affective, social and cultural significance for learners who interact with them. We are interested in exploring what features and elements of technology-based learning environments motivate and scaffold learning or interfere with and inhibit it.

DMDL/ECT students and faculty draw implications for the design of technology-based learning environments, and learning-with-media research questions as well, from a robust interdisciplinary understanding of human learning. Our theoretical framework is comprised of perspectives from the cognitive sciences, the learning sciences, developmental models of learning, constructivist and construction-ist philosophies of learning, and social learning theories. Other fields as well contribute to the design of media environments and experiences for learning, including communication design, interaction design, information design, multimedia learning theory, human-computer interaction, human symbolization and aesthetics.

DMDL/ECT students represent a wide array of content interests, academic and cultural backgrounds, professional experiences and goals. This diversity and the program's project-based curriculum strengthen students' collaborative skills and ensure engagement in projects with wide-ranging goals and content, for many different types of learners. As students collaborate, taking on different roles in project teams, they practice tailoring the design of technology-based learning environments for different learning goals and content areas, many different kinds of learning, and for learners with diverse demographic profiles, educational needs, and cultural backgrounds.

Students in doctoral and master's programs also participate with faculty on funded design, research and development projects. Students in the master's and certificate programs gain professional experience in internships, as apprentices in organizations designing, using and researching media for learning throughout the New York City metropolitan area.

 **Professional Directions**

Through coursework, research experience and internships, DMDL/ECT prepares individuals for professional leadership roles in the multi-dimensional field of educational communication and technology. This dimensionality as well as the diversity among ECT students are well-reflected in the types of settings where graduates work and the positions they hold.

Many DMDL/ECT alumni work in educational software companies designing and producing technology-based learning environments, for example, simulations to support middle school classroom learning in science or social studies or games that challenge middle schoolers to think critically about values. Many of our alums work in or as consultants to schools and school districts at all levels, as academic technology coordinators or professional development specialists in the integration of technology in curriculum and instruction; in colleges and universities, they may be faculty members or have leadership roles in academic computing, faculty technology services, or assistive communication technology services. A small percentage of alumni direct and coordinate training in corporate settings large and small, where media and technology have long been used to introduce new procedures to clients or to call employees' attention to administration or communication problems.

Alumni of the program also work in cultural institutions such as visual arts and children's museums, science centers and museums, and historical and international societies. They may work in departments of museum education, interactive exhibit design, or website development intended to relate closely to K-12 curricula for use by teachers and students. Others have experimented with the design of content for handheld devices intended to extend and enhance visitors' experience. In visual arts museums, alums have been most interested in designing video segments and multimedia kiosks that provide an explicit educational dimension to exhibits.

There are yet many other settings where "educational communication and technology" is practiced. Those who work in network or cable television may design and produce educational programs for broadcast or webcast. Publishing companies increasingly produce media as companions to textbooks in every subject for every grade level. Some professionals, such as physicians and attorneys, have regular continuing education

requirements and periodic tests to pass to maintain licensure, and such fields are replete with teams of educational media designers and content specialists who produce ever more sophisticated computer-based models and case studies. Professional organizations, like those for educators, clinical psychologists and social workers, design and produce dramatic models of exemplary practices; and social service agencies, hospitals, emergency rooms, and clinics use multimedia of all kinds for in-service technician training and for patient education.

Most non-profit, policy, and advocacy organizations use diverse communication technologies to address rights, access, equity and social justice issues as well as to raise funds to support their work. In local government and civic agencies, educational video and multimedia are used to educate jurors, when they arrive at the courts, about their role; in motor vehicle bureaus and passport offices, videos run throughout the day on safe driving. Media designers and producers also work throughout state and federal government creating media that facilitates communication and understanding between committees and for the public who visit.

 **CREATE**

The infrastructure for research in DMDL/ECT, and in particular the doctoral program, is the Consortium for Research and Evaluation of Advanced Technologies in Education (CREATE). The mission of CREATE is to improve the educational effectiveness of emerging technologies by advancing design that is theoretically grounded in the cognitive sciences.

CREATE is engaged in research on the cognitive science-based design and evaluation of advanced technologies for learning, in particular multimedia simulations, games for learning, and video ethnography, data analysis, and narratives for learning. CREATE works to develop approaches to the design of technology-based educational materials based on principles derived from theoretical foundations, implement models and examples of educational applications based on these methods and principles, and develop and apply methods and criteria for the evaluation of such educational environments. Faculty, doctoral, and funded research projects are on-going in CREATE, and all students have opportunities to participate. See <http://create.alt.ed.nyu.edu>.





## Faculty, Staff & Resources



### DMDL/ECT Faculty and Staff

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### More About DMDL/ECT

**DMDL/ECT Website** In addition to information in this document: faculty and student interviews on the program and courses; videos; current doctoral research, masters theses, and internships; current news and events; archives of program bulletins.  
<http://steinhardt.nyu.edu/alt/ect>

**CREATE Consortium for Research and Evaluation of Advanced Technologies in Education**  
<http://create.alt.ed.nyu.edu>

**Program Bulletins** Subscribe by sending a blank message from the e-mail address you prefer for delivery to: [join-ed-comm-tech@lists.nyu.com](mailto:join-ed-comm-tech@lists.nyu.com)

### More About NYU & Steinhardt

**New York University**  
<http://www.nyu.edu>

**The Steinhardt School**  
<http://steinhardt.nyu.edu>

**NYU Home Accounts**  
<http://home.nyu.edu>

**Info Technology Services**  
<http://home.nyu.edu/its>

**International Students**  
<http://home.nyu.edu/oiss>

*Financial Aid and Scholarships*  
[http://steinhardt.nyu.edu/financial\\_aid/](http://steinhardt.nyu.edu/financial_aid/)

*Steinhardt, current student information*  
[http://steinhardt.nyu.edu/portal/current\\_students](http://steinhardt.nyu.edu/portal/current_students)

*Steinhardt, Student Guide, procedures*  
<http://steinhardt.nyu.edu/policies/>

*Steinhardt, policies and procedures*  
<http://steinhardt.nyu.edu/policies/procedures>

*Office of Graduate Studies, all graduate information*  
<http://steinhardt.nyu.edu/advisement/masters/>

*Office of Graduate Studies, MA information*  
<http://steinhardt.nyu.edu/advisement/masters/office>

*NYU Student Resource Center*  
<http://www.nyu.edu/src/>





## COURSES OFFERED

### **Theoretical Foundations**

EDCT-GE 2158	Educational Design for Media Environments .....	3
EDCT-GE 2174	Cognitive Science and Educational Technology I .....	3
EDCT-GE 2175	Cognitive Science and Educational Technology II .....	3

### **Design Foundations**

EDCT-GE 2015	Interaction Design for Learning Environments .....	3
EDCT-GE 2017	Architecture of Learning Environments .....	3

### **Specialization Courses**

#### **Design**

EDCT-GE 2153	Educational Video: Design and Production I .....	3
EDCT-GE 2154	Educational Video: Design and Production II .....	3
EDCT-GE 2200	Media for Museums and Public Spaces .....	3
EDCT-GE 2251	Educational Design for the World Wide Web I .....	3
EDCT-GE 2177	Advanced World Wide Web Design Lab .....	3
EDCT-GE 2510	Narrative, Digital Media and Learning .....	3
EDCT-GE 2031	Educational Technology in a Global Context .....	3

#### **Games for Learning**

EDCT-GE 2500	Video Games and Play in Education .....	3
EDCT-GE 2505	Simulations and Games for Learning .....	3
EDCT-GE 2520	Research on Simulations and Games for Learning .....	3
EDCT-GE 2510	Narrative, Digital Media and Learning .....	3

#### **Professional Applications**

EDCT-GE 2211	Professional Applications of Educational Media in NYC .....	3
EDCT-GE 2008	Learning and Teaching K-16 With Social Media .....	3
EDCT-GE 2197	Media Practicum: Field Internships .....	3
EDCT-GE 2198	K-12 Student Teaching in Educational Technology .....	3
EDCT-GE 2018	Integrating Educational Technology in Teaching & Learning .....	1

#### **Research Courses and Doctoral Seminars**

EDCT-GE 2075	Digital Video Ethnography: Cultural Interpretation with New Media .....	3
EDCT-GE 3311	Content Seminar: Research in Instructional Technology .....	3
EDCT-GE 3076	Advanced Seminar in Research & Practice in Instructional Technology ....	3
EDCT-GE 3315	Doctoral Colloquium in Educational Communication & Technology .....	1

#### **Independent Study**

EDCT-GE 2300	Independent Study .....	variable	1-6
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### **Master of Arts Thesis Project**

EDCT-GE 2095	Research in Educational Communication and Technology .....	variable	1-3
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## COURSE DESCRIPTIONS



*Courses may be offered in semesters different from those listed. Check current course lists at [www.nyu.edu](http://www.nyu.edu).*

### THEORETICAL FOUNDATIONS

#### **EDCT-GE 2158 Educational Design of Media Environments**

*Hoadley, Shuchat Shaw. 30 hours; 3 credits. Fall.*

The purpose of this course is to provide an introduction to the principles and practices of instructional design for the development of media-based learning. We will address issues in the field of instructional design such as professional definitions and boundaries, different theoretical and philosophical approaches to the design of mediated learning environments, and issues surrounding the use of media in learning. We will then examine representative instructional design models including their components, methodologies, theoretical underpinnings, and the types of learning and learners they support. Emphasis will be given to a detailed study of the "analysis phase" of instructional design, including how to conduct varieties of needs assessments, and the "design phase," including the use of theoretical perspectives in cognitive science, developmental psychology, and the learning sciences to inform decisions about instructional strategies and media selection in the design of learning environments.

#### **EDCT-GE 2174 Cognitive Science and Educational Technology I**

*Plass, Goldman. 30 hours: 3 credits. Spring. Restricted to ECT majors.*

Introduction to cognitive science applied to teaching, learning, and the design of instructional media. Readings include developments in cognitive science and descriptions and analyses of instructional programs developed in a cognitive science frame-work. The design and implementation of cognitive aspects of learning and teaching strategies are examined through class demonstrations, discussions, on-line activities, readings, and projects.

#### **EDCT-GE 2175 Cognitive Science and Educational Technology II**

*Goldman, Plass. 30 hours: 3 credits. Fall. Restricted to ECT majors.*

*May be taken before EDCT-GE 2174.*

This course focuses on the social and cultural issues of learning as they relate to individual and group cognition in the context of media-rich technology learning environments. We will explore how educational technologies are often designed from particular theoretical approaches that are linked to the work of leading educational research communities. We will not only study the often hidden connection between the research community members and the technologies they affect, but also how these theories play upon each other in the invention of new paradigms for learning with technologies. In short, we will delve deeply into constructivism and constructionism, scaffolding, apprenticeship, distributed cognition, computer supported collaborative learning, knowledge building communities, the learning sciences, perspectivity and identity formation as they relate to the creation of successful and equitable learning environments for diverse populations of learners. Students conduct an evaluation of the embedded theories in an existing learning environment of their choice (such as Second Life, Logo, Scratch, NetLogo, The Sims).

### DESIGN FOUNDATIONS

#### **EDCT-GE 2015 Interaction Design for Learning Environments**

*Migliorelli. 30 hours: 3 credits. Fall.*

This design course builds on cognitive and cultural theory as well as design theory, translating them into approaches to the design of the representation of information and design of interaction in media environments. Interaction design discussions will explore issues such as types and levels of interactivity, levels of user control, pattern languages, and media-specific instructional strategies for different levels of engagement, and will result in the design of wire frames of a learning environment. For the visual design, discussions will explore topics such as

the semiotics of visual representations, use of metaphors, and development of a visual language, and will result in drafts of storyboards of the visual design of the environment.

**EDCT-GE 2017 Architecture for Learning Environments**

*Goldman. 30 hours: 3 credits. Spring.*

In this course, we will examine the architectural issues involved in designing learning environments by becoming designers of an Atelier. In other words, we will be practicing the theory. Our objective is to gain both theoretical and practical knowledge of the field of design and user experience. Students are not expected to become professional Content (Information) Architects (IAs) when they have completed this course. Instead they are expected to gain a repertoire of approaches and ideas that will enable them to become knowledgeable members of design teams where emerging technologies are used to advance learning, in either academic or industrial settings.

**Specialization: DESIGN**

**EDCT-GE 2251 Educational Design for the World Wide Web I**

*Hoadley. 30 hours: 3 credits. Spring.*

In this course, we will focus on design and implementation of web-based technologies for learning. There will be three main deliverables, along with other smaller assignments. These deliverables include: a demonstration website incorporating the technologies we are studying in class; a class presentation and critique of a particular web-based learning technology; and a design of an educational intervention which includes some web component. By the end of the course students will be able to identify types of web-based educational platforms, their strengths and weaknesses, and their likely conditions of success; understand basic concepts about technologies underlying the web, including client-server networking, style vs. semantic markup, the difference between markup, scripting, and programming; and develop simple websites including html, flash, jquery, javascript, and CSS.

**EDCT-GE 2177 Advanced World Wide Web Design Lab**

*Hoadley. 30 hours: 3 credits. Spring.*

*Prerequisite: EDCT-GE 2251.*

In this course, you will gain experience developing Web-based learning applications, ranging from small persuasive, informational, or communication interventions to more complete Web-based learning environments. In general, the focus will be on the design processes and gaining whatever technical skills are required to implement designs; this is not a Web programming course per se. As a consequence, you should have as a prerequisite a modicum of technology familiarity, and the willingness to use online tutorials and self-study to get technical skills up to speed rapidly.

**EDCT-GE 2153 Educational Video: Design and Production I**

*Shuchat Shaw. 30 hours: 3 credits. Spring.*

The design and production of educational video programming as well as video segments, both linear and interactive, to be integrated into educational online environments and multimedia programs -- distributed through diverse technology platforms for use in wide-ranging places of learning. Emphasis is on uses of those characteristics of motion picture, as a family of pictorial and iconic forms of representation, that have special potential to support different kinds of learning, as understood from the perspectives of cognitive science, constructivism, and other learning sciences. Students learn theoretical underpinnings of design principles and strategies/methods that support learning, and how to apply, use and embed those in such educational video genres as the public service announcement, public advocacy programming, mini-documentary, and social drama. Students do their own script-writing, production management, directing, digital production, editing, and graphics, primarily in crews and on location.

**EDCT-GE 2154 Educational Video: Design and Production II**

*Shuchat Shaw. 30 hours: 3 credits. Fall.*

*Prerequisite: EDCT-GE 2153 or permission of the instructor.*

Intermediate design and production of educational video programs and video segments to be integrated into educational interactive environments. Emphasis is on the application of

cognitive science and constructivist views of learning to design principles guiding uses of video's representational and structural affordances. Includes advanced instructional design and writing; producing and production management; directing; and the use of digital production, editing, and graphics technology (applications such as Photoshop and Flash may be used to create media to integrate into productions). Students work individually and in crews, on location.

**EDCT-GE 2510 Narrative, Digital Media and Learning**

*Goldman, Shaw. 30 hours: 3 credits.*

Addresses the role of narrative when designing serious games, simulations, social media, and documentary storytelling. Narrative forms have been used for teaching and learning given their role in memory, cognition, the engagement of learners, as well as in case studies for learning, teaching, and research. This course explores the design principles and constitutive elements of narrative-centered learning. Special emphasis is given to designing media narratives that enable and support pedagogical models including story-based learning, digital storytelling, and entertainment education, and goal-based scenarios.

**EDCT-GE 2031 Educational Technology in a Global Context**

*Hoadley. 30 hours: 3 credits. Fall, Spring.*

Educational technologies have become essential for international exchange, as a 'leapfrog' technology for development, as a way of bridging distance in education, and as an important means for the preservation and dissemination of local cultures and contexts. Educational technology is a significant and growing force worldwide, and not only in industrialized nations. E-learning, open educational resources, m-learning, and educational media are transforming not only formal primary, secondary, and postsecondary education, but also rural economic development, agriculture, and women's empowerment. In this course, we look at how educational communications and technology shape, and are shaped by, their context internationally. We will also be collaborating with international clients to identify technology designs for real educational problems in developing countries.

**EDCT-GE 2200 Media for Museums and Public Spaces**

*Majzlin. 30 hours: 3 credits. Spring.*

The objective of the course is to understand the variety of media available to educators in public space and publicly shared learning environments, how these environments are unique learning experiences and how one can develop comparative criteria in the application of technology to enhance learning. The field includes the study of museums and other public space, but also draws from numerous disciplines including theater, architecture, cybernetics, philosophy, installation art, film, video and video gaming. The course examines the nature, application and use of media, including audio, computer-based multimedia, internet and tie-ins — for such shared learning environments as cultural institutions, historical and visual arts museums, communications and visitor information centers through the analysis of site visits and case studies. The use of media in museum curating and interpreting content for exhibition environments, educational programs, orientation presentations, community interface, development and fundraising programs will be examined. Emphasis is on developing criteria in the decision-making process regarding media choices available, analysis of the visitor experience, the learning environment and the ways in which media choices can serve a museum's or visitor center's educational goals.

**Concentration: GAMES FOR LEARNING**

**EDCT-GE 2500 Video Games and Play in Education**

*Hoadley. 30 hours: 3 credits. Spring.*

Video games are becoming ever-present in educational settings, with classrooms incorporating both commercial and educational games in curriculum, and educational technologists becoming ever more interested in developing "serious" or educational games. However, there are still many unknowns, such as, what genres of games may best be used for certain kinds of learning, and how we can go about studying how games affect players and learners. This course will prepare students to: Understand the history of educational video games, and what shaped the development of certain genres; identify theories of learning and

play, and describe how they relate to the educational potential of videogames; analyze and evaluate commercial and educational video games; and Design educational video games with history, theory, learning outcomes and learner characteristics in mind.

**EDCT-GE 2505 Designing Simulations and Games In Education**

*Plass. 30 hours: 3 credits. Fall.*

Examines the potential of various genres of simulations and games (both analog and digital) as learning technologies through readings, discussion, play, design and research. Cognitive, emotional, and cultural aspects of educational game design are among the concepts covered in this course. Class discussions focus on identifying design factors for effective educational games that are based on research and theory. Student-selected assignments typically include reflections on game and simulation play, integrating games and simulations in formal learning environments, designing and developing prototypes of educational games and simulations, and conducting short exploratory research.

**EDCT-GE 2520 Research on Simulations and Games for Learning**

*Plass. 30 hours: 3 credits. Spring.*

Provides an introduction to research on simulations and games, with a focus on choosing the appropriate approach, e.g., playtesting, evaluation, or efficacy research, and the appropriate methods, e.g., think aloud protocols, video research, eye tracking, EEG/EMG, user log data, or biometrics. Reading assignments, class discussions, and case studies will be used to discuss the goals, methods, design, and setup of these methods and prepare students to design and execute their own playtesting and evaluation research for learning games of their choice.

**EDCT-GE 2510 Narrative, Digital Media and Learning**

*Shuchat Shaw. 30 hours: 3 credits. Fall.*

Addresses the role of narrative when designing serious games, simulations, social media, and documentary storytelling. Narrative forms have been used for teaching and learning given their role in memory, cognition, the engagement of learners, as well as in case studies for learning, teaching, and research. This course explores the design principles and constitutive elements of narrative-centered learning. Special emphasis is given to designing media narratives that enable and support pedagogical models including story-based learning, digital storytelling, and entertainment education, and goal-based scenarios.

**Specialization: PROFESSIONAL APPLICATIONS**

**EDCT-GE 2211 Professional Applications of Educational Media in New York City**

*Majzlin. 30 hours: 3 credits. Fall.*

The objective of the course is to understand the variety of non-design forces at work which may influence the creation and production of educational media. Secondly, to become aware of the elements involved in Project Management while creating educational media. Third, to become aware of your own skills and talents and how they might thrive in different work environments that create educational media. Emphasis is placed on the context in which media is produced, on identifying key players in media creation, organizational structure, NFPs, proposals, project development, project management, client interaction, team collaboration, intellectual property issues, and other factors which may affect the creation and implementation of design. Guest speakers and/or site visits may include the Wildlife Conservation Society, Memorial Sloan-Kettering Cancer Center, Kognito Interactive, Sesame Workshop, Transient Pictures, Davis Wright Tremaine LLP, film/video producers, attorneys, project managers, software developers.

**EDCT-GE 2008 Learning and Teaching K-16 with Social Media**

*Goldman. 30 hours: 3 credits. Summer.*

To enter the workplace as a designer of formal and informal technology-rich learning environments, students from Education, the Arts, and Industry need to become fluent with advances in social cognitive theory as well as the state-of-the-art technical affordances of social media. In this course, students learn to apply a range of social media—wikis, games, digital video stories and mini-movies, social networking, and virtual worlds—as they work in

teams to develop a curriculum module for both teaching and learning. Students will use the Perspectivity Framework, a framework that enables stakeholders to layer diverse "points of viewing" using the appropriate technologies required to investigate a complex topic.

**EDCT-GE 2018 Integrating Educational Technology in Teaching & Learning**

*Singh. 45 hours: 1 credit. Fall, Spring, Summer.*

Prepares students to integrate digital media and technology into curricula. Through demonstrations, hands-on use, and application projects, students gain experience with the roles digital tools play to support teaching methods and learning strategies associated with a continuum of learner- and teacher-centered educational approaches and goals. Students develop skills in HTML, podcasting, digital storytelling, educational use of Web 2.0 tools (e.g., content management systems, social networks, e-portfolios), digital video, and virtual worlds, and common software packages in order to design and formatively assess engaging learning communities.

**EDCT-GE 2197 Media Practicum: Field Internships**

*Shuchat Shaw. 180 hours: 3 credits. Fall, Spring, Summer.*

*Prerequisite: Permission of Internship Coordinator. Restricted to DMDL/ECT students who have completed a minimum of 12 credits in DMDL. Includes fieldwork and seminars on campus.*

*Repeatable to a maximum of 6 credits. May be taken a maximum of two times.*

Students are placed in internships in the educational media and technology field. The program regards internships as essential to professional development and places students in excellent settings throughout New York City that match their interests and goals. They learn through supervised participation to design, produce, use and evaluate educational media and technology-based learning environments. Internship sites include: media companies and broadcast and cable networks that produce educational television programs and web environments for all age groups and in all content areas; museums, historical societies and other cultural sites; publishing companies that use both print, video and online technologies for K-12 and higher education; organizations that develop technology-based learning materials for continuing professional education and special interest groups; colleges and universities with designers and producers of educational systems and media as well as complex academic and faculty technology services; companies and independents who produce social documentaries, digital games for learning, and novel educational applications for new portable and hand-held technologies; social service agencies, hospitals, emergency rooms, and clinics where patient and client education and research are frequently done with media and technology; in businesses and corporations that develop employee training and workplace learning media as well as educational media for their clients and consumers; and non-profit, policy, and advocacy organizations that use diverse communication technologies to address rights, access and equity issues.

**EDCT-GE 2198 K-12 Student Teaching in Educational Communication and Technology**

*Shuchat Shaw. 180 hours: 3 credits. Fall, Spring, Summer.*

*Prerequisite: Permission of Internship Coordinator. Restricted to DMDL/ECT students. Includes fieldwork and seminar on campus. Repeatable to a maximum of 6 credits. May be taken a maximum of two times.*

Students are placed in elementary, middle, or high school settings for student teaching experiences in diverse practices in educational media and technology. These might include, for example, practices in technology integration and implementation, coordination and leadership in technology-related reform efforts, support to teachers for curricular and instructional uses of media and technology to improve learning, support to teachers and students in media design and production as well as in media education and literacy.

**RESEARCH COURSES AND DOCTORAL SEMINARS**

**EDCT-GE 2075 Digital Video Ethnography: Cultural Interpretations with New Media**

*Goldman. 30 hours: 3 credits. Spring.*

This course is an examination of the opportunities and problematics of using digital video and other new media forms in educational research. In this course students create and critique ethnographic video accounts; and, they use online analysis tools to understand how participatory research communities are created to build aesthetically valid interpretations. This

course is designed specifically for students with a focus on how technologies are used as tools in educational research. The course will also be of interest to educators involved in using video as an investigative tool in their classrooms and to media artists and designers interested in the use of video as an expressive tool for communication and learning.

**EDCT-GE 3311 Content Seminar in Research in Instructional Technology**

*Plass, Goldman, Hoadley. 45 hours: 3 credits. Spring.*

*Prerequisite: Permission of the instructor.*

Critical analysis, supported by readings, of selected contemporary research issues and problems, theories and methods in instructional media and technology, in historical perspective. In addition to common readings, students identify and individually research articles related to their research interests and critically assess the studies. Introduces students to software packages to anchor a conceptual understanding of primary statistical procedures and qualitative data analysis. The major task is to develop a research proposal that should inform the direction of their candidacy papers and serve as an initial draft of their dissertation proposals.

**EDCT-GE 3076 Advanced Seminar in Research & Practice in Instructional Technology**

*Plass, Goldman, Hoadley. 30 hours: 3 credits. Fall.*

In addition to developing the candidacy paper, this course is an overview of the profession. Students become familiar with the components of the candidacy paper and begin to research and develop information related to those components. Profession-related topics include vita construction, identifying and pursuing faculty positions in higher education, the major conferences and publications in the profession, the critical steps and benchmarks in doctoral training, and funding sources for doctoral research.

**EDCT-GE 3315 Doctoral Colloquium in Educational Communication & Technology**

*Plass, Hoadley. 30 hours: Variable 1- 3 credits. Spring.*

*Prerequisite: Permission of the instructor.*

The goal of the Doctoral Colloquium in ECT is to bring together doctoral students and faculty to exchange ideas, discuss research projects, to get to know one another, and to build a community of researchers. Doctoral graduates from our program will talk about their research results, current doctoral candidates will present their ongoing research projects, and new doctoral students will present ideas for future research. On occasion, we will also invite researchers from other universities to present and discuss their work. In all cases, we aim for active discussions and debate of the work presented.

**INDEPENDENT STUDY**

**EDCT-GE 2300 Independent Study**

*Goldman; Hoadley; Plass; Shuchat Shaw. 15 hours per credit: 1-6 credits variable.*

*Fall, Spring, Summer. Permission of supervising faculty member required.*

Students may begin or extend special projects with the supervision of a program faculty member. Students develop proposals, including goals and a time-line, to present when seeking a faculty member's supervision. Together they further develop and refine proposals and decide on the appropriate number of credits, based on the type and scope of projects proposed. Students meet with their super-visors on a regular basis throughout the semester to review progress and get feed-back. Projects are submitted, in a form agreed upon by students and supervisors, at the end of the semester.

**MASTER OF ARTS THESIS PROJECT**

**EDCT-GE 2095 Educational Communication and Technology Research**

*Shuchat Shaw. 45 hours: 3 credits. Fall, Spring.*

*Prerequisite: Permission of the instructor. Restricted to DMDL Thesis students.*

The Master of Arts thesis project is developed in this course, which meets weekly as a group, with faculty supervision, for peer exchange and feedback. The purpose of the thesis is to provide students an opportunity to integrate their academic studies in the program and bring their learning to bear on a single project of personal and professional interest in a very

concentrated way. This culmination of the ECT experience should demonstrate students' proficiency and skill in theory and practice and, in the process, take students to new levels of understanding in their chosen area of interest. The thesis project itself should also make a contribution to the learning of those for whom it is designed and to current knowledge and understanding in the field of educational communication and technology. The ECT thesis may take various forms, including (1) design and development of media for learning, (2) a scholarly critical inquiry paper, (3) a research study, (4) an action project, or (5) a field service media project. See page 13 for additional information.



## MASTER OF ARTS DEGREE

### Academic Requirements Summary

The Master of Arts is a 36-credit program, comprised of course requirements in several categories as shown below. The Coordinator of the MA program and faculty academic advisors assist students in making course selections and planning course sequences both appropriate to general guidelines and relevant to students' individual goals and interests (all faculty serve as academic advisors to MA students; advisors are assigned prior to the matriculation semester). All courses taken must be at the graduate level which, in Steinhardt, are numbered at the 2000- and 3000-levels (and at equivalent graduate levels in other programs and schools at NYU where MA students may take electives).

① General guidelines for completing the required 36 credits of course work are:

<b>a. THEORETICAL FOUNDATIONS .....all 9 credits required</b>	
EDCT-GE 2158 Educational Design for Media Environments .....	3
EDCT-GE 2174 Cognitive Science and Educational Technology I .....	3
EDCT-GE 2175 Cognitive Science and Educational Technology II .....	3
<b>b. DESIGN FOUNDATIONS .....all 6 credits required</b>	
EDCT-GE 2015 Interaction Design for Learning Environments.....	3
EDCT-GE 2017 Architecture of Learning Environments .....	3
<b>c. SPECIALIZATION COURSES .....choose 9 credits</b>	
<b>Design</b>	
EDCT-GE 2153 Educational Video: Design and Production I .....	3
EDCT-GE 2154 Educational Video: Design and Production II .....	3
EDCT-GE 2200 Media for Museums and Public Spaces .....	3
EDCT-GE 2251 Educational Design for the World Wide Web I .....	3
EDCT-GE 2177 Advanced World Wide Web Design Lab .....	3
EDCT-GE 2510 Narrative, Digital Media and Learning .....	3
EDCT-GE 2031 Educational Technology in a Global Context .....	3
<b>Games for Learning</b>	
EDCT-GE 2500 Video Games and Play in Education .....	3
EDCT-GE 2176 Simulations and Games for Learning .....	3
EDCT-GE 2520 Research on Simulations and Games for Learning .....	3
EDCT-GE 2510 Narrative, Digital Media and Learning .....	3
<b>Professional Applications</b>	
EDCT-GE 2211 Professional Applications of Educational Media in NYC .....	3
EDCT-GE 2008 Learning and Teaching (K-16 With Social Media .....	3
EDCT-GE 2018 Integrating Educational Technology in Teaching & Learning .....	1
EDCT-GE 2197 Media Practicum: Field Internships .....	3
EDCT-GE 2198 K-12 Student Teaching in Educational Technology .....	3

### **Research Courses and Doctoral Seminars**

EDCT-GE 2075 Digital Video Ethnography: Cultural Interpretation with New Media .....	3
EDCT-GE 3311 Content Seminar: Research in Instructional Technology .....	3

### **Independent Study**

EDCT-GE 2300 Independent Study .....	variable	1-6
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#### **d. COGNATE ELECTIVES .....choose 6 credits**

"Cognates" are graduate-level professional electives. These courses may be taken in programs other than DMDL/ECT or selected from DMDL/ECT specialization courses.

#### **e. M.A. THESIS PROJECT .....6 credits required**

EDCT-GE 2095 Research in Educational Communication and Technology ..... variable 1-3  
*Students are advised to complete all other course work prior to enrolling in this course for the second time in order to devote their final, graduating semester exclusively to the thesis.*

The purpose of the thesis is to provide students an opportunity to integrate their academic studies in the program and bring their learning to bear on a single project of personal and professional interest in a very concentrated way. This culmination of the DMDL experience should demonstrate students' proficiency and skill in theory and practice and, in the process, take students to new levels of understanding in their chosen area of interest. The thesis project itself should also make a contribution to the learning of those for whom it is designed and to current knowledge and understanding in the field of educational communication and technology. Thesis projects may be "new," relative to work done in previous courses; or they may be projects started in a previous course that become significantly expanded and enhanced. The thesis may take these forms:

#### **Design & Development of Media for Learning**

The instructional design, production, and field test/formative evaluation of a media/technology-based learning environment; with documentation of all phases of instructional design.

#### **Scholarly Critical Inquiry Paper**

An analysis, synthesis, and critique of multiple perspectives on a well-focused topic in the field -- for example, a problematic or controversial issue, a pressing question about theory or practice, a developing or promising trend, or interesting concerns about the application of theory to practice -- with a view toward developing an original interpretation or integrating concept that contributes to the current body of knowledge and understanding.

#### **Research Study**

Limited to a small-scale pilot; and provided prior formal study of research methods to be used, for example, descriptive, case study, survey, content analysis, historical, ethno-graphic, evaluation methods. Students who anticipate doing a research thesis are required to complete, in advance of the thesis semester, ECT's doctoral course, *EDCT-GE 3311, Content Seminar in Research in Instructional Technology* (3 credits) and an appropriate research methods course, selected from offerings in Steinhardt for its relevance to the thesis (3 credits) which are applied toward the 36 credit requirement for the MA degree. It is preferable, though not essential, that students develop the research proposal and related literature review for the thesis while taking EDCT-GE 3311 as well as prepare, if applicable, a "human subjects" application to be submitted to the Institutional Review Board

#### **Action Project**

Development of educational media project or media/technology-related curriculum designed to improve or transform learning in the student's immediate work environment or an educational environment to which the student has

confirmed access, followed by personal [or supervision of] implementation or use, and evaluation.

 **Field Service Media Project**

Design and development of a media-based educational solution to a real-world problem identified by an educational client, involving all phases of instructional design and related documentation; client must confirm availability throughout the semester; can not be done in the context of an internship or the student's current place of employment.

- ② A minimum of 24 credits must be taken in residency at NYU, i.e., courses offered by NYU.
- ③ A maximum of 9 to 11 graduate credits may be considered for transfer from other universities; these are evaluated by faculty advisors to establish whether they meet criteria established by the Steinhardt School.
- ④ Students must maintain a minimum 3.0 grade point average in DMDL and the overall record.
- ⑤ Students, whether attending full-time or part-time, have a six-year tenure period in which to complete the MA. The clock begins with the first day of the semester of matriculation.
- ⑥ Students must maintain "active" status every semester, from the semester of matriculation through the semester of graduation. Students are "active" in a semester when enrolled in a 3-credit course (at minimum) at the graduate level. When students are not enrolled as such within the six-year tenure period, they are required to register for "Maintaining Matriculation," which provides students with access to all University facilities.



**ADVANCED CERTIFICATE PROGRAM**

**Academic Requirements Summary**

The ECT Certificate is a 30-credit post-master's program, comprised of course requirements as shown below. The Coordinator of the Certificate program and faculty academic advisors assist students in making course selections and planning course sequences appropriate to general guidelines, relevant to students' individual goals and interests, and to advance and enhance students' professional practice in the field (all ECT faculty serve as academic advisors; advisors are assigned prior to the matriculation semester). All courses taken must be at the graduate level which, in Steinhardt, are numbered at the 2000- and 3000-levels (and at equivalent graduate levels in other schools at NYU where MA students may take non-ECT electives).

- ① General guidelines for completing the required 30 credits of course work are as follows. Requirements are adjusted for alumni of ECT's Master of Arts program who have completed courses listed below as requirements within the four (4) years prior to matriculation for the Certificate.

<b>a. ECT FOUNDATIONS</b> .....	<b>all 9 credits required</b>	
EDCT-GE 2158 Educational Design for Media Environments .....		3
EDCT-GE 2174 Cognitive Science and Educational Technology I .....		3
EDCT-GE 2175 Cognitive Science and Educational Technology II .....		3
<b>b. ECT DESIGN FOUNDATIONS</b> .....	<b>all 6 credits required</b>	
EDCT-GE 2015 Interaction Design for Learning Environments.....		3
EDCT-GE 2017 Architecture of Learning Environments .....		3

**c. ECT SPECIALIZATION COURSES .....choose 9 - 12 credits**

**Design**

EDCT-GE 2153 Educational Video: Design and Production I .....	3
EDCT-GE 2154 Educational Video: Design and Production II .....	3
EDCT-GE 2200 Media for Museums and Public Spaces .....	3
EDCT-GE 2251 Educational Design for the World Wide Web I .....	3
EDCT-GE 2177 Advanced World Wide Web Design Lab .....	3
EDCT-GE 2510 Narrative, Digital Media and Learning .....	3
EDCT-GE 2031 Educational Technology in a Global Context .....	3

**Games for Learning**

EDCT-GE 2500 Video Games and Play in Education .....	3
EDCT-GE 2176 Simulations and Games for Learning .....	3
EDCT-GE 2520 Research on Simulations and Games for Learning .....	3

**Professional Applications**

EDCT-GE 2211 Professional Applications of Educational Media in NYC .....	3
EDCT-GE 2008 Learning and Teaching (K-16 With Social Media .....	3
EDCT-GE 2018 Integrating Educational Technology in Teaching & Learning .....	1
EDCT-GE 2197 Media Practicum: Field Internships .....	3
EDCT-GE 2198 K-12 Student Teaching in Educational Technology .....	3

**Research Courses and Doctoral Seminars**

EDCT-GE 2075 Digital Video Ethnography: Cultural Interpretation with New Media .....	3
EDCT-GE 3311 Content Seminar: Research in Instructional Technology .....	3

**Independent Study**

EDCT-GE 2300 Independent Study .....	variable	1-6
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**d. COGNATE ELECTIVES .....choose 3 - 6 credits**

"Cognates" are graduate-level professional electives. These courses may be taken in programs other than DMDL/ECT or selected from DMDL/ECT specialization courses.

**e. PROFESSIONAL WORK REPORT**

Certificates are awarded after coursework is completed and candidates have completed three years of work experience in the field; this work can be done before, during, or after coursework is completed (or a combination). With faculty supervision, candidates develop and submit a report which (1) documents work experience in the field and learning in that context, and (2) includes a retrospective critique of the work experience and a prospective set of plans and goals from the point of view of new insights about theory and practice gained through the Certificate program.

- ② A minimum of 24 credits must be taken in residency at NYU, i.e., courses offered by NYU.
- ③ A maximum of 9 graduate credits may be considered for transfer from other universities; these are evaluated by faculty advisors to establish whether they meet criteria established by the Steinhardt School.
- ④ Students must maintain a minimum 3.0 grade point average in ECT and the overall record.
- ⑤ Students, whether attending full-time or part-time, have a six-year tenure period in which to complete the MA. The clock begins with the first day of the semester of matriculation.
- ⑥ Students must maintain "active" status every semester, from the semester of matriculation through the semester of graduation. Students are "active" in a semester when enrolled for a minimum of 3 credits at the graduate level. When students are not enrolled as such within the six-year tenure period, they are required to register for "Maintaining Matriculation," which provides students with access to all University facilities.

**FIELD INTERNSHIP PROGRAM**

The Field Internship Program is designed to provide students with professional field experience in

chosen career areas. Students have the opportunity to explore diverse opportunities in the profession throughout the New York metropolitan area. They learn through supervised participation in instructional technology, instructional design and production, and a wide range of other professional positions and practices.

The faculty view internships as essential complements of academic course work, particularly for students who may not have yet had professional work experience. Internships afford students the opportunity to apply and refine what they are learning in their course work, under the supervision of professionals in professional settings. This experience assists students in further academic and career planning and fosters professional development.

More than one hundred organizations in the Greater Metropolitan Area host interns from the ECT Program. These organizations and the work they engage in parallel the various areas in which students have been immersed throughout their graduate work. Settings include educational, cultural, broadcast, communications, publishing, government and public service, non-profit, advocacy, health and social services, corporate training, and media design, and education media research and development organizations.

Following are some examples of ECT internship placements over the last several years: Following are some examples of ECT internship placements over the last several years: New Visions in Media & Education; Chinatown Manpower Project of NY; Museum of Chinese in the Americas, Sesame Workshop and Sesame Interactive; Lucky Duck Productions; Little Airplane Productions; Drury Design; Kralyevitch Productions; Kognito Interactive, Electronic Media Patient Education Institute; Taskstream; American Museum of Natural History, American Museum of the Moving Image; NetAid; and UNICEF.

### **ACADEMIC ADVISEMENT**

Students are assigned to a faculty advisor during their first semester in the program. Faculty members has frequent and convenient office hours. Required meetings include new student orientations and mid-term advisement for curriculum and progress review and course registration for the following semester. Following those meetings, students complete registration through Albert, an on-line registration system students access through their homepage on NYU-NET. Subsequent course changes such as "drops and adds," once approved by a faculty advisor, are also done through these systems.

With a faculty advisor, new students should review degree requirements and develop a tentative curriculum plan for their studies. At and between course registration periods, students may review their progress with their faculty advisor and alter their curriculum plan as necessary. The faculty advisor's approval is required in a number of situations, including course registration, enrollment in an Independent Study, when taking an Incomplete in a course, and so on.

### **FOR INTERNATIONAL STUDENTS**

Prior to course registration advisement and curriculum planning, new international students must meet with an advisor in the NYU Office for International Students and Scholars (OISS) and with The Steinhardt School of Culture, Education and Human Development's International Student Advisor. From these two offices, international students will be informed of all steps and procedures they must take prior to the beginning of the school semester.

International students must coordinate their arrival in New York, prior to their first semester as a student, with the OISS schedule for the test of English proficiency. Students must take this test and receive scores (immediately after taking the tests) prior to meeting with their faculty advisors to register for courses and to accessing the ALBERT registration systems. The purpose of this test is to determine whether or not international students will be required to take English language courses during their first semester in the Program.





## Planning Your Curriculum

**ECT MA DEGREE PROGRAM**  
**MA CURRICULUM WORKSHEET**

**NAME** OR \_\_\_\_\_  
**DATE** \_\_\_\_\_

	YEAR 1			YEAR 2			YEAR 3		
	FA	SP	SU	FA	SP	SU	FA	SP	SU
<b>ED FDNS</b> 9 Credits EDCT-GE 2158 Educ Design EDCT-GE 2174 Cog Science I EDCT-GE 2175 Cog Science II									
<b>DESIGN FDNS</b> 6 Credits EDCT-GE 2015 Interac Design  EDCT-GE 2017 Architecture									
<b>SPECIALIZE</b> 12 Credits									
<b>ELECTIVES (non-ECT)</b> 6 Credits									
<b>THESIS</b> 3 Credits									
<b>OTHER</b>									