

# INFORMATION STUDIES (IST)

## IST 500 Selected Topics (1-6 Credits)

### *Information Studies*

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

## IST 511 Cultural Foundations of Information Studies (3 Credits)

### *Information Studies*

Survey of the professional, social, ethical, and legal issues affecting information service professionals and organizations and prepares students to deal with these issues and work with a diverse community. Shared Competencies: Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

## IST 553 Information Architecture for Internet Services (3 Credits)

### *Information Studies*

Building and management of Internet information services, including information organization, information management, and information dissemination. Understanding of the use of Internet technologies within an organizational context. Practice with current technologies.

## IST 564 Accessible Library & Information Services (3 Credits)

### *Information Studies*

Provides students on K-12, public, and academic library paths with context, awareness, and strategies to develop programs, services and facilities, and to select resources and technologies that ensure patrons and staff with disabilities have inclusive library experiences. Shared Competencies: Ethics and Integrity (<https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/>); Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

## IST 580 International Course (1-12 Credits)

### *Information Studies*

Offered through SUAbroad by educational institution outside the United States. Student registers for the course at the foreign institution and is graded according to that institution's practice. SUAbroad works with the S.U. academic department to assign the appropriate course level, title, and grade for the student's transcript. Repeatable 1 times for 12 credits maximum

## IST 600 Selected Topics (1-6 Credits)

### *Information Studies*

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

## IST 601 Information and Information Environments (1 Credit)

### *Information Studies*

A broad overview of the field and an orientation to the School of Information Studies. Describes the past, present, and future of information studies.

## IST 602 Digital Forensics (3 Credits)

### *Information Studies*

Examination of information technology to establish probative information. Fundamentals of the forensic process, evidence handling and quality assurance as these apply to digital forensics.

## IST 604 Cataloging of Information Resources (3 Credits)

### *Information Studies*

History, theories, standards, and practices of bibliographic control of information resources with a focus on the library community. Practice creating original bibliographic and authority records and adapting, editing existing records using various technologies and tools, and applying subject vocabularies and classification systems.

Prereq: IST 616

## IST 605 Reference and Information Literacy Services (3 Credits)

### *Information Studies*

Equips students with foundational knowledge of library ethics/standards, user information behavior, information literacy (including core information search, evaluation, and use practices), library resource types and discovery tools, question answering strategies, and related user-responsive library resources and services.

## IST 607 Digital Humanities for Librarians, Archivists, & Cultural Heritage Workers (3 Credits)

### *Information Studies*

Introduction to Digital Humanities (DH) in Libraries, Archives, Museums, and other cultural institutions, with a focus on how information professionals can make use of DH methods and approaches and support and sustain DH work in their communities.

## IST 608 Blockchain Management (3 Credits)

### *Information Studies*

Double-numbered with IST 408

Students complete distributed ledger labs before developing, implementing, and 'demo or die' sharktanking their own new blockchain project. Blockchain concepts such as decentralization, smart contracts, trust and consensus governance are discussed. Additional work for graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>); Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

## IST 611 Information Technologies in Educational Organizations (3 Credits)

### *Information Studies*

Information and communication technologies for teaching and learning in all types of libraries: practice with tools along with consideration of pedagogy (instructional design and evaluation of tools for learning objectives) and context (ethics, policies, legislation).

## IST 612 Youth Services in Libraries and Information Centers (3 Credits)

### *Information Studies*

Introduction to best practices and methods to support and develop youth services programming in school and public library settings. Students gain skills in collection development, knowledge of youth literature, and information literacy instruction to serve a rich diversity of youth.

## IST 613 Library Planning, Marketing, and Assessment (3 Credits)

### *Information Studies*

Enables students to discern gaps between user/community needs/goals and library services, resources, and facilities; students develop recommendations to close gaps. Covers project management, marketing/communications, and assessment. Course content is contextualized in collaboration with partner libraries.

Prereq: IST 605

**IST 614 Information Technology Management and Policy (3 Credits)***Information Studies*

Basic ideas, concepts and perspectives of management and policy as they apply to the information professions. Students learn to understand and apply these principles to improve organizational effectiveness and promote digital transformation.

**IST 615 Cloud Management (3 Credits)***Information Studies*

Focus on understanding cloud management principles and practices, cloud service models (IaaS, PaaS, SaaS) and deployment strategies (public, private, hybrid), as well as key concepts like scalability, security, and cost optimization. Practical experience in using, creating and managing cloud services.

**IST 616 Information Resources: Organization and Access (3 Credits)***Information Studies*

Introduction to theories, tools, and standards for information organization and access, including cataloging rules and formats, content analysis, indexing, classification, and fundamentals of information retrieval systems.

**IST 618 Information Policy (3 Credits)***Information Studies*

Public policy and the data, library, and information technology sectors. Access, ethical and responsible artificial intelligence, privacy and security, intellectual property, and freedom of expression. Application of economic, legal, and political science concepts to information policy analysis.

**IST 620 Advanced Topics in Information Innovation (3 Credits)***Information Studies*

Critical and emerging issues in information innovation. The course presents durable concepts of innovation around a specific innovation in the information field. The innovation is used as context for readings and project.

**IST 621 Information Management and Technology (3 Credits)***Information Studies*

Introduces the concept of digital transformation and its relationship to information systems within an organization. Uses business case studies to explore topics of digitization, strategic decision making, and organizational culture. Assignments emphasize development of analytical problem solving, presentation, and collaboration skills.

**IST 622 Introduction to Preservation of Cultural Heritage (3 Credits)***Information Studies*

Introduction to field of preservation of cultural heritage, including institutions, contexts and methodologies, concepts of place and culture, objects and resources for study; emphasis also on role of digital applications. Requires research project and presentation.

**IST 623 Introduction to Information Security (3 Credits)***Information Studies*

Basic concepts and technologies of information security. Students who successfully complete this course will have a comprehensive overview of information security with some hands-on experience.

**IST 624 Preservation of Library and Archival Collections (3 Credits)***Information Studies*

Introduction to preserving library and archival collections, including paper, audio-visual, and digital objects.

**IST 625 Enterprise Risk Management (3 Credits)***Information Studies*

A multidisciplinary perspective of risk assessment, modeling, and management. Topics include: concepts of personal accountability versus governance and policy; how organizations define and measure risk and loss; and plan for contingencies.

**IST 626 Information Justice & Community Engagement (3 Credits)***Information Studies*

Double-numbered with IST 426

This course will examine the interrelation of social justice and community engagement in online and naturalistic communities. Areas of emphasis will explore how gender, race, class and community location (on and off-line) affect and are affected by information. Additional work for graduate students.

University Requirement Course: IDEA Requirement Eligible

Shared Competencies: Ethics and Integrity (<https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/>); Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

**IST 628 Arrangement and Description of Archival Collections (3 Credits)***Information Studies*

Introduction to the hands-on work of acquiring, processing and preserving archival and manuscript collections. Requires a comprehensive collections project completed at the Special Collections Research Center in Bird Library.

**IST 629 Technology and the Future of Work (3 Credits)***Information Studies*

Double-numbered with IST 429

Explore the rapidly evolving landscape of work. Examine how emerging technologies like artificial intelligence, robotics, and extended reality are impacting industries, jobs, and the very nature of work itself. Topics include a history of work, labor organizing, work augmentation, work-life balance, and future worker skills and capabilities. Additional work required for graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>)

**IST 632 Management and Organization of Special Collections (3 Credits)***Information Studies*

Principles, methods, and techniques of management, development and organization of special collections such as rare books, archives, or pictorial materials, including issues such as bibliographic services and preservation.

**IST 634 Security in Networked Environments (3 Credits)***Information Studies*

Security technologies and management in networked/Internet environments with hands-on skills and research opportunities. This course provides students with the concepts, threats, and key components of network security with technologies and effective management.

**IST 635 Collection Development and Access (3 Credits)***Information Studies*

Advanced investigation of collection development practices across library types. Includes topics such as, acquisition, maintenance of different types of collections; user and collection analysis; policies and guidelines, budgeting and licensing; evaluation and usage statistics; cooperative collection development; preservation; and ethical issues.

**IST 636 Leading Issues in Information Security (3 Credits)***Information Studies*

This course is intended to cover today's leading issues and challenges in information security, considering social, ethical, management, and global perspectives that are related to current technology trends.

Prereq: IST 623 or IST 323

**IST 644 Managing Data Science Projects (3 Credits)***Information Studies*

Increase the agility of a data science project by improving the process a team uses to execute their project. Explore data science life cycles (e.g., CRISP-DM, TDSP) and collaboration frameworks (e.g., Kanban, Scrum).

**IST 645 Managing Information Systems Projects (3 Credits)***Information Studies*

Double-numbered with IST 345

Project management as a professional discipline in information and communication technology. Introduction to roles, activities, methods, and tools. Critical review and application of principles. Microsoft Project (Industry standard) will be the tool used in class. Additional work required of graduate students

Shared Competencies: Scientific Inquiry and Research Skills (<https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/>)

**IST 649 Human Interaction with Computers (3 Credits)***Information Studies*

Human performance characteristics, user/ system communication design alternatives, user behavior research methods, information system organizational impact.

**IST 651 Scripting for Enterprise Data Systems (3 Credits)***Information Studies*

Scripting methods, languages, tools and theory for the efficient and effective management of resources and services in enterprise data systems.

**IST 652 Scripting for Data Analysis (3 Credits)***Information Studies*

Introduction to scripting techniques for automating, managing, and analyzing data in various formats. The course focuses on practical applications of Python to preprocess, clean, analyze, and visualize data to support data-driven decision-making and the creation of data analysis pipelines.

Shared Competencies: Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

**IST 654 Information Systems Analysis (3 Credits)***Information Studies*

Concepts and methods of systems analysis through decomposition and modeling. Extensive practice with structured methodologies. Systems analysis and project management techniques. Introduction to automated tools and technologies. Group project to apply skills.

**IST 656 Telecommunications and Enterprise Network Management II (3 Credits)***Information Studies*

Hardware and software technologies in telecommunication and information networks. TCP/IP protocols. Design, maintenance and management.

Prereq: IST 653

**IST 659 Data Administration Concepts and Database Management (3 Credits)***Information Studies*

Definition, development, and management of databases for information systems. Learn data analysis techniques, data modeling, data normalization query writing for information retrieval and query performance tuning using the SQL language.

**IST 662 Instructional Strategies and Techniques for Information Professionals (3 Credits)***Information Studies*

Prepares students to teach, train, consult, and present programming in information organizations. Focuses on understanding learners and audiences, utilizing educational theory, designing strategies for conveying content, employing inclusive techniques, and assessing effectiveness of instructional episodes.

**IST 664 Natural Language Processing (3 Credits)***Information Studies*

Linguistic and computational aspect of natural language processing technologies. Lectures, readings, and projects in the computational techniques required to perform all levels of linguistic processing of text. Additional work required of graduate students.

**IST 665 Evaluating Disruptive Information Technologies and Trends (3 Credits)***Information Studies*

Introduces concepts and methods for identifying, evaluating, and presenting IT analyses in areas that have potential to cause significant disruption in public and private sector organizations with a focus on social, financial and technological impacts.

**IST 668 Literacy Through School Libraries (3 Credits)***Information Studies*

Introduction to standards-based methods to support and reinforce library instruction, multiple literacies, reading comprehension in all formats, and information fluency. Development of collaborative instruction and programs that foster student agency and voice, family and cultural literacy.

**IST 671 Foundations of Research Methods in Information Studies (3 Credits)***Information Studies*

Philosophies, approaches, and practices of research in information studies, including quantitative, qualitative, critical, historical, and design-based approaches. Create a proposal for an actionable research project, including research ethics, literature review, data collection and analysis, peer review, and communication of results.

**IST 672 Public Libraries (3 Credits)***Information Studies*

Introduction to public libraries within the context of demographic and technological changes and shifting economic and political forces. Topics covered include issues related to social and political environments, user services, diversity, equity, and inclusive services, collections, programming, budgeting, staffing and community outreach.

**IST 674 Academic Librarianship (3 Credits)***Information Studies*

Survey of academic librarianship, including a variety of public services and technical services domains within the academic library. Emphasizes the role of academic libraries in higher education and attainment of institutional mission.

**IST 675 Dynamics of Human AI Interaction (3 Credits)***Information Studies*

Double-numbered with IST 375

Understand, analyze, and critique scientific and practical perspectives on what counts as *interactivity* and *intelligence* when AI-driven agents interact with humans

**IST 676 Digital Curation (3 Credits)***Information Studies*

Introduces key concepts and techniques in digital curation across humanities, social sciences, and sciences and issues in the technical, service, and social dimensions of curating digital assets.

**IST 678 Communication for Information Professionals (3 Credits)***Information Studies*

Enhances the listening, speaking and writing skills of Information Studies students with low TOEFL or IELTS scores, or through departmental recommendation. Includes information studies specific writing presentations. Cannot be counted towards degree. By permission only.

**IST 681 Metadata (3 Credits)***Information Studies*

Introduces metadata concepts, models, encoding, vocabulary, interoperability, and quality control as well as new development and trends. Students will apply metadata principles, tools, and best practices in creating metadata descriptions and models using established standards.

**IST 682 Cultural Competence for Information Professionals (3 Credits)***Information Studies*

Double-numbered with IST 382

This course prepares information professionals to develop cultural competencies and provide inclusive services to underrepresented populations. It relates cultural competence to meeting information needs of communities through library and information collection development, outreach, and services. Additional work for graduate students. Shared Competencies: Ethics and Integrity (<https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/>)

**IST 686 Quantitative Reasoning for Data Science (3 Credits)***Information Studies*

Contemporary methods of statistical inference for quantitative data, including Bayesian analysis. Students gain practical skills in data preparation, analysis using R, and communicating results for informed, reliable decision-making.

**IST 687 Introduction to Data Science (3 Credits)***Information Studies*

Introduction to using data science across many different situations. Covers concepts such as data management, transformation, analysis, and machine learning, using R. No programming experience required. Hands-on projects and real-world problem-solving help identify when data science is useful, with emphasis on ethically applying data science.

**IST 688 Building Human Centered AI Applications (3 Credits)***Information Studies*

Double-numbered with IST 488

Learn to build Generative AI applications leveraging large language models. Through hands-on projects, students will use libraries and APIs to create conversational agents, Q&A bots, and goal-oriented assistants. Topics covered include prompt engineering, AI conversational memory, output evaluation, and responsible AI practices. Additional work required for graduate students.

Advisory recommendation Prereq: IST 687 or Knowledge of Python Programming

**IST 690 Independent Study (1-6 Credits)***Information Studies*

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department. Repeatable

**IST 691 Deep Learning in Practice (3 Credits)***Information Studies*

An introduction to the concepts and techniques needed to build deep learning applications. Gain hands-on experience training neural networks using open-source tools (Python, Tensorflow/Keras). The course culminates in a project applying deep learning methods to real-world challenges.

Prereq: IST 687 OR IST 387 (B grade or higher)

**IST 692 Responsible AI (3 Credits)***Information Studies*

Through hands-on coding exercises and critical analysis, you'll learn to identify and address biases in AI systems, evaluate the social and environmental impact of AI, navigate AI regulations, and apply best practices for responsible AI design and deployment.

Prereq: IST 687 or IST 387 (B grade or higher)

**IST 700 Selected Topic (0-6 Credits)***Information Studies*

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

**IST 704 Applied Information Security (3 Credits)***Information Studies*

Applications of information security including hands-on experience. Students who successfully complete this course will understand how information security technology is applied to real systems.

Prereq: IST 623 or IST 323

**IST 707 Applied Machine Learning (3 Credits)***Information Studies*

Provides a comprehensive overview of industry standard machine learning techniques, including an introduction to deep learning. Focus on model building and optimization in Python, real-world applications, and stakeholder communication. Students will apply their skills to an original machine learning project to showcase their skills.

Prereq: IST 687 or IST 387

**IST 714 Cloud Architecture (3 Credits)***Information Studies*

Hands-on enterprise cloud-native software defined network and application/service design, planning and economics; migration/adoption costs, data center resource orchestration. Topics also include cloud elastic sizing, risk management, governance, compliance and data monitoring, and security architecture.

**IST 715 LAMS: Libraries, Archives, Museums (3 Credits)***Information Studies*

A study of libraries, archives, museums, and national parks as cultural institutions; their missions and operating structures; involvement in joint ventures, both physical and electronic; panelists from and site visits to nearby venues.



**IST 717 Library Leadership and Management (3 Credits)***Information Studies*

Management of academic, public, and special libraries. Relationship between library and its parent institution; internal organization and operation; library information policies; library financing; legislation affecting libraries.

**IST 718 Big Data Analytics (3 Credits)***Information Studies*

Learn to develop actionable insights from big data using open-source tools (Python and Spark). This course prepares students to build scalable data analytics pipelines and apply advanced machine learning techniques, culminating in a hands-on project tackling real-world challenges.

Prereq: (IST 687 & IST 707) or (IST 387 & IST 407(B grade or higher))

**IST 719 Information Visualization (3 Credits)***Information Studies*

A broad introduction to data visualization for information professionals. Students will develop a portfolio of resources, demonstrations, recipes, and examples of various data visualization techniques.

Prereq: IST 687 or IST 387

**IST 720 Topics in Library Leadership (1-3 Credits)***Information Studies*

Topics related to library leadership offered as available. May include advocacy, budgeting, grant writing, fund-raising, and other topics as appropriate.

Repeatable 3 times for 6 credits maximum

**IST 722 Data Warehouse (3 Credits)***Information Studies*

Introduction to the concepts of data warehousing and business intelligence (BI). Data warehouse architectures and design. Dimensional modeling, extract-load-transform (ELT) in the SQL language. Emphasis on using data warehouses to make better organizational decisions.

Prereq: IST 659 or IST 359

**IST 725 Information Technology Security Architecture (3 Credits)***Information Studies*

Introduces concepts and practices, using an organization-wide enterprise architecture as context. The purpose of an IT security architecture is to ensure proper levels of information confidentiality, integrity, and availability are provided for an organization's information and data.

**IST 728 Information Security Policy (3 Credits)***Information Studies*

Understand and develop information security technology, law and policy risks and vulnerability analysis skills for management and operations of business and government. Technology, law, regulation, and policy for information security best practices and compliance.

**IST 736 Text Mining (3 Credits)***Information Studies*

Introduces concepts and methods for knowledge discovery from large amount of text data, and the application of text mining techniques for business intelligence, digital humanities, and social behavior analysis.

**IST 737 Visual Analytic Dashboards (3 Credits)***Information Studies*

Analytic dashboards find valuable insights from large scale data. Students will gain knowledge of human visual reasoning, and obtain technical skills necessary to design, develop and implement analytic dashboards for business, government, or personal data.

Prereq: IST 687

**IST 755 Information Systems Capstone (3 Credits)***Information Studies*

Seminar. Integration of previous learning on the various components of management, user needs, and technologies. In-depth review and use of case studies on a range of critical information resources management areas.

Prereq: IST 614 and 24 credits completed

**IST 769 Advanced Big Data Management (3 Credits)***Information Studies*

Double-numbered with IST 469

Analyze relational and non-relational databases and corresponding database management system architectures. Learn to build complex database objects to support a variety of needs from big data and traditional perspectives. Data systems performance, scalability, security. Additional work required for graduate students.

Prereq: IST 659 or IST 359

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>); Information Literacy and Technological Agility (<https://coursecatalog.syracuse.edu/shared-competencies/information-literacy-and-technological-agility/>)

**IST 773 Reflective Portfolio (3 Credits)***Information Studies*

Creation of an online reflective portfolio that demonstrates successful achievement of all program learning outcomes for the MSLIS degree.

**IST 776 Research Methods in Information Science and Technology (3 Credits)***Information Studies*

Hands-on experience with qualitative and quantitative research methods in Information Science. Covers the entire research process; from question development to data analysis; while emphasizing ethical considerations and diverse research techniques like surveys, interviews, and experiments.

**IST 777 Statistical Methods in Information Science and Technology (3 Credits)***Information Studies*

Classical statistical procedures used in information transfer research. Emphasis on underlying rationale for each procedure and on criteria for selecting procedures in a given research situation.

Repeatable 1 times for 3 credits maximum

**IST 778 Elicitation and Analytical Techniques for Information Science (3 Credits)***Information Studies*

Techniques for data elicitation and analysis for research in information science and technology. Includes intellectual history, assumptions, procedures, and practical experience with a range of techniques, including both qualitative and quantitative approaches.

**IST 782 Applied Data Science Portfolio (1 Credit)***Information Studies*

Reflect on and curate a portfolio of data science projects completed during the program. Through an ePortfolio and reflection document, demonstrate how your work has aligned with your program learning outcomes. The portfolio serves as a professional showcase for future career opportunities. No new projects are required.

**IST 783 Applied Human Centered AI Portfolio (1 Credit)***Information Studies*

Reflect on and curate a portfolio of data science projects completed during the program. Through an ePortfolio and reflection document, demonstrate how your work has aligned with your program learning outcomes. The portfolio serves as a professional showcase for future career opportunities. No new projects are required.

**IST 790 Theories of Information (1-3 Credits)***Information Studies*

Introduces students to a broad range of information-focused theories. Through critical reading, writing, and discussion, students will critically engage course concepts and apply them to their own research interests.

**IST 800 Information Studies Seminar (1-3 Credits)***Information Studies*

Selected areas within the information field, emphasizing related disciplines and their relationships to the diagnosis of information needs and the collection, storage, management, regulation and dissemination of information.

Repeatable

**IST 801 Introduction to Doctoral Studies (3 Credits)***Information Studies*

This course defines what it means to be a scientist (Ph.D.) or practitioner/researcher (DPS), what is meant by science, and what are some of the core concepts in the broad intellectual spaces represented by faculty at this (and other) iSchool(s). As such, this overview is very directed towards concepts, perspectives, and issues that are relevant to the doing of science by researchers in iSchools.

**IST 810 Practicum in Research (2 Credits)***Information Studies*

Practical, mentor-led experience in the research process, including planning, design, data collection, analysis, writing, and/or funding. Experiences are complemented by workshops and discussions.

Repeatable

**IST 820 Seminar in Research Methods (3 Credits)***Information Studies*

Principles and applications of appropriate research techniques, including probability and statistics, sampling theory, operations research models, survey techniques, interviewing, observation, and experimental design. Problem formulation, proposal writing, preparation and presentation of final report.

**IST 830 Theories of Digital Technologies (3 Credits)***Information Studies*

Theory and practice in the analysis, design, management, and evaluation of existing and hypothetical information systems, including computerized storage and retrieval systems, libraries, management systems, and networks.

**IST 840 Practicum in Teaching (1-2 Credits)***Information Studies*

Practical, mentor-led experience in teaching, including work in course design, pedagogical strategies, lecture and activity delivery, grading, classroom management, and/or accessibility. Experiences are complemented by workshops and discussions.

Repeatable 8 times for 8 credits maximum

**IST 880 Intensive Seminar (0 Credits)***Information Studies*

Residential seminar for Doctorate of Professional Studies distance students. Skill building and mentoring for doctoral coursework and dissertation preparation. Portfolio evaluation of work accumulated during the semester.

Repeatable 7 times for 1 credits maximum

**IST 970 Internship (1-6 Credits)***Information Studies*

Participation in a supervised and evaluated field experience. Requires contract approved by advisor, faculty supervisor, and field agency before registration.

Repeatable

**IST 971 Information Systems Internship (1-3 Credits)***Information Studies*

Fully supervised internship experience for graduate students in the MSIS degree program. Must meet GPA requirements and complete a learning agreement with site supervisor.

Repeatable 2 times for 3 credits maximum

**IST 972 School Media Practicum (1-6 Credits)***Information Studies*

Fully supervised and evaluated school-based library experience at the elementary and secondary levels. Includes online seminar. Must meet GPA/program requirements and complete a learning agreement with site supervisor.

Repeatable

**IST 973 Internship in Library Science (1-6 Credits)***Information Studies*

Fully supervised internship experience. Must meet GPA requirements and complete a learning agreement with site supervisor.

Repeatable 2 times for 6 credits maximum

Prereq: 9 completed graduate level IST credits

**IST 974 Internship in Applied Data Science (1-3 Credits)***Information Studies*

Fully supervised internship experience. Must meet GPA requirements and complete a learning agreement with site supervisor. Pre-req: IST ADS master's students only.

Repeatable 3 times for 9 credits maximum

**IST 990 Independent Study (1-6 Credits)***Information Studies*

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

**IST 997 Thesis (1-6 Credits)***Information Studies*

Repeatable 7 times for 45 credits maximum

**IST 999 Dissertation (1-15 Credits)***Information Studies*

Repeatable