Department of Media and Information
College of Communication
Arts and Sciences

101 Understanding Media and Information
Fall, Spring. Summer. 3(3-0) SA: TC 100, TC 110, TC 101
Critique and analysis of media including television, radio, film, handholds, video games, social media and the Internet. Media history, effects and ethics. Technology, business and social developments affecting the media in the information society.

201 Media and Information Technologies and Industries
Fall, Spring. Summer. 3(3-0) P: (MI 101 or concurrently) or (CSE 231 or concurrently) SA: TC 201
Operational principles and applications of media and information technologies and services. Technological, business, and policy developments transforming media and information industries. Local, national and global players in the media and information sector.

211 Documentary History and Theory
Fall. 3(3-0) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. R: Open to students in the School of Journalism or in the Department of Media and Information or in the Department of Writing, Rhetoric and American Cultures or in the Documentary Studies Specialization or in the Film Studies major. Documentary history and theory form its origins to the present.

220 Methods for Understanding Users
Fall. 3(3-0)
Basics of user research methods, such as interviews, surveys, content analysis, and focus groups. Methods to generate design ideas, solve design problems, and communicate the results.

231 Game and Interactive Media Development
Fall, Spring. 3(2-2) P: (CAS 117) or (CAS 204 and CAS 208) R: Open to students in the Department of Media and Information or in the Design Specialization. SA: TC 241, TC 331, MI 331
Brainstorming, planning, implementing, and troubleshooting applications and interfaces for games and interactive media. Basic principles of programming for interactivity.

239 Digital Footprints: Privacy and Online Behavior
Spring. 3(3-0) P: Completion of Tier I Writing Requirement R: Open to undergraduate students
Exploration of digitization and capture of personal information. Issues of privacy, anonymity, and ownership. Technologies involved in capturing personal information.

241 Filmmaking I
Fall, Spring. Summer. 3(2-2) P: CAS 112 R: Open to students in the Department of Media and Information. Not open to students with credit in CAS 201 or CAS 202. Process of creating a film product. Basic camera operation, sound capture, the editing process and producing a final product.

247 Three-Dimensional Graphics and Design
Fall, Spring. Summer. 3(2-2) P: (CAS 116) or (STA 110 and STA 113) or (CAS 205 or CAS 206 or CAS 207) R: Open to students in the Department of Media and Information or in the Game Design and Development Minor. SA: TC 247
Principles of 3D of computer graphics applied in cinema, games, illustration, design and sculpture. Use of 3D software to create and manipulate synthetic objects, materials, lights, and cameras.

250 Introduction to Applied Programming
Fall. 3(2-2)
Creation of software that responds to user input. Introduces variables, control structures, problem decomposition, finding and using existing libraries/APIs, producing user visible output, testing, creating documentation, and using version control.

291 Special Topics
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. A student may earn a maximum of 16 credits in MI 291 and MI 491.
Contemporary issues in media and communication technology.

301 Bringing Media to Market
Spring. 3(3-0) P: (MI 201 or concurrently) or CAS 114 or BUS 190 SA: TC 356, TC 381, TC 301
Process of bringing media to market across multiple delivery platforms including broadcast, cable, satellite, Internet and mobile devices. Organization of creative industries, distribution methods, pricing and business models. Creation and repurposing of content. Practical and theoretical models of the behavior of media and information consumers.

302 Networks, Markets and Society
Fall. 3(3-0) P: MI 201 or concurrently
Theories and methods for understanding dynamic systems in which information and communication technology (ICT) and society evolve interdependently over time. Explores how ICTs shape human experience, and how politics, commercial interests and culture shape how ICTs are designed.

305 Media and Information Policy
Fall. 3(3-0) P: MI 201 or concurrently SA: TC 200, TC 210
National, international and local policies and private agreements governing traditional, new and emerging media, including radio, television, film, games, social media, mobile communications and the Internet.

311 Introduction to Documentary Production
Spring. 3(2-2) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. P: MI 211 R: Open to students in the Documentary Production Minor. SA: TC 233
Introduction to documentary production using accessible and affordable digital technology.

320 Reasoning with Data
Spring. 3(2-2) P: MI 220 and MI 250
Explore and summarize structured data using simple statistics such as means, standard deviations, contingency tables, and hypothesis tests, and use this data to evaluate arguments and draw conclusions about technology performance and human behavior.

335 Film Directing
Fall. 3(3-1) Interdepartmental with Film Studies. Administered by Film Studies. P: (FLM 230 or concurrently) or (CAS 112 or concurrently) SA: ENG 335
Concepts and techniques for directing in styles most associated with the art of film. Studies of innovative film directors. Skills of film directing, including script and shot breakdown. Directing actors and crew. Directing on location.

337 Compositing and Special Effects
Fall, Spring. 3(2-2) P: (CAS 112) and (CAS 110 or CAS 116) or THR 219 or (CAS 201 and CAS 202) or (CAS 205 or CAS 206 or CAS 207) R/B: MI 241 R: Open to students in the Department of Media and Information or in the Department of Theatre. SA: TC 437, TC 337 Not open to students with credit in THR 337.
Conceptual and technical use of animation and compositing software for television, cinema, interactive media, and live performance.

341 Filmmaking II
Fall, Spring. Summer. 3(2-2) P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 341
Film style planning, techniques, and aesthetic principles for cinema and television production.

342 Multi Camera Production for Television
Fall, Spring. Summer. 3(2-2) P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 342
Conceptualizing, designing, planning, producing, directing and evaluating multi-camera video programs.

343 Audio Production
Fall, Spring. Summer. 3(2-2) P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 343
Basic audio production techniques. In-depth audio and radio industry analysis. Media writing.

344 Sound Design for Cinema, Television, and Games
Spring, Summer. 3(2-2) P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R/B: MI 343 R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 344
Principles, technology, and techniques of sound design for media projects, including film, games, television, animation, and web.

346 Game Design
Fall. 3(2-2) P: MI 231 or CSE 331 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Minor or in the Information and Communication Technology for Development Minor. SA: TC 346
Analyze, critique, and design of non-digital and digital games. Overview of game industry.
Media and Information—MI

347 **Advanced Three-Dimensional Computer Animation**
Spring. 3(2-2) P: MI 247 R: Open to students in the Department of Media and Information or in the Game Design and Development Specialization. SA: TC 347

How aesthetic skill, technical competency, and engaging performance are woven together to create compelling animation using 3D computer graphics. Use of industry standard software to create, manipulate and render synthetic characters and their environments.

349 **Web Design and Development**
Fall, Summer. 3(2-2) P: (MI 220 or MI 231 or CSE 231) or (CAS 204 and CAS 205) RB: MI 231 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Design Specialization or in the Information and Communication Technology for Development Minor. SA: TC 349

Preparation, design and development of web sites, services, and applications that employ primarily web browser technologies.

350 **Evaluating Human-Centered Technology**
Spring. 3(2-2) P: MI 220 and MI 250

How to form context-specific inquiry based on user needs and goals, assess fundamental usability problems, conduct lab-based summative evaluation methods, summarize their evaluation results into reports and design suggestions.

351 **Producing For Cinema and Television**
Spring. 3(3-0) P: (MI 241) or (CAS 112 and CAS 201 and CAS 202) R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 351

Conceptualizing, designing, planning, and developing projects for cinema and television.

355 **Media and Information Research**
Spring. 3(3-0) RB: Completion of University Math Requirement SA: ADV 340, ADV 355, TC 376, TC 355

Applied media and information research methods, practices, techniques and ethics. Data analytics, visualization and online research methods.

360 **Media and Information Management**
Fall. 3(3-0) P: MI 201 or concurrently RB: Completion of Tier I Writing Requirement

Basic principles of managing and financing media and information companies, media projects, and information applications.

361 **IT Network Management and Security**
Spring. 3(3-0) P: MI 201 or CSE 231 RB: MI 360 SA: TC 361

Structure, design and management of data networks with a focus on business settings. Examination of information technology security issues specifically in the context of data networks and new, digital media and ITs.

377 **Advanced 3D Modeling**
Fall. 3(2-2) P: MI 247 R: Open to students in the Department of Media and Information. Learn advanced techniques in 3D modeling and texturing for games, movies, television, and motion graphics.

401 **Topics in Media, Information and Society (W)**
Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 9 credits in all enrollments for this course. P: (MI 101) and completion of Tier I writing requirement SA: TC 239, TC 339, TC 375, TC 401

Cultural, technological, and design evolution of media and information. Conventional and emerging theories of media processes and effects. Critical examination of empirical research concerning social impacts of media, information technologies, and the Internet.

411 **Collaborative Documentary Design and Production (W)**
Spring. 3(2-2) Interdepartmental with Film Studies and Journalism and Writing, Rhetoric and American Cultures. Administered by Media and Information. P: Completion of Tier I Writing Requirement R: Open to students in the Documentary Production Minor. SA: TC 411

Design and development of documentaries in a team setting using video and audio, still photography, web design, and print media. Participation in a production cycle including idea generation, research, design, production, and distribution.

419 **Projection Design for Live Performance**
Spring. 3(2-2) A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Theatre. Administered by Theatre. P: (THR 219 and THR 219L) or (THR 337 or MI 337 or MI 341) RB: THR 211 or THR 211L or THR 212 or THR 212L or THR 214 or THR 214L or THR 216 or THR 216L

Creating projection performance media through script, technology advancements, and production analysis. Practical application through digital rendering, video production and software exploration.

420 **Interactive Prototyping**
Fall. 3(2-2) P: MI 220 and MI 250

Creation of iterative and diverse prototypes of computer-based technologies that satisfy user needs. Low-fidelity prototypes that can be used for design feedback and medium-fidelity working prototypes that can be used to assess interactivity and social goals.

435A **Creating the Fiction Film I**
Fall. 3(3-1) Interdepartmental with Film Studies. Administered by Film Studies. P: FLM 335 R: Approval of department. SA: ENG 435A

Creation of a short film, including scripting, conceptualization and planning, shooting, and rough editing.

435B **Creating the Fiction Film II (W)**
Spring. 3(3-1) Interdepartmental with Film Studies. Administered by Film Studies. P: (FLM 435A or approval of department) and completion of Tier I Writing Requirement R: Approval of department. SA: ENG 435B

Finishing a short film, including fine editing, color correction, sound design, and Foley work. Developing web promotion, marketing strategies, and distribution.

441 **Advanced Lighting and Camera Techniques**
Fall. Spring. 3(1-4) P: MI 341 R: Open to students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 348, MI 348

Advanced techniques for manipulation of light and image characteristics in film and television settings.

442 **Design of Cinema and Television Projects (W)**
Fall, Spring. Summer. 3(2-2) P: (MI 341) and completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Documentary Production Minor or in the Fiction Filmmaking Minor. SA: TC 442

Develop TV, video and film projects in a group setting. Practice a full production cycle including idea development, budgeting, pitching, teaser, trailer, production, postproduction, distribution and evaluation. Production case studies, advertising, ethics and worldwide media and job trends.

443 **Audio Industry Design and Management (W)**
Fall, Spring, Summer. 3(2-2) P: (MI 343) and completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information. SA: TC 443

Advanced audio production specializing in multi-channel techniques. Industry focus on all aspects of the audio field.

444 **Information Technology Project Management**
Spring. 3(3-0) Interdepartmental with Computer Science and Engineering and Information Technology Management. Administered by Information Technology Management. P: ITM 311 R: Open to students in the Information Technology Minor. Practical training and experiences in design, testing, and launch of new information technologies and systems.

445 **Game Design and Development I**
Fall. 3(2-2) P: MI 231 or CSE 331 or CSE 335 or STA 360 RB: TC 247 or TC 347 R: Open to students in the Game Design and Development Minor and open to graduate students in the Department of Media and Information. SA: TC 445

Design, architecture, and creation concepts related to the development of interactive digital games.

447 **Three-Dimensional Graphics and Animation Portfolio (W)**
Fall. 3(2-2) P: (MI 347 or MI 377) and completion of Tier I Writing Requirement RB: MI 337 R: Open to seniors or graduate students in the Department of Media and Information. SA: TC 447

Development of a portfolio of advanced three-dimensional models, animation, and technical art. This course is aimed at students seeking to become computer graphics professionals and want to learn to develop a portfolio and focus their skills on a specific profession or industry.
449 Advanced Web Development and Database Management
Spring. 3(2-2) P: MI 349 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering. SA: TC 445, TC 359, MI 359
Learn and apply server-side web technologies and database integration with client-side web technologies, to design, development, and deploy modern web sites, services, and applications.

450 Creating Human-Centered Technology (W)
Fall, Spring. 3(2-2) P: (MI 320 and MI 350 and MI 420 or approval of department) and Completion of Tier I Writing Requirement SA: TC 450
Entire human-centered design process, including assessing needs, forming ideas, designing a solution, building prototypes, evaluating the effectiveness of those solutions, and iterating to improve the solutions. Creation of a portfolio piece to illustrate capabilities.

452 Media Entrepreneurship and Business Strategies
Fall. 3(3-0) P: (MI 301) and completion of Tier I writing requirement SA: TC 452
Entrepreneurship and business strategy options, with their attendant risks and opportunities, available to media firms in an industry that is being dynamically transformed by new information and communication technologies.

455 Game Design and Development II
Spring. 3(2-2) P: MI 445 R: Open to students in the Game Design and Development Minor and open to graduate students in the Department of Media and Information. SA: TC 455
Advanced design, architecture, and creation concepts related to the development of real-time interaction 3D design for gaming, simulation, and immersive virtual environments.

458 Project Management (W)
Spring. 3(3-0) P: (MI 301) and completion of Tier I writing requirement R: Open to juniors or seniors or graduate students in the Department of Media and Information or in the Applied Engineering Sciences Major. SA: TC 458
Not open to students with credit in MI 499.
Managing complicated and multidisciplinary projects. Organizing projects into manageable elements: scope, time, cost, quality, human resources, communication, risk, procurement, and integration. Communicate with stakeholders. Analyze organizations. Develop a budget. Identify roles and responsibilities during the critical planning, deployment, and evaluation stages.

462 Social Media and Social Computing
Fall. 3(2-2) P: (MI 349 or MI 361 or approval of department) and Completion of Tier I Writing Requirement R: Open to juniors or seniors or graduate students. SA: TC 462B, TC 462
Social and technological perspectives on how people collaborate using social media and other information and communication technologies. Experience with using multiple collaboration platforms and analysis of differences between enabling technologies.

472 Digital Business and Commerce
Spring. 3(2-2) P: (MI 349 or MI 381) or approval of department) and completion of Tier I writing requirement R: Open to juniors or seniors or graduate students. SA: TC 462C, TC 472
Technologies, business models, and organizational and social implications of electronic commerce. Strategies for designing, managing and marketing in digital commerce contexts.

480 Information and Communication Technologies and Development
Fall. 3(3-0) Interdepartmental with Engineering. Administered by Media and Information. P: Completion of Tier I Writing Requirement SA: TC 480
Role of information and communications technologies (ICT) in low income countries and in disadvantaged areas in middle and high income countries. Theories and case studies that link ICT and social, political, economic, and environmental change.

482 Building Virtual Worlds
Spring. 3(2-2) P: (MI 231 and MI 346) or MI 445 RB: MI 247 P: Open to students in the Department of Media and Information or in the Game Design and Development Minor. Theoretical and practical approaches to the planning, design, and development of virtual worlds for games and simulations.

484 Building Innovative Interfaces
Fall. 3(2-2) P: MI 231 or MI 250 or CSE 320 or CSE 331 or CSE 335 R: Open to students in the Department of Media and Information or in the Department of Computer Science and Engineering or in the Game Design and Development Minor.
Designing, implementing and evaluating new interaction devices using mobile and sensor technologies.

488 Information and Communication Technology Development Project (W)
Spring, Summer. 3 to 6 credits. A student must earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Engineering. Administered by Media and Information. P: Completion of Tier I Writing Requirement RB: MI 480 SA: TC 488
Challenges and opportunities of implementing an information and communication technology in a developing country or underprivileged region of the United States. Hands-on experience conducting field work on location.

490 Independent Study
Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 7 credits in all enrollments for this course. R: Open to undergraduate students in the Department of Media and Information. Approval of department; application required. SA: TC 490
Directed study under faculty supervision.

491 Special Topics
Fall, Spring. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. A student may earn a maximum of 16 credits M491 and M499 R: Open to juniors or seniors or graduate students. SA: TC 491
Contemporary issues in media and communication technology.

493 Internship
Fall, Spring. Summer. 1 to 7 credits. A student may earn a maximum of 7 credits in all enrollments for this course. RB: MI 101 and MI 201 and MI 301 R: Open to undergraduate students in the Department of Media and Information. Approval of department; application required. SA: TC 493
Supervised professional experience in a media or information institution, business or facility.

497 Game Design Studio
Fall. 3(1-4) P: MI 455 R: Open to students in the Game Design and Development Specialization and open to graduate students in the Department of Media and Information. SA: TC 497
Conceptualization, design documentation, planning, prototyping, and distribution of games.

498 Collaborative Game Design (W)
Spring. 3(2-2) P: (MI 497 or MI 447) and completion of Tier I writing requirement R: Open to students in the Department of Media and Information or in the Game Design and Development Specialization and development of comprehensive digital games in a team setting working with a client. Participation in a design cycle including specification, design, prototyping, implementation, and documentation. Issues of professionalism, ethics, and communication.

803 Introduction to Quantitative Research Methods
Fall, Spring, Summer. 3(3-0) Interdepartmental with Advertising and Communication and Journalism. Administered by Communication. SA: ADV 875, COM 800, JRN 817, TC 802
Introduction to quantitative social science research methods and applied analyses for understanding research reports and developing graduate level research projects.

820 Theories of Media and Information
Fall, Spring, Summer. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 820
Classic and contemporary theories of communication with special emphasis on applications to telecommunication, extant and emerging media, and technology.

830 Foundations of Serious Games
Spring. 3(3-0) R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 830
Rationales, principles, processes, and pedagogies for serious game design. Applications of serious game genres and simulations. Funding and distribution.

831 Theories of Games and Interaction Design
Fall. 3(3-0) R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 831
Theories of interaction in games and other mediated contexts including commercial, learning, health, global and local development, and social justice to form the design of social systems, games and other interactive media products.
Media and Information—MI

839 Implementing Interactivity
Fall. 3(2-2) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 839
Foundational visual design principles and theories for interactivity. Implementation of user interfaces. Current industry practices.

841 Understanding Users
Fall. 3(3-0) R: Direct experience with the creative process in interactive media. R: Open to students in the Educational Technology Major or in the Educational Technology Graduate Certificate or in the Serious Game Design and Research Certificate or in the Media and Information Major or approval of department. SA: TC 841
Methods of user-centered media and interaction design. Iterative cycles of user and product conceptualization.

842 Design and Development of Media Projects
Spring. 3(2-2) RB: Strongly recommended to be taken in final or near-final semester of graduate studies, so that majority of graduate degree program coursework has already been completed and can serve as relevant background. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 842
Team projects in Human Computer Interaction and Media and Information Management. Proposal development, team building, project management and workflow methods.

844 Interaction Design
Spring. 3(2-2) RB: Basic familiarity with computers and Internet. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 844
Design of user interactions in information and media systems. Prototyping and presentation tools. Example topics include information architecture, task analysis, use cases, wireframes, scenarios.

845 Human Computer Interaction
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 845
Principles and theories of how humans and technical systems interact. Traditional media, networked environments, social and mobile computing, virtual environments and information appliances.

850 Media and Information Policy
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 850
Analysis of major public and private media and information policies, including Internet governance. Applying concepts and data from law, political science, economics, communication, technology and general social science.

851 Understanding Social Media
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 851
Overview of social media applications and services and their effects on individuals, organizations, and society.

852 Economic Structure of Telecommunication Industries
Fall. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 852
Economic aspects of telecommunication and information industries. Emphasis on market structure, conduct, performance. Content diversity, new technologies, recent regulatory policies, and antitrust.

854 Economics of Media Markets and Strategies
Spring of odd years. 3(3-0) RB: MI 852 or concurrently R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 854
Conceptual tools and analytical perspectives on economic forces and incentives underlying structure, conduct, and responses to new technologies in media markets.

861 Information Networks and Technologies
Fall. 3(3-0) RB: Academic or professional background in telecommunication field. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 861
Fundamental characteristics, components, standards and applications of information networks and services. Local and wide area network technologies, fundamentals of the Internet, and private network technologies and services from a management perspective.

862 Information Networks in Organizations and Commerce
Spring. 3(2-2) MI 861 or concurrently R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 862
Design and management of electronic commerce strategies and the telecommunications infrastructure. Impact of information and communication technology on organizations and markets.

875 Information and Communication Technology for Development
Spring. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 875
Information and communication technology in developing areas, cases studies, implementation, international and domestic contexts.

877 Comparative and International Telecommunication
Fall of even years. 3(3-0) R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 877
Comparison of various national approaches to broadcasting, cable, satellite, telephone, mobile communications, and the Internet. Policy, economic, institutional and content issues. Interactions and media flows among countries. International governance bodies.

890 Independent Study
Fall, Spring, Summer. 1 to 6 credits. R: Open to graduate students in the Department of Media and Information. Approval of department; application required. SA: TC 890
Individualized study under faculty supervision.

891 Special Topics in Telecommunication
Fall, Spring. 1 to 3 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 891
Contemporary issues. Topics vary.

893 Media and Information Internship
Fall, Spring. Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the College of Communication Arts and Sciences or approval of department. SA: TC 893
Internships in media and information industries.

898 Master's Project
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to master's students in the Department of Media and Information. Approval of department; application required. SA: TC 843, TC 898
Plan B individual project demonstrating master's level professional competence.

899 Master's Thesis Research
Fall, Spring. Summer. 1 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate students in the Department of Media and Information. Approval of department; application required. SA: TC 899
Master's thesis research.

900 Theory Building in Media and Information Studies
Fall. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Advertising and Journalism. Concepts and issues relating explanation, scientific inquiry, theory building and applications to interdisciplinary studies in media and information.

912 Information Technology Transactional Perspectives
Spring of even years. 3(3-0) Interdepartmental with Information Technology Management. Administered by Information Technology Management. RB: Graduate level microeconomics course. R: Open to doctoral students. Multiple perspectives on relationships between organizations and information technology. Information processing, communications and management strategy approaches. Economic perspectives.

916 Qualitative Research Methods
Spring. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Journalism. R: Open to doctoral students in the College of Communication Arts and Sciences.
Qualitative research in mass and specialized communication systems. Topics include documentary, bibliographic, case study and participant observation methods.

921 Media Theory
Fall. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Journalism. R: Open to doctoral students. SA: ADV 921
960  Media and Technology  
Spring. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Media and Information. R: Open to doctoral students in the Communication Major or in the Media and Information Studies Major or approval of department. SA: TC 960 
Theoretical frameworks concerning media and communication processes, and their interactions with technology. Social, organizational, critical, and economic perspectives.

975  Quantitative Research Design  
Fall. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Advertising. RB: One graduate-level research design or statistics course. R: Open to doctoral students. 
Survey, experimental and content-analytic techniques applied to the study of media. Academic and applied research methods. Univariate and multivariate techniques.

985  Advanced Quantitative Analysis for Media  
Spring. 3(3-0) Interdepartmental with Advertising and Journalism. Administered by Media and Information. P: ADV 975 RB: Masters-level research course in addition to ADV 975. 
Multivariate research methods for media and information studies research.