Information and Data Science

The Master of Information and Data Science (MIDS) is a part-time professional degree program that prepares students to work effectively with heterogeneous, real-world data (ranging from tweet streams and call records to mouse clicks and GPS coordinates) and to extract insights from the data using the latest tools and analytical methods. The program emphasizes the importance of asking good research or business questions as well as the ethical and legal requirements of data privacy and security.

The curriculum includes research design and applications for data and analysis, storing and retrieving data, exploring and analyzing data, identifying patterns in data, and effectively visualizing and communicating data. MIDS features a project-based approach to learning and encourages the pragmatic application of a variety of different tools and methods to solve complex problems.

Graduates of the program will be able to:

- Imagine new and valuable uses for large datasets;
- Retrieve, organize, combine, clean, and store data from multiple sources;
- Apply appropriate data mining, statistical analysis, and machine learning techniques to detect patterns and make predictions;
- Design visualizations and effectively communicate findings; and
- Understand the ethical and legal requirements of data privacy and security.

Admission to the University

Uniform minimum requirements for admission

The following minimum requirements apply to all programs and will be verified by the Graduate Division:

1. A bachelor's degree or recognized equivalent from an accredited institution;
2. A minimum grade-point average of B or better (3.0);
3. If the applicant comes from a country or political entity (e.g. Quebec) where English is not the official language, adequate proficiency in English to do graduate work, as evidenced by a TOEFL score of at least 570 on the paper-and-pencil test, 230 on the computer-based test, 90 on the iBT test, or an IELTS Band score of at least 7 (note that individual programs may set higher levels for any of these); and
4. Enough undergraduate training to do graduate work in the given field.

Applicants who already hold a graduate degree

The Graduate Council views academic degrees as evidence of broad research training, not as vocational training certificates; therefore, applicants who already have academic graduate degrees should be able to take up new subject matter on a serious level without undertaking a graduate program, unless the fields are completely dissimilar.

Programs may consider students for an additional academic master's or professional master's degree if the additional degree is in a distinctly different field.

Applicants admitted to a doctoral program that requires a master's degree to be earned at Berkeley as a prerequisite (even though the applicant already has a master's degree from another institution in the same or a closely allied field of study) will be permitted to undertake the second master's degree, despite the overlap in field.

The Graduate Division will admit students for a second doctoral degree only if they meet the following guidelines:

1. Applicants with doctoral degrees may be admitted for an additional doctoral degree only if that degree program is in a general area of knowledge distinctly different from the field in which they earned their original degree. For example, a physics PhD could be admitted to a doctoral degree program in music or history; however, a student with a doctoral degree in mathematics would not be permitted to add a PhD in statistics.
2. Applicants who hold the PhD degree may be admitted to a professional doctorate or professional master's degree program if there is no duplication of training involved.

Applicants may only apply to one single degree program or one concurrent degree program per admission cycle.

Any applicant who was previously registered at Berkeley as a graduate student, no matter how briefly, must apply for readmission, not admission, even if the new application is to a different program.

Required documents for admissions applications

1. **Transcripts:** Upload unofficial transcripts with the application for the departmental initial review. Official transcripts of all college-level work will be required **if admitted**. Official transcripts must be in sealed envelopes as issued by the school(s) you have attended. Request a current transcript from every post-secondary school that you have attended, including community colleges, summer sessions, and extension programs.
   If you have attended Berkeley, upload unofficial transcript with the application for the departmental initial review. Official transcript with evidence of degree conferral ***will not*** be required if admitted.
2. **Letters of recommendation:** Applicants can request online letters of recommendation through the online application system. Hard copies of recommendation letters must be sent directly to the program, not the Graduate Division.
3. **Evidence of English language proficiency:** All applicants from countries in which the official language is not English are required to submit official evidence of English language proficiency. This requirement applies to applicants from Bangladesh, Burma, Nepal, India, Pakistan, Latin America, the Middle East, the People's Republic of China, Taiwan, Japan, Korea, Southeast Asia, and most European countries. However, applicants who, at the time of application, have already completed at least one year of full-time academic course work with grades of B or better at a U.S. university may submit an official transcript from the U.S. university to fulfill this requirement. The following courses will not fulfill this requirement: 1) courses in English as a Second Language, 2) courses conducted in a language other than English, 3) courses that will be completed after the application is submitted, and 4) courses of a non-academic nature. If applicants have previously been denied admission to Berkeley on the basis of their English language proficiency, they

must submit new test scores that meet the current minimum from one of the standardized tests.

Admission to the Program

Applications are evaluated holistically on a combination of prior academic performance, GRE/GMAT score, work experience, statement of purpose, and letters of recommendation.

The UC Berkeley School of Information seeks students with the academic abilities to meet the demands of a rigorous graduate program. To be eligible for the Master of Information and Data Science program, you must meet the following requirements:

1. A bachelor's degree or its recognized equivalent from an accredited institution
2. Superior scholastic record, normally well above a 3.0 GPA
3. Official Graduate Record Examination (GRE) (http://www.princetonreview.com/mids) General Test or Graduate Management Admission Test (GMAT) (http://www.princetonreview.com/mids) scores
4. A high level of quantitative ability as demonstrated by scores in the top 15 percent in the Quantitative section of either the GRE or GMAT, five years of technical work experience, or significant work experience that demonstrates your quantitative abilities
5. A working knowledge of fundamental concepts including: data structures, algorithms and analysis of algorithms, and linear algebra
6. Programming proficiency as demonstrated by prior work experience or advanced coursework. (For example: Python, Java, or R)
7. A Statement of Purpose that clearly indicates professional career goals and reasons for seeking the degree
8. Official Test of English as a Foreign Language (TOEFL) (http://www.toefl.org) scores for applicants whose academic work has been in a country other than the U.S., U.K., Australia, or English-speaking Canada

Unit requirements

Total units to graduate: 27

Curriculum

INFO 202	Information Organization and Retrieval	4
INFO 203	Social and Organizational Issues of Information	4
INFO 205	Information Law and Policy	3
INFO 206	Distributed Computing Applications and Infrastructure	4
Second Technology requirement, approved for specialized study list		
Management requirement, approved for specialized study list		
INFO 298A	Directed Group Work on Final Project	2

Workshops

Attendance at one on-site Immersion Program

Advancement to Candidacy

Capstone/Master's Project (Plan II)

Information and Data Science

INFO 202 Information Organization and Retrieval 4 Units
Organization, representation, and access to information. Categorization, indexing, and content analysis. Data structures. Design and maintenance of databases, indexes, classification schemes, and thesauri. Use of codes, formats, and standards. Analysis and evaluation of search and navigation techniques.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 203 Social and Organizational Issues of Information 4 Units
The relationship between information and information systems, technology, practices, and artifacts on how people organize their work, interact, and understand experience. Individual, group, organizational, and societal issues in information production and use, information systems design and management, and information and communication technologies. Social science research methods for understanding information issues.
Rules & Requirements

Prerequisites: Consent of instructor required for non-majors

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 205 Information Law and Policy 3 Units
Law is one of a number of policies that mediates the tension between free flow and restrictions on the flow of information. This course introduces students to copyright and other forms of legal protection for databases, licensing of information, consumer protection, liability for insecure systems and defective information, privacy, and national and international information policy.
Rules & Requirements

Prerequisites: Consent of instructor required for nonmajors

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Mulligan

INFO 206 Distributed Computing Applications and Infrastructure 4 Units
Technological foundations for computing and communications: computer architecture, operating systems, networking, middleware, security. Programming paradigms: object oriented-design, design and analysis of algorithms, data structures, formal languages. Distributed-system architectures and models, inter-process communications, concurrency, system performance.
Rules & Requirements

Prerequisites: An introductory programming course and consent of instructor for nonmajors

Credit Restrictions: Course must be completed for a letter grade to fulfill degree requirements.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

Summer: 6 weeks - 7.5 hours of lecture and 2.5 hours of laboratory per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Chuang

INFO 209 Professional Skills Workshop 2 Units
As information and information systems projects have become increasingly strategic, information workers at all levels and in all environments must demonstrate higher levels of professionalism, not only to perform their duties competently, but to remain competitive in the job market. This course, in conjunction with the School of Information final project, gives students insight into the source and best practice of professionalism, and gives students the chance to refine the essential skills in a simulated but realistic working environment.
Rules & Requirements

Prerequisites: 202, 203, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 212 Information in Society 3 Units
The role of information and information technology in organizations and society. Topics include societal needs and demands, sociology of knowledge and science, diffusion of knowledge and technology, information seeking and use, information and culture, and technology and culture.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 213 User Interface Design and Development 4 Units
User interface design and human-computer interaction. Examination of alternative design. Tools and methods for design and development. Human computer interaction. Methods for measuring and evaluating interface quality.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 214 Needs and Usability Assessment 3 Units
Concepts and methods of needs and usability assessment. Understanding users' needs and practices and translating them into design decisions. Topics include methods of identifying and describing user needs and requirements; user-centered design; user and task analysis; contextual design; heuristic evaluation; surveys, interviews, and focus groups; usability testing; naturalistic/ethnographic methods; managing usability in organizations; and universal usability.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 216 Computer-Mediated Communication 3 Units
This course covers the practical and theoretical issues associated with computer-mediated communication (CMC) systems (e.g., email, newsgroups, wikis, online games, etc.). We will focus on the analysis of CMC practices, the relationship between technology and behavior, and the design and implementation issues associated with constructing CMC systems. This course primarily takes a social scientific approach (including research from social psychology, economics, sociology, and communication).
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Cheshire

INFO 218 Concepts of Information 3 Units
As it's generally used, "information" is a collection of notions, rather than a single coherent concept. In this course, we'll examine conceptions of information based in information theory, philosophy, social science, economics, and history. Issues include: How compatible are these conceptions; can we talk about "information" in the abstract? What work do these various notions play in discussions of literacy, intellectual property, advertising, and the political process? And where does this leave "information studies" and "the information society"?
Rules & Requirements

Prerequisites: Graduate standing

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructors: Duguid, Nunberg

INFO 219 Privacy, Security, and Cryptography 3 Units
Policy and technical issues related to insuring the accuracy and privacy of information. Encoding and decoding techniques including public and private key encryption. Survey of security problems in networked information environment including viruses, worms, trojan horses, Internet address spoofing.
Rules & Requirements

Prerequisites: 206 or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Tygar

INFO 221 Information Policy 3 Units
An examination of the nature of corporate, nonprofit, and governmental information policy. The appropriate role of the government in production and dissemination of information, the tension between privacy and freedom of access to information. Issues of potential conflicts in values and priorities in information policy.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 225 Managing in Information-Intensive Companies 3 Units
This course focuses on managing people in information-intensive firms and industries, such as information technology industries. Topics include managing knowledge workers; managing teams (including virtual ones); collaborating across disparate units, giving and receiving feedback; managing the innovation process (including in eco-systems); managing through networks; and managing when using communication tools (e.g., tele-presence). The course relies heavily on cases as a pedagogical form.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Hansen

INFO 228 Information Systems and Service Design 4 Units
Using a mix of theory and case studies, the course provides students with different backgrounds a unifying view of the design life cycle, making them more effective and versatile designers.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Glushko

INFO 231 Economics of Information 3 Units
The measurement and analysis of the role information plays in the economy and of the resources devoted to production, distribution, and consumption of information. Economic analysis of the information industry. Macroeconomics of information.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 232 Applied Behavioral Economics for Information Systems 3 Units
"Behavioral Economics" is one important perspective on how information impacts human behavior. The goal of this class is to deploy a few important theories about the relationship between information and behavior, into practical settings — emphasizing the design of experiments that can now be incorporated into many 'applications' in day-to-day life. Truly 'smart systems' will have built into them precise, testable propositions about how human behavior can be modified by what the systems tell us and do for us. So let's design these experiments into our systems from the ground up! This class develops a theoretically informed, practical point of view on how to do that more effectively and with greater impact.
Rules & Requirements

Credit Restrictions: Students will receive no credit for Information 232 after completing Information 290 sect 6 (Fall 13).

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Weber

INFO 234 Information Technology Economics, Strategy, and Policy 3 Units
Application of economic tools and principles, including game theory, industrial organization, information economics, and behavioral economics, to analyze business strategies and public policy issues surrounding information technologies and IT industries. Topics include: economics of information; economics of information goods, services, and platforms; strategic pricing; strategic complements and substitutes; competition models; network industry structure and telecommunications regulation; search and the "long tail"; network cascades and social epidemics; network formation and network structure; peer production and crowdsourcing; interdependent security and privacy.
Objectives & Outcomes

Course Objectives:
INFO234 is a graduate level course in the school's topical area of Information Economics and Policy, and can be taken by the masters and doctoral students to satisfy their respective degree requirements.

Student Learning Outcomes:
Students will learn to identify, describe, and analyze business strategies and public policy issues of particular relevance to the information industry. Students will learn and apply economic tools and principles to analyze phenomena such as platform competition, social epidemics, and peer production, and current policy issues such as network neutrality and information privacy. Through integrated assignments and project work, the students will apply the theoretical concepts and analytic tools learned in lectures and readings to develop and evaluate a business model, product, or service of their choosing, e.g., a start-up idea they are pursuing.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Chuang

INFO 235 Cyberlaw 3 Units
Introduction to legal issues in information management, antitrust, contract management, international law including intellectual property, trans-border data flow, privacy, libel, and constitutional rights.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Carver

INFO 237 Intellectual Property Law for the Information Industries 3 Units
The philosophical, legal, historical, and economic analysis of the need for and uses of laws protecting intellectual property. Topics include types of intellectual property (copyright, patent, trade secrecy), the interaction between law and technology, various approaches (including compulsory licensing), and the relationship between intellectual property and compatibility standards.
Rules & Requirements

Prerequisites: 205 or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Carver

INFO 240 Principles of Information Retrieval 3 Units
Theories and methods for searching and retrieval of text and bibliographic information. Analysis of relevance, utility. Statistical and linguistic methods for automatic indexing and classification. Boolean and probabilistic approaches to indexing, query formulation, and output ranking. Filtering methods. Measures of retrieval effectiveness and retrieval experimentation methodology.
Rules & Requirements

Prerequisites: 202 or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Larson

INFO 242 XML Foundations 3 Units
The Extensible Markup Language (XML), with its ability to define formal structural and semantic definitions for metadata and information models, is the key enabling technology for information services and document-centric business models that use the Internet and its family of protocols. This course introduces XML syntax, transformations, schema languages and the querying of XML databases. It balances conceptual topics with practical skills for designing, implementing, and handling conceptual models as XML schemas.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 245 Organization of Information in Collections 3 Units
Standards and practices for organization and description of bibliographic, textual, and non-textual collections. Design, selection, maintenance, and evaluation of cataloging, classification, indexing, and thesaurus systems for specific settings. Codes, formats, and standards for representation and transfer of data.
Rules & Requirements

Prerequisites: 202 or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Larson

INFO 246 Multimedia Information 3 Units
Concepts and methods of design, management, creation, and evaluation of multimedia information systems. Theory and practice of digital media production, reception, organization, retrieval, and reuse. Review of applicable digital technology with special emphasis on digital video. Course will involve group projects in the design and development of digital media systems and applications.
Rules & Requirements

Prerequisites: 202, 203, or consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 247 Information Visualization and Presentation 4 Units
The design and presentation of digital information. Use of graphics, animation, sound, visualization software, and hypermedia in presenting information to the user. Methods of presenting complex information to enhance comprehension and analysis. Incorporation of visualization techniques into human-computer interfaces. Course must be completed for a letter grade to fulfill degree requirements.
Rules & Requirements

Prerequisites: Information 206, Computer Science 160, or knowledge of programming and data structures with consent of instructor

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Hearst

INFO 250 Computer-Based Communications Systems and Networks 3 Units
Communications concepts, network architectures, data communication software and hardware, networks (e.g., LAN, wide), network protocols (e.g., TCP/IP), network management, distributed information systems. Policy and management implications of the technology.
Rules & Requirements

Prerequisites: 206 or equivalent

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Chuang

INFO 252 Mobile Application Design and Development 3 Units
This course looks at the quickly developing landscape of mobile applications. It focuses on Web-based mobile applications, and thus covers issues of Web service design (RESTful service design), mobile platforms (iPhone, Android, Symbian/S60, WebOS, Windows Mobile, BlackBerry OS, BREW, JavaME/JavaFX, Flash Light), and the specific constraints and requirements of user interface design for limited devices. The course combines a conceptual overview, design issues, and practical development issues.
Rules & Requirements

Prerequisites: 206 or consent of instructor

Credit Restrictions: Students will receive no credit for 252 after taking 152.

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 253 Web Architecture 3 Units
This course is a survey of Web technologies, ranging from the basic technologies underlying the Web (URI, HTTP, HTML) to more advanced technologies being used in the the context of Web engineering--for example, structured data formats and Web programming frameworks. The goal of this course is to provide an overview of the technical issues surrounding the Web today, and to provide a solid and comprehensive perspective of the Web's constantly evolving landscape.
Rules & Requirements

Prerequisites: Introductory programming

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 256 Applied Natural Language Processing 3 Units
This course examines the state-of-the-art in applied Natural Language Processing (also known as content analysis and language engineering), with an emphasis on how well existing algorithms perform and how they can be used (or not) in applications. Topics include part-of-speech tagging, shallow parsing, text classification, information extraction, incorporation of lexicons and ontologies into text analysis, and question answering. Students will apply and extend existing software tools to text-processing problems.
Rules & Requirements

Prerequisites: Proficient programming in python (programs of at least 200 lines of code), proficient with basic statistics and probabilities

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Hearst

INFO 257 Database Management 3 Units
Introduction to relational, hierarchical, network, and object-oriented database management systems. Database design concepts, query languages for database applications (such as SQL), concurrency control, recovery techniques, database security. Issues in the management of databases. Use of report writers, application generators, high-level interface generators.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Larson

INFO C262 Theory and Practice of Tangible User Interfaces 4 Units
This course explores the theory and practice of Tangible User Interfaces, a new approach to Human Computer Interaction that focuses on the physical interaction with computational media. The topics covered in the course include theoretical framework, design examples, enabling technologies, and evaluation of Tangible User Interfaces. Students will design and develop experimental Tangible User Interfaces using physical computing prototyping tools and write a final project report.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture and 1 hour of laboratory per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: NWMEDIA C262

INFO C263 Technologies for Creativity and Learning 3 Units
How does the design of new educational technology change the way people learn and think? How do we design systems that reflect our understanding of how we learn? This course explores issues on designing and evaluating technologies that support creativity and learning. The class will cover theories of creativity and learning, implications for design, as well as a survey of new educational technologies such as works in computer supported collaborative learning, digital manipulatives, and immersive learning environments.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: NWMEDIA C263

INFO C265 Interface Aesthetics 2 Units
This course will cover new interface metaphors beyond desktops (e.g., for mobile devices, computationally enhanced environments, tangible user interfaces) but will also cover visual design basics (e.g., color, layout, typography, iconography) so that we have systematic and critical understanding of aesthetically engaging interfaces. Students will get a hands-on learning experience on these topics through course projects, design critiques, and discussions, in addition to lectures and readings.
Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Ryokai

Also listed as: NWMEDIA C265

INFO 271B Quantitative Research Methods for Information Systems and Management 3 Units
Introduction to many different types of quantitative research methods, with an emphasis on linking quantitative statistical techniques to real-world research methods. Introductory and intermediate topics include: defining research problems, theory testing, casual inference, probability, and univariate statistics. Research design and methodology topics include: primary/secondary survey data analysis, experimental designs, and coding qualitative data for quantitative analysis.
Rules & Requirements

Prerequisites: Introductory statistics recommended

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Cheshire

INFO 272 Qualitative Research Methods for Information Systems and Management 3 Units
Theory and practice of naturalistic inquiry. Grounded theory. Ethnographic methods including interviews, focus groups, naturalistic observation. Case studies. Analysis of qualitative data. Issues of validity and generalizability in qualitative research.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Burrell

INFO C283 Information and Communications Technology for Development 3 Units
This seminar reviews current literature and debates regarding Information and Communication Technologies and Development (ICTD). This is an interdisciplinary and practice-oriented field that draws on insights from economics, sociology, engineering, computer science, management, public health, etc.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of seminar per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructors: Ray, Saxenian

Also listed as: ENE,RES C283

INFO 287 Information and Communications Technologies for Social Enterprise 3 Units
This class is focused on the creation of sustainable enterprises based on ICT (Information and Communications Technologies) innovations supporting international development. We take a broad view of entrepreneurship--including starting new businesses, non-profit initiatives, and/or public sector projects. We will take a highly iterative, design-oriented, feedback-driven approach to developing and refining business plans for social enterprises.
Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Instructor: Parikh

INFO 290 Special Topics in Information 1 - 4 Units
Specific topics, hours, and credit may vary from section to section, year to year.
Rules & Requirements

Repeat rules: Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7.5 weeks - 2-6 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 290A Special Topics in Information 1 or 2 Units
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
5 weeks - 3 hours of lecture per week
6 weeks - 2 hours of lecture per week
8 weeks - 1.5-2 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

Formerly known as: Information Systems and Management 290A

INFO 290M Special Topics in Management 1 - 4 Units
Specific topics, hours, and credit may vary from section to section and year to year.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit as topics in management vary. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 2-6 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 290MA Effective Project Management 2 Units
It takes critical thinking, outstanding leadership, and a little magic to be a successful project manager. Come and learn not only the essential building blocks of project management, but the tricks to managing a variety of complex projects. We will have a combination of interactive lectures, guest speakers, and case studies discussions to cover globally recognized standards, best practices, and tools that successful project managers use.
Hours & Format

Fall and/or spring: 15 weeks - 2 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 290T Special Topics in Technology 1 - 4 Units
Specific topics, hours, and credit may vary from section to section and year to year.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit as topics in technology vary. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring:
7 weeks - 2-7.5 hours of lecture per week
15 weeks - 1-4 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 290TA Information Organization Laboratory 3 Units
Students will build tools to explore and apply theories of information organization and retrieval. Students will implement various concepts covered in the concurrent 202 course through small projects on topics like controlled vocabularies, the semantic web, and corpus analysis. We will also experiment with topics suggested by students during the course. Students will develop skills in rapid prototyping of web-based projects using Python, XML, and jQuery.
Rules & Requirements

Prerequisites: It is recommended that students take 202 concurrently, or have taken it in the past

Hours & Format

Fall and/or spring: 15 weeks - 3 hours of lecture per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 293 Curricular Practical Training for International Students 0.0 Units
This is a zero-unit independent study course for international students doing internships under the Curricular Practical Training program. The course will be individually supervised and must be approved by the head graduate adviser.
Rules & Requirements

Repeat rules: Course may be repeated once. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Summer: 10 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

INFO 295 Doctoral Colloquium 1 Unit
Colloquia, discussion and readings designed to introduce students to the range of interests of the school.
Rules & Requirements

Prerequisites: Ph.D. standing in the School of Information

Hours & Format

Fall and/or spring: 15 weeks - 1 hour of colloquium per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Offered for satisfactory/unsatisfactory grade only.

INFO 296A Seminar 2 - 4 Units
Topics in information management and systems and related fields. Specific topics vary from year to year.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 2-4 hours of seminar per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 298 Directed Group Study 1 - 3 Units
Group projects on special topics in information management and systems.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-3 hours of directed group study per week

Summer: 8 weeks - 1.5-5.5 hours of directed group study per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 298A Directed Group Work on Final Project 2 Units
The final project is designed to integrate the skills and concepts learned during the Information School Master's program and helps prepare students to compete in the job market. It provides experience in formulating and carrying out a sustained, coherent, and significant course of work resulting in a tangible work product; in project management, in presenting work in both written and oral form; and, when appropriate, in working in a multidisciplinary team. Projects may take the form of research papers or professionally-oriented applied work.
Rules & Requirements

Prerequisites: Consent of instructor. Course must be taken for a letter grade to fulfill degree requirements

Hours & Format

Fall and/or spring: 15 weeks - 2 hours of directed group study per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 299 Individual Study 1 - 12 Units
Individual study of topics in information management and systems under faculty supervision.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-12 hours of independent study per week

Summer: 8 weeks - 2-22.5 hours of independent study per week

Additional Details

Subject/Course Level: Information/Graduate

Grading: Letter grade.

INFO 375 Teaching Assistance Practicum 1 - 6 Units
Discussion, reading, preparation, and practical experience under faculty supervision in the teaching of specific topics within information management and systems. Does not count toward a degree.
Rules & Requirements

Repeat rules: Course may be repeated for credit as topic varies. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 0 hours of independent study per week

Additional Details

Subject/Course Level: Information/Professional course for teachers or prospective teachers

Grading: Offered for satisfactory/unsatisfactory grade only.

Formerly known as: Information 310

INFO 602 Individual Study for Doctoral Students 1 - 5 Units
Individual study in consultation with the major field adviser, intended to provide an opportunity for qualified students to prepare themselves for the various examinations required of candidates for the Ph.D. degree.
Rules & Requirements

Prerequisites: Consent of instructor

Repeat rules: Course may be repeated for credit. Course may be repeated for credit when topic changes.

Hours & Format

Fall and/or spring: 15 weeks - 1-5 hours of independent study per week

Additional Details

Subject/Course Level: Information/Graduate examination preparation

Grading: Offered for satisfactory/unsatisfactory grade only.