Undergraduate Programs

Degrees

Bachelor of Arts

American Studies and Ethnicity (see American Studies and Ethnicity, page 250)

American Studies and Ethnicity (African American Studies) (see American Studies and Ethnicity, page 252)

American Studies and Ethnicity (Asian American Studies) (see American Studies and Ethnicity, page 253)

American Studies and Ethnicity (Chicano/Latino Studies) (see American Studies and Ethnicity, page 253)

Animation and Digital Arts (see Cinematic Arts, page 214)

East Asian Area Studies (see East Asian Area Studies, page 307)

Environmental Studies: Business (see Environmental Studies, page 334)

Environmental Studies: Geography (see Environmental Studies, page 334)

Environmental Studies: Public Policy and Management (see Environmental Studies, page 335)

Environmental Studies: Social Sciences (see Environmental Studies, page 333)

Gender Studies (see page 348)

Health and Humanity (see page 359)

Interdisciplinary Archaeology (see Anthropology, page 260)

Interdisciplinary Studies (see page 370)

International Relations (Global Business) (see International Relations, page 372)

Linguistics/East Asian Languages and Cultures (see Linguistics, page 393)

Linguistics/Philosophy (see Linguistics, page 392)

Linguistics/Psychology (see Linguistics, page 393)

Middle East Studies (see International Relations, page 373)

Narrative Studies (see page 104)

Neuroscience (see page 409)

Philosophy, Politics and Law (see Philosophy, page 416)

Religion, emphasis in Judaic Studies (see Religion, page 453)

Social Sciences, emphasis in Economics (see Economics, page 317)

Social Sciences, emphasis in Psychology (see Psychology, page 445)

Bachelor of Science

Biochemistry (see Biological Sciences, page 275)

Biophysics (see Physics and Astronomy, page 425)

Business Administration (Cinematic Arts) (see Business, page 143)

Business Administration (East Asian Studies) (see Business, page 144)

Business Administration (International Relations) (see Business, page 144)

Computer Science/Business Administration (see Computer Science, page 626)

Economics/Mathematics (see Mathematics, page 400)

Environmental Studies: Biology (see Environmental Studies, page 335)

Environmental Studies: Chemistry (see Environmental Studies, page 335)

Environmental Studies: Earth Sciences (see Environmental Studies, page 336)

Global Health (see Preventive Medicine, page 773)

Physical Sciences (see Physics, page 286)

Physics/Computer Science (see Physics and Astronomy, page 424)

Minors

American Popular Culture (see American Studies and Ethnicity, page 254)

American Studies and Ethnicity (see American Studies and Ethnicity, page 254)

Ancient Religion and Classical Languages (see Religion, page 453)

Animation and Digital Arts (see Cinematic Arts, page 225)

Applied Theatre Arts/Education (see Theatre, page 915)

Arabic and Middle East Studies (see Linguistics, page 393)

Bioethics (see page 273)

Biotechnology (see Biological Sciences, page 276)

Business Law (see Business, page 145)

Children and Families in Urban America (see Social Work, page 850)

Cinema-Television for the Health Professions (see Cinematic Arts, page 226)

Communication and the Entertainment Industry (see Communication, page 482)

Communication Design (see Fine Arts, page 672)

Communication Law and Media Policy (see Communication, page 483)

Computational Biology and Bioinformatics (see Biological Sciences, page 276)

Construction Planning and Management (see Engineering, page 610)

Consumer Behavior (see Interdisciplinary Programs, page 105)

Craniofacial and Dental Technology (see Dentistry, page 516)

Critical Approaches to Leadership (see page 370)

Cultural Studies (see English, page 326)

Cultures and Politics of the Pacific Rim (see East Asian Languages and Cultures, page 310)

East Asian Area Studies (see East Asian Area Studies, page 307)

Education in a Pluralistic Society (see Education, page 548)

Engineering Management (see Engineering, page 650)

Engineering Technology Commercialization (see Engineering, page 567)

Environmental Natural Sciences (see Environmental Studies, page 337)

Environmental Planning and Development (see Environmental Studies, page 337)

Environmental Social Sciences (see Environmental Studies, page 336)

Folklore and Popular Culture (see Anthropology, page 260)

Forensics and Criminality (see Sociology, page 463)

Gender Studies (see page 348)

Geobiology (see Earth Sciences, page 301)

Global Communication (see Communication, page 483)

Health Communication (see Communication, page 484)

Health Policy and Management (see Policy, Planning, and Development, page 850)

Human Rights (see Political Science, page 433)

Interactive Multimedia (see Engineering, page 662)

International Policy and Management (see International Relations, page 374)

International Urban Development (see International Relations, page 374)

Jewish American Studies (see American Studies and Ethnicity, page 254)

Judaic Studies (see page 384)

Latin American Studies (see Spanish and Portuguese, page 469)

Law and Internet Technology (see Engineering, page 657)

Law and Public Policy (see Policy, Planning, and Development, page 851)

Law and Society (see Political Science, page 434)

Managing Human Relations (see page 106)

Mathematical Finance (see page 106)

Middle East Studies (see International Relations, page 374)

Musical Theatre (see Music, page 795)

Natural Science (see Biological Sciences, page 277)

Neuroscience (see page 410)

Nonprofits, Philanthropy and Volunteerism (see Policy, Planning, and Development, page 851)

Peace and Conflict Studies (see page 414)

Performing Arts Studies (see Theatre, page 916)

Political Organizing in the Digital Age (see Political Science, page 435)

Psychology and Law (see Psychology, page 446)

Public Policy (see Policy, Planning, and Development, page 852)

Race, Ethnicity and Politics (see Political Science, page 434)

Russian Area Studies (see Slavic Languages and Literatures, page 459)

Southeast Asia and Its People (see Anthropology, page 261)

Thematic Approaches to the Humanities and Society (see Thematic Option, page 475)

Theories of Art (see Philosophy, page 416)

3-D Animation (see Fine Arts, page 657)

3-D Art for Games (see Fine Arts, page 674)

2-D Art for Games (see Fine Arts, page 674)

Urban Neighborhood Studies (see page 109)

Video Game Design and Management (see Engineering, page 658)

Visual Culture (see Art History, page 267)

Programs

Collaborative Learning Projects (see Learner Centered Curricula, page 389)

Honors in Multimedia Scholarship (see Interdisciplinary Programs, page 107)

Individual Programs of Study (see Learner Centered Curricula, page 389)

Liberal Arts Modules (see Thematic Option, page 475)

Graduate and Professional Programs

Degrees

Master's Degrees

Cell and Neurobiology (see Medicine, page 757)

Clinical and Biomedical Investigations (see Medicine, page 742)

Construction Management (see Policy, Planning, and Development, page 611)

Digital Supply Chain Management (see Business, page 167)

Health Systems Management Engineering (see Industrial and Systems Engineering, page 652)

Medical Device and Diagnostic Engineering (see Engineering, page 592)

Philosophy and Law (see Philosophy, page 417)

Physiology and Biophysics (see Medicine, page 770)

Public Diplomacy (see Communication, page 488)

Graduate Certificates

Energy, Technology and Society (see Interdisciplinary Programs, page 110)

Engineering Technology Commercialization (see Engineering, page 573)

Health Systems Operations (see Engineering, page 654)

Optimization and Supply Chain Management (see Business, page 168)

Sustainable Cities (see Interdisciplinary Programs, page 111)

System Safety and Security (see Engineering, page 654)

Transportation Systems (see Policy, Planning, and Development, page 613)

Urban and Global Studies (see page 109)

Visual Studies (see Art History, page 268)

Doctor of Philosophy

Computational Biology and Bioinformatics (see Biological Sciences, page 280)

Molecular Pharmacology and Toxicology (see Pharmacy, page 831)

Pathobiology (see Medicine, page 767)

Pharmaceutical Sciences (see Pharmacy, page 831)

Physiology and Biophysics (see Medicine, page 770)

Interdisciplinary Programs

Bachelor of Arts in Narrative Studies

Narrative studies prepares students for the development and evaluation of original content for novels, films, theatre and other narrative platforms, but recognizes that the range of professional opportunities in literature and the performing arts is much wider than the roles of author, screenwriter or playwright. To recognize a good story, to critique, help shape, realize and transform it, requires a background in the history of narrative, cross-cultural and contemporary models, and an understanding of the broader context of popular culture.

Narrative Studies assumes that an effective narrative will be adapted from the medium in which it first appears as new media become available. To prepare students for a future in which the platform is likely to change, the Bachelor of Arts in Narrative Studies allows students to study across the current platforms while concentrating on the techniques of effective construction common to them all.

In so doing, it draws upon course work from several schools of art but finds its home in the humanities. To help develop the flexibility necessary to understand how stories change across platforms, students are expected to complete at least three courses in literary and three courses in performance-based media. The remaining three courses may be chosen to reflect the student's personal preference and initial career aspirations.

MDA 490 Directed Research is a capstone experience: Students work under the guidance of a faculty member in a relevant discipline or professional field, which may include full-time faculty from the college or the participating schools of the arts. Projects intended for the stage should be done under the direction of School of Theatre faculty.

REQUIREMENTS		UNITS

Nine or 10 courses totaling 36 units; no more than two at the 100- or 200-level, selected from the following lists.

Introduction to Narrative Media (choose one course)

COLT 101	Masterpieces and Masterminds: Literature and Thought of the West	4
CTCS 190	Introduction to Cinema	4
CTCS 191	Introduction to Television and Video	4
CTIN 309	Introduction to Interactive Entertainment	4
ENGL 261	English Literature to 1800	4
ENGL 262	English Literature Since 1800	4
ENGL 263	American Literature	4
ENGL 471	Literary Genres and Film	4
ENGL 481	Narrative Forms in Literature and Film	4
FA 150	Visual Culture and Literacy I	4
PHIL 446	Aesthetics and the Film	4
THTR 125	Text Studies for Production	4
THTR 303	The Performing Arts	4

Writing and Narrative Forms (choose one or two courses, totaling 4 units)

CTWR 412	Introduction to Screenwriting, and	2
CTWR 414	The Screenplay	2
ENGL 303	Introduction to Fiction Writing	4
ENGL 405*	Fiction Writing	4, max 8
THTR 365	Playwriting I	4
THTR 366*	Playwriting II	4

Popular Culture and Ethnicity (choose one course)

AMST 200	Introduction to American Studies and Ethnicity	4
AMST 274	Exploring Ethnicity Through Film	4
AMST 285	African-American Popular Culture	4
ANTH 333	Forms of Folklore	4
COLT 365	Literature and Popular Culture	4
CTCS 192	Race, Class and Gender in American Film	4
CTCS 392	History of the American Film, 1925-1950	4
CTCS 393	History of the American Film, 1946-1975	4
CTCS 394	History of the American Film, 1977-Present	4
CTCS 407	African-American Cinema	4
CTCS 414	Chicana/o Cinema	4
ENGL 392	Visual and Popular Culture	4

HIST 380	American Popular Culture	4
MUSC 400	The Broadway Musical: Reflections of American Diversity, Issues and Experiences	4
MUSC 420	Hip-Hop Music and Culture	4
MUSC 460	Film Music: History and Function From 1930 to the Present	4
THTR 393	Cultural Identities in Performance	4
THTR 395	Drama as Human Relations	4

Narrative in Cross-Cultural Perspective (choose one course)

ANTH 372	Interpretation of Myth and Narrative	4
COLT 264	Asian Aesthetic and Literary Traditions	4
CTCS 200	History of the International Cinema I	4
CTCS 201	History of the International Cinema II	4
EALC 125	Introduction to Contemporary East Asian Film and Culture	4
EALC 332	Korean Literature in English Translation	4
EALC 342	Japanese Literature and Culture	4
EALC 452	Chinese Fiction	4
EALC 455	Japanese Fiction	4
ENGL 444	Native American Literature	4
ENGL 445	The Literatures of America: Cross-Cultural Perspectives	4
FREN 320	French Cinema and French Society: 1900 to the Present	4
GERM 360	20th Century German Prose: Texts and Films	4
ITAL 446	Italian Cinema and Society	4
THTR 210***	Theory and Practice of World Theatre I	4
THTR 211***	Theory and Practice of World Theatre II	4

Western Narrative in Historical Perspective (choose one course)

CLAS 325	Ancient Epic	4
CLAS 337	Ancient Drama	4
CLAS 380	Approaches to Myth	4
COLT 312	Heroes, Myths and Legends in Literature and the Arts	4
ENGL 423*	English Literature of 18th Century (1660-1780)	4
ENGL 424*	English Literature of the Romantic Age (1780-1832)	4
ENGL 425*	English Literature of the Victorian Age (1832-1890)	4
ENGL 426*	Modern English Literature (1890-1945)	4
ENGL 430	Shakespeare	4
ENGL 440**	American Literature to 1865	4
ENGL 441**	American Literature, 1865-1920	4
GERM 340	German Prose Fiction From Goethe to Thomas Mann	4
GERM 372	Literature and Culture in Berlin of the 1920s	4
SLL 302	Modern Russian Literature	4
SLL 344	Tolstoy: Writer and Moralist	4

SLL 345	Literature and Philosophy: Dostoevsky	4
SLL 346	Russian Drama and the Western Tradition	4
SPAN 304	Survey of Fiction (taught in Spanish)	4
SPAN 305	Survey of Drama (taught in Spanish)	4
THTR 301***	Greek and Roman Theatre	4
THTR 302***	Shakespeare and His World	4

Contemporary Fiction and Drama (choose one course)

AMST 448	Chicano and Latino Literature	4
AMST 449	Asian American Literature	4
COLT 345	Realist Fiction	4
COLT 348	Modernist Fiction	4
COLT 351	Modern and Contemporary Drama	4
COLT 420	The Fantastic	4
COLT 472	Los Angeles Crime Fiction	4
COLT 475	Politics and the Novel	4
EALC 354	Modern Chinese Literature in Translation	4
ENGL 375	Science Fiction	4
ENGL 442**	American Literature, 1920 to the Present	4
ENGL 447	African American Narrative	4

ENGL 455	Contemporary Prose	4
ENGL 463	Contemporary Drama	4
FREN 347	Race, Gender and Power in Francophone Literature	4
SLL 303	Contemporary Russian Literature	4
SLL 348	Nabokov's Novels: Art and Exile	4
THTR 300	Introduction to Modern Drama	4
THTR 314***	Advanced Topics in Modern Drama	4

Two additional courses (three if CTWR 412/CTWR 414 are chosen) (8 units) at the upper-division 300 or 400 level, from different departments, chosen from the lists above.

Capstone Enrollment:

MDA 490	Directed Research	4

*Prerequisite required

**Corequisite required

***Recommend preparation suggested

Total: Nine courses, including at least seven at the upper-division level, for a total of 36 units.

Minor in Consumer Behavior

Accounting 306
(213) 740-5033

This interdisciplinary minor explores consumer thinking from the perspectives of psychology, marketing, economics, anthropology, sociology and other departments interested in popular culture. Why do people form the attitudes and impressions they do? How do individual factors, culture, mass media, economics and social trends influence people's decisions?

As with all minors, students must include at least four upper-division courses and four courses dedicated exclusively to this minor (which may be the same four courses). Finally, students must select four courses outside their major department. Psychology majors must choose four courses outside of psychology; business majors must choose four courses outside of the Marshall School of Business.

REQUIREMENTS		UNITS
Choose one of the following courses (4 units).		
BUAD 307	Marketing Fundamentals	4
PSYC 100	Introduction to Psychology	4
Choose one of the following courses (4 units):		
MKT 450	Consumer Behavior and Marketing	4
PSYC 355*	Social Psychology	4
SOCI 320	Social Psychology	4
Choose two of the following courses (8 units):		
ANTH 460	Economic Anthropology	4
COMM 302	Persuasion	4
MKT 405*	Advertising and Promotion Management	4
MKT 410*	Personal Selling	4
ECON 432*	Economics of Happiness	4
PSYC 454*	Social Cognition	4
PSYC 457*	Applied Social Psychology	4

Choose one of the following courses (4 units):

COLT 365	Literature and Popular Culture	4
COMM 384	Interpreting Popular Culture	4
ENGL 392	Visual and Popular Culture	4
HIST 380	American Popular Culture	4
MKT 470*	Marketing Research	4
PSYC 490x	Directed Research	4

*Prerequisites required

(Please note that prerequisites will not be waived for upper-division courses; students must complete the introductory classes they will need.)

Total requirements: five courses   20 units

Minor in Managing Human Relations

**College Academic Services Building
(213) 740-2534**

This interdisciplinary minor is intended for students in all schools with an interest in human relations as a subject of study or professional goal. In addition to course work in organizational behavior, social psychology and management, this minor includes attention to questions of ethics and leadership.

As with all minors, students must include at least four upper-division courses and four courses dedicated exclusively to this minor (not used for credit toward a major, another minor or general education requirements). Finally, students must select four courses outside their major department. Students seeking the Bachelor of Arts in Sociology must choose four courses outside of sociology; those seeking the Bachelor of Science in Business Administration must choose four courses outside the Marshall School.

REQUIREMENTS		UNITS
Choose one course from the following (4 units):		
BUAD 304	Organizational Behavior	4
PSYC 355*	Social Psychology	4
SOCI 320	Social Psychology	4
Choose one course from the following (4 units):		
MOR 431*	Interpersonal Competence and Development	4
PSYC 457*	Applied Social Psychology	4
SOCI 340	Organizations: Bureaucracy and Alternatives to Bureaucracy	4
SOCI 342	Race Relations	4
SOCI 345	Social Institutions	4

Choose one course from the following list of classes on leadership (4 units):

CLAS 370	Leaders and Communities: Classical Models	4
IR 303	Leadership and Diplomacy	4
MOR 470*	Global Leadership	4
MDA 325	Case Studies in Modern Leadership	4
MDA 365	The Art and Adventure of Leadership	4
PHIL 335	Theoretical Models of Leadership	4

Choose one course from the following list of classes on ethics (4 units):

BUCO 425*	Public Communication in Ethics and Research	4
MOR 421*	Social and Ethical Issues in Business	4
PHIL 340	Ethics	4
REL 341	Ethics in a Technological Society	4
REL 375	Conflict and Change and the Ethics of Business	4

Choose one of the following three capstone classes (4 units):

ECON 332*	Contracts, Organizations, and Institutions	4
ECON 471*	Economics of Labor Markets and Human Capital	4
MOR 471	Managing and Developing People	4
SOCI 340	Work and the Workplace	4

*Course has prerequisite or corequisite

Total requirements: five courses   20 units

Minor in Mathematical Finance

**Kaprielian Hall 108
(213) 740-2400**

This interdisciplinary minor was created for students in business, economics and mathematics, whose majors already require some of the introductory course work. Students in other programs are welcome but should expect the minor to require more units than it does for students in those programs.

As with all minors, students must include at least four upper-division courses and four courses dedicated exclusively to this minor (which may be the same four courses). Finally, students must select four courses outside their major department. Economics majors must choose four courses outside of economics; math majors must choose four courses outside of math; business majors must choose four courses outside of the Marshall School of Business. These may be the same courses used to meet the first two conditions.

REQUIREMENTS		UNITS
ECON 203	Principles of Microeconomics	4
ECON 205	Principles of Macroeconomics	4

Choose one of the following two sequences (8 units):

ECON 303*	Intermediate Microeconomic Theory	4
ECON 305*	Intermediate Macroeconomic Theory	4
or		
BUAD 350*	Macroeconomic Analysis for Business Decisions	4
BUAD 351*	Economic Analysis for for Business Decisions	4

Choose two courses, one from each of the following pairs (8 units):

MATH 118x	Fundamental Principles of the Calculus, or	
MATH 125	Calculus I	4
MATH 218*	Probability for Business, or	
MATH 407*	Probability Theory	4

Choose two courses from the following list (8 units):
MATH 126 or MATH 127; MATH 225 or MATH 245; MATH 226 or MATH 227; MATH 408 or MATH 467

Choose one course from the following list (4 units):
BUAD 306, BUAD 310, ECON 350*, ECON 357*, FBE 441*

Choose one course from the following list (4 units):
ECON 452*, ECON 457*, FBE 324*, FBE 421*, FBE 443*, FBE 445*, FBE 459*, FBE 462*, FBE 464*

Choose one course from the following two (2 units):
ITP 165x, ITP 168x

*Prerequisite required

Total requirements, for students with no prior course work: 42 units

Students majoring in business administration, economics or mathematics can meet many of these requirements with course work that also satisfies their majors. In addition to those classes, students in those majors must complete the following requirements:

- Business majors satisfy 24 units with course work that is also required for the major and need to complete only 18 units in MATH, ECON and ITP

- Economics majors satisfy 20-24 units with course work required for the major (including one major elective), needing only 18-22 units in BUAD, FBE, ITP and MATH
- Mathematics majors satisfy 16 units with course work required for the major, needing only 26 units in BUAD, ECON, FBE and ITP.

Honors in Multimedia Scholarship

EGG 202
(213) 743-2198
FAX: (213) 747-8357
Email: imlhonors@cinema.usc.edu
iml.usc.edu

Director: Holly Willis

Program Overview
Honors in Multimedia Scholarship offers qualified undergraduate students an opportunity to learn new approaches to the production of knowledge through the critical application of multimedia expression and scholarship. The program is based on the premise that a century of mass media and the advent of digital communication have transformed the way ideas are expressed and understood across the university. As a result, the notion of literacy, which has traditionally referred to the reading and writing of printed materials, has fundamentally expanded to include new forms of expression.

The program includes a systematic introduction to the history, theory and practice of multimedia scholarship within a range of disciplinary and interdisciplinary contexts. Over the four-year program, students develop and refine their abilities to conduct research, author and publish work in methods appropriate to their specific field of study. The program is open to students from all disciplines.

At the Institute for Multimedia Literacy's Honors in Multimedia Scholarship program, students participate in small classes taught by leading faculty members. The program enrolls entering freshman students, and a limited number of sophomore students, who will integrate multimedia courses into their program of study.

Students are expected to integrate theory into the practice of multimedia scholarship; for this reason, courses include discussion of historical and theoretical material, instruction in basic research practices, as well as opportunities to develop skills in multimedia authorship, collaboration, leadership and creative thinking.

Year 1: Foundational study of the contexts, concepts and competencies of multimedia literacy, embodied in the languages of new media.

Year 2: Beginning integration of multimedia approaches within chosen disciplines and/or in conjunction with the university's general education requirements.

Year 3: Development of proficiency with multimedia as a scholarly tool within a student's own discipline or field of study.

Year 4: Completion of a yearlong project that demonstrates mastery of discipline-based multimedia authorship.

Upon successfully completing IML 101, students may earn honors in multimedia scholarship by completing *a minimum of 20 units* of required course work culminating in a capstone thesis seminar during their final year.

To maintain small classes and allow for extensive discussion and project development, the Honors in Multimedia Scholarship program requires students to be highly motivated; there is extensive reading, writing and multimedia authoring. Honors in Multimedia Scholarship (IML) required courses are not available for pass/no pass registration.

Information about courses for the Honors in Multimedia Scholarship and other program offerings can be obtained from the student advisor at the Institute for Multimedia Literacy office.

COURSE REQUIREMENTS		UNITS
IML 101	Honors in Multimedia Scholarship: The Languages of New Media I	
Multimedia in the Core General Education course (indicated in the *Schedule of Classes* each semester.)		4
IML 346	Honors in Multimedia Scholarship: Methods in Scholarly Multimedia	2
IML 440	Honors in Multimedia Scholarship: Multimedia Honors Thesis Project I	4
IML 444	Honors in Multimedia Scholarship: Multimedia Honors Thesis Project II	4
MDA 140	Practicum in Multimedia Authorship (students must register in this lab concurrently with Multimedia in the Core GE course)	2
		20

ELECTIVES		UNITS
IML 104	Honors in Multimedia Scholarship: The Languages of New Media II	4
IML 340	Honors in Multimedia Scholarship: The Praxis of New Media	2

MULTIMEDIA SCHOLARSHIP (IML)

IML 101 Honors in Multimedia Scholarship: The Languages of New Media I (4, FaSp) An introduction to the expressive range of screen languages in their cultural, historical, and technological contexts.

IML 104 Honors in Multimedia Scholarship: The Languages of New Media II (4, FaSp) An introduction to the expressive range of screen languages in their cultural, historical, and technological contexts. *Recommended preparation:* one course from the Multimedia in the Core General Education program.

IML 340 Honors in Multimedia Scholarship: The Praxis of New Media (2) An intermediate level blend of theory and practice that approaches scholarly multimedia work in the context of its cultural and technological environment. Open to all students. *Recommended preparation:* IML 101, IML 104 or MDA 140.

IML 346 Honors in Multimedia Scholarship: Methods in Scholarly Multimedia (2, max 4, FaSp) Emphasizing rigorous student multimedia research and strategies for authorship within a disciplinary context, this course prepares students to undertake their thesis projects. Open to students in the Honors in Multimedia Scholarship program only. *Prerequisite:* IML 101 or IML 104.

IML 440 Honors in Multimedia Scholarship: Multimedia Honors Thesis Project I (4, FaSp) Exploration of theoretical and practical concerns of advanced level interdisciplinary multimedia research and authorship. Open to students in the Honors in Multimedia Scholarship program only. Senior standing. *Prerequisite:* IML 101 or IML 104, IML 346.

IML 444 Honors in Multimedia Scholarship: Multimedia Honors Thesis Project II (4, FaSp) Production of Multimedia Honors thesis. Open to students in the Honors in Multimedia Scholarship program only. *Prerequisite:* IML 440.

IML 490x Directed Research (2-8, max 8, FaSpSm) Individual research and production. Not available for degree credit. *Prerequisite:* IML 101 or IML 104.

IML 499 Special Topics (4) Selected topics in multimedia literacy. Open to students in the Honors in Multimedia Scholarship program only.

USC Stevens Institute for Innovation

(213) 821-5000
FAX: (213) 821-5001
Email: stevens.usc.edu

The USC Stevens Institute for Innovation is a university-wide resource in the Office of the Provost designed to harness and advance creative thinking and breakthrough research at USC for the benefit of society. The USC Stevens Institute identifies, nurtures, protects and transfers the most exciting innovations from USC to the market, and, in turn, provides a central connection for industry seeking cutting-edge innovations in which to invest. From the biosciences and technology to music and cinematic arts, the USC Stevens Institute connects faculty, students and the business community to create an environment for stimulating and inspiring innovation and innovators.

USC has many existing programs and courses spanning engineering, music, cinematic arts, fine arts, medicine and business that teach innovation. One of the goals of the USC Stevens Institute is to identify, nurture and promote these courses across USC. Engineers and science students may be particularly interested in the undergraduate minor and a graduate certificate in engineering technology commercialization.

"Research universities in the 21st century not only will be judged by the quality of their research and the quality of their students, but also by how successful they are in transferring innovation into the marketplace in order to meet societal needs."
C.L. Max Nikias
Provost, University of Southern California

Graduate Certificates

Undergraduate Minors

Innovation Coursework
- AME 503 Advanced Mechanical Design
- BAEP 551 Introduction to New Ventures
- BAEP 556 Technology Feasibility
- BAEP 557 Technology Commercialization
- BUAD 301 Technological Entrepreneurship
- CTIN 488 Game Design Workshop
- ENGR 493 Dean's Seminar in Entrepreneurship
- FA 436 Art and Technology
- ISE 545 Technology Development and Implementation
- MOR 467 Strategic Management of Technology and Innovation
- MOR 561 Strategies in High Tech Businesses
- MPTX 511 Regulation of Pharmaceutical and Biological Products
- MUIN 496 Music Media Solutions

Urban Initiative

The USC Urban Initiative offers an undergraduate minor in urban neighborhood studies and a graduate certificate in urban and global studies. Faculty from across the university's professional schools and USC College actively engage in inter- and trans-disciplinary scholarship that bridges basic and applied research.

Faculty and students undertake applied and theoretical urban scholarship in an environment that promotes inquiry, introduces principles and values and teaches the skills necessary to work on complex urban problems in multidisciplinary environments and to develop the common language essential to effective collaboration.

Minor in Urban Neighborhood Studies
The focus of this minor is on the quality of urban life at the scale of the neighborhood or district. This is the location of the places of residence and work, of education and religion, of everyday life. Neighborhoods are the fundamental building blocks of cities.

The minor is supported by the School of Architecture, Rossier School of Education, School of Social Work and School of Policy, Planning, and Development. The core studies are "hands-on" as a practicum in learning about neighborhoods and learning how the disciplines of the four schools provide the means for understanding and treating urban issues. The core courses are team taught by faculty from the collaborating schools.

This minor should be of interest to students generally, but especially to those interested in the nature of urban life and the policies and actions directed toward the improvement of cities.

The requirements for the minor include two required courses and 12 units of elective courses, including at least one from each of three of the Schools of Architecture, Education, Social Work, and Policy, Planning, and Development.

One of the listed geography courses may be substituted for a course from one of the sponsoring schools. At least 8 of the 12 elective units must be upper division. Students in the School of Architecture and in the School of Policy, Planning, and Development may not apply more than one core course toward their major and must take all of their elective courses outside their major.

REQUIRED COURSES (8 UNITS)		UNITS
URBN 375	The Urban Neighborhood	4
URBN 475	Urban Practicum	4

ELECTIVE COURSES		UNITS

One course each selected from three of the four schools:

ARCH 114	Architecture: Culture and Community	2
ARCH 206	Shelter	4
ARCH 432	People, Places, and Culture: Architecture of the Public Realm	4
EDPA 302	Global Education	4
EDPA 308	Politics and American Education	3
GEOG 325*	Culture and Place	4
GEOG 340*	Latino L.A.	4
GEOG 410*	Urban Geography	4
PPD 350	Urban Institutions and Policies	4
PPD 372	Public Service in an Urban Setting	4
PPD 417	History of Planning and Development	4
PPD 425	Designing Livable Communities	4
PPD 439	Housing and Community Development	4
SOWK 200	Institutional Inequality in American Political and Social Policy	4
SOWK 304	Children and Families in Urban America	4
SOWK 400	Children and Families in Urban America Capstone Course	4

*May be substituted for a course from one of the sponsoring schools.

Graduate Certificate in Urban and Global Studies
The Urban and Global Studies certificate provides an intense, interdisciplinary, intellectual educational, research and training experience focused on cities in global context to doctoral students from diverse professional and academic disciplines.

Urban challenges today are complex, often global problems that defy solutions from one discipline. The Urban and Global Studies certificate seeks to train a new generation of scholars with the skills to bridge basic and applied research, work collaboratively across disciplines, and think beyond national or local spheres to discover better solutions to complex problems. It offers scholars from interdisciplinary and disciplinary fields a unique opportunity to exchange respective methodologies and develop an enlarged community of communication.

A critical component of participation in the Urban and Global Studies certificate will be an international research project in the summer of the second year of the Ph.D. program. This will provide the student cohort with critical international comparative experience.

Admissions Criteria
Applicants for admission to the Urban and Global Studies certificate must be full-time currently enrolled students in good standing in a USC Ph.D. program. Applicants will be expected to have completed one year of full-time study in their respective schools prior to admission (generally, students will apply in the spring of their first year of study; however, other applicants further along in their Ph.D. studies will also be considered). Admitted students will generally enroll in the certificate courses during the second and third year of their Ph.D. studies.

Admission to the certificate program is highly selective and competitive. Preference is given to those with professional and academic qualities favoring success in interdisciplinary collaboration and scholarship around complex problem-solving.

Applicants must supply (1) a one-page statement of their professional and academic background and interests and career goals related to the certificate; (2) a letter of recommendation from a faculty member who knows the student's work well; and (3) a brief letter from the departmental chair (for applicants in USC College departments) or program advisor (for professional school applicants) indicating that the applicant is a currently enrolled student in good standing. Applications must be signed by the dean or a designated signer.

For specific information on admission requirements, application procedures and urban and global fellowships contact the Urban Initiative office at (213) 740-8181.

URBAN STUDIES (URBN)

URBN 375 The Urban Neighborhood (4, Fa)
Understanding neighborhoods as the fundamental places of everyday urban life from the perspective of the fields of architecture, education, planning and social work. (Duplicates credit in former ARCH 375.)

URBN 475 Urban Practicum (4, Sp) Critical assessment of existing urban neighborhoods as a basis for proposing positive social and physical interventions. (Duplicates credit in former ARCH 475.) *Recommended preparation*: URBN 375.

URBN 601 Pro-Seminar in Urban and Global Studies (1, max 3, FaSp) Introduces students to the issues and problems of global cities and a range of urban scholars via the Urban Initiative lecture series. Open to Urban and Global Studies students only. Graded CR/NC.

URBN 603 Comparative Urbanism: Theory, Method, Policy (4, Fa) A critical overview of the city in history, past and present approaches to urban theory, the dynamics of contemporary urbanization and urban outcomes, and prospects for managing urban growth and change. Open to Urban and Global Studies students only. *Concurrent enrollment:* URBN 601.

URBN 605 Interdisciplinary Methods of Inquiry in Urban and Social Problems (3, Sp) Engages participants in discourse about the characteristics of urban problems and intellectual foundations of ways to solve them. It offers communication and language skills across disciplines. Open to Urban and Global Studies students only. *Prerequisite:* URBN 603; *concurrent enrollment:* URBN 601.

URBN 700 Grand Challenge Integrative Seminar (3, Sp) Seminar builds on knowledge and assignments of the Grand Challenge courses. Students describe, analyze and compare the work they did in their separate Grand Challenge courses. Open to Urban and Global Studies students only. *Prerequisite:* URBN 603, URBN 605.

Graduate Certificates

Energy, Technology and Society
Mark Taper Hall, THH 355
(213) 740-1384
Email: kaylor@college.usc.edu

Directors: Mark Bernstein (*Political Science*); James Haw (*Chemistry*)

The Energy, Technology and Society graduate certificate program is a multidisciplinary program open to USC students pursuing graduate degrees in many disciplines including architecture, biology, chemistry, communication, earth sciences, economics, education, engineering, geography, international relations, political science, public policy, sociology and urban planning.

Energy has become an increasingly volatile and uncertain commodity. Relatively small changes in supply can cause large swings in prices. Energy is the also the main cause of worsening air quality in most major urban areas. The consumption of fossil fuels is the primary cause of emission of greenhouse gases, which is a major factor in global climate change. Reducing greenhouse gas emission will be a complex and daunting task for the coming decades.

While many academic disciplines include elements of energy and environmental issues, leaders will require multidisciplinary education, training and experiences to create an economically viable and environmentally sound future. Future decision-makers and analysts need to be able to develop new paradigms for how to integrate a portfolio of technologies, with changes in consumer behavior and new policies.

This program seeks to equip students with the tools to fit the pieces together, craft strategies for new portfolios of energy use, and help decision-makers understand the policy and planning tools to meet future energy and environmental needs.

Admission Requirements
Two groups of students are served by this certificate program:

1. New students who wish to apply directly to the Energy, Technology and Society Graduate Certificate program.

2. Students currently matriculated in a USC master's or doctoral degree program.

Candidates for admission among the first group of students must have: (1) a B.A. or B.S. degree or its international equivalent; (2) a minimum 3.0 GPA (A = 4.0) calculated over the last 60 units of credit earned. Exceptions may be made in cases of very high GRE scores or some other compelling evidence of potential to excel in graduate studies (e.g., outstanding letters of recommendation).

Application Procedures
Applicants are required to submit the following documents: (1) completed online application for admission *(www.usc.edu/admission/graduate)*; (2) statement of purpose; (3) official transcripts from all schools previously attended; (4) two letters of recommendation; and (5) results of the GRE General Test.

International students must submit TOEFL scores and are expected to achieve a minimum score of 600 on this exam. The statement of purpose should be uploaded into the online application. This letter should: (1) describe the student's motivation, field of interest and career goals; and (2) provide contact information, including address, phone number, email address and the primary academic unit (if the student is already enrolled at USC). Continuing students are not required to submit transcripts or GRE scores; these documents will be obtained electronically by the Office of Graduate Admissions from their original online graduate application. The letter of recommendation for continuing students must come from their primary academic advisor.

For more information, contact Natalie Kaylor, USC College Office of Advanced and Professional Programs, University of Southern California, Los Angeles, CA 90089-0355, kaylor@usc.edu, (213) 740-1384.

REQUIRED COURSES

One course from each of the following four categories (14 units of graduate work)

Technology

AME 577	Survey of Energy and Power for a Sustainable Future	3
CHEM 510	Alternative Energy Technologies and Options	4

Tools

ISE 576	Industrial Ecology: Technology-Environment Interaction	3
ENST 530	Environmental Risk Analysis	4

Politics and Policy

POSC 545	Critical Issues in Politics and Policy	4
POSC 546	Seminar in Environmental Policy	4

Impacts and Solutions

ARCH 519	Sustainability in the Environment: Infrastructure, Urban Landscapes, and Buildings	3
ARCH 611	Advanced Building Systems Integration	4
GEOG 601	Sustainable Cities	4
GEOL 525	The Science of Climate Change	4
PPD 692	Transportation and the Environment	4

Sustainable Cities Program
Taper Hall 355
(213) 740-1384
Email: kaylor@college.usc.edu
www.usc.edu/dept/sustainablecities

Director and Dean of Graduate Programs:
Jennifer Wolch (*Geography*)

Sustainable Cities Graduate Certificate
The Sustainable Cities Graduate Certificate program is a multidisciplinary certificate program open to USC students pursuing graduate degrees in many disciplines including anthropology, architecture, biology, chemistry, communication, earth sciences, economics, education, engineering, geography, international relations, political science, public policy, sociology, urban planning and others.

Creating sustainable cities for the 21st century is a major challenge for society. The growth of cities, caused by natural population increase and massive rural-to-urban population flows, poses critical environmental problems that reach far beyond municipal boundaries and transcend national borders. Resolving such problems requires contributions from natural scientists, engineers, behavioral scientists and policy experts. To solve problems of national concern, such scientists must work productively with public administrators, political decision-makers and diverse interest groups.

This program seeks to equip graduate students with both the requisite knowledge of other fields and the political, interpersonal and communication skills necessary to succeed in research and practical contexts.

REQUIRED COURSES (14 UNITS)		UNITS
ARCH 519	Sustainability in the Environment: Infrastructure, Urban Landscapes, and Buildings	3
CE 564	Methods for Assessment and Protection of Environmental Quality, or	
ENE 502	Environmental and Regulatory Compliance	3
GEOG 601	Sustainable Cities, or	
GEOG 615	Natural Spaces in Urban Places	4
PPD 619	Smart Growth and Urban Sprawl: Policy Debates and Planning Solutions, or	
PPD 692	Transportation and the Environment	4

Each academic unit, department or program will determine the number of units completed that may be applied to the student's master's or doctoral degree.

Admission Requirements and Application Procedures
Students must be currently matriculated in a USC graduate degree program or be prospective USC students applying for admission to such a program. Prospective USC students, as well as continuing USC students, must submit the following documents: (1) complete application for admission to the Sustainable Cities Graduate Certificate Program, which can be found at *www.usc.edu/admission/graduate*; (2) statement of purpose; (3) official transcripts from all schools previously attended; (4) one letter of recommendation; and (5) results of the Graduate Record Examinations General Test. The statement of purpose should describe the student's field of interest and how it relates to urban sustainability. Continuing students are not required to submit transcripts or GRE scores; these documents will be obtained electronically by the Office of Graduate Admissions from their original online graduate application. The letter of recommendation for continuing students must come from their primary academic advisor.