

**MASTER OF
INFORMATION STUDIES**

Program code: 1331

INTRODUCTION

The College of Social Sciences offers a Master's program in **Information Studies (MIS)**. English is the language of instruction and research. Graduates from all disciplines are eligible for admission to the program. The program is designed to prepare professionals for the information fields. Curriculum covers information organizations, use of up-to-date technology and accompanying managerial techniques. The program offers both thesis and non-thesis options.

According to the University Council decision dated 4/2/2007, Thesis students admitted with effect from September 2007 are exempted from the comprehensive examination.

PROGRAM REQUIREMENTS

36 TOTAL COURSE CREDITS

18 (21) COMPULSORY COURSES (3 credits each)

1331-503	Information Resources and Services
1331-504	Management of Information Organizations
1331-505	Foundations of Information Studies
1331-506	Technology Applications in Information Organizations
1331-508	Organization of Information
1331-509	Research Methods in Information Studies
1331-593	Capstone Project (for non-thesis option)

9 (15) ELECTIVES COURSES

For project option: Students should choose at least three courses from a group related to an area of specialization.

For thesis option: Students should choose at least two courses from a group related to an area of specialization.

I. Information Sources and Services (3 credits each)

1331-525	Information Sources in Science & Technology
1331-526	Information Sources in Business
1331-527	Information Sources in Humanities and Social Sciences
1331-528	Health Information Sources & Services
1331-529	Public and Community Information Services
1331-530	Academic Information Services
1331-535	Information Literacy
1331-536	Corporate Information Services

- 1331-537 Schools Information Resources and Services
- 1331-538 Information Literacy Standards for Different Professions
- 1331-539 Information Application of E-government
- 1331-567 Advanced Research Application in Information Studies

II. Information & Knowledge Management (3 credits each)

- 1331-550 Principles & Practices of Knowledge Management
- 1331-551 Digital Libraries and Archives
- 1331-552 Communities of Practice
- 1331-553 Electronic Records Management
- 1331-554 Metadata Applications for Knowledge Organization
- 1331-555 Information Ethics
- 1331-556 Tools for Knowledge Organization & Management
- 1331-557 Management Information Systems
- 1331-558 Information Policy
- 1331-559 Social Informatics
- 1331-566 Measurement and Evaluation in Information Organization

III. Information Technology Applications (3 credits each)

- 1331-540 Information Technologies for Education & Learning Resources
- 1331-543 Systems Analysis and Design in Information Organizations
- 1331-545 Networks and Telecommunications in Information Organizations
- 1331-546 Internet for Information Professionals
- 1331-549 Social Media Applications in Information Organizations
- 1331-560 Automation in Information Organizations
- 1331-561 Database Applications in Information Organizations
- 1331-563 Usability Studies
- 1331-564 Digital Collections Management
- 1331-565 E-Libraries and E-Services

IV. Special Topics (3 credits each)

Student may take up to two courses from the following:

- 1331-595 Special Topics in Information Studies I
- 1331-596 Special Topics in Information Studies II

Special topics courses will be offered in emerging areas. Specific topics are chosen keeping in view the availability of resource persons and student interests.

9 COMPULSORY COURSES

1331-597	Thesis	(0)
1331-598	Thesis	(0)
2000-599	Thesis	(9)

COURSE DESCRIPTION**1331- 503: INFORMATION RESOURCES AND SERVICES
CR: 3**

This course introduces the principles and practices of development of information sources, collections and services to meet user needs in information institutions. Main topics covered include dynamic nature of information services, understanding users' information behavior, information retrieval concepts and theories, mediation with users (information need negotiation, search strategy development, and evaluation of search results), meeting information needs through human and technology based services and by using printed and electronic resources to information needs and use in different environments.

**1331-504: MANAGEMENT OF INFORMATION ORGANIZATIONS
CR: 3**

This course provides an introduction to management theory and decision making in the context of information agencies and services. Emphasis is placed on strategic planning, organizing, quality management, organizational behavior, human resource management, leadership and communication, management of change, and information use in decision making. Principles of management are discussed from the perspective of information studies.

**1331-505: FOUNDATIONS OF INFORMATION STUDIES
CR: 3**

This course provides a broad framework within which other required or elective courses could be understood. It introduces the world of information, documents and information agencies. Major topics covered include development of information society and the role of the library as a social agency. Other topics include information dynamics (generation, processing, organization, and retrieval); information users and use; role of information services in various institutional settings; growth of the discipline of

information studies; education of information professionals; professional ethics and standards; and impact of IT on information service agencies.

**1331-506: TECHNOLOGY APPLICATIONS IN INFORMATION ORGANIZATIONS
CR: 3**

This course introduces students to applications of information and communication technologies in information organizations. Emphasis is on the role and functions of information technology to support delivery of information services. The main topics covered include features of operating systems and programming languages, basic concepts of networking and telecommunications; fundamental concepts and applications of database structure; development and role of internet; emerging information technologies and their impact on information services.

**1331-508: ORGANIZATION OF INFORMATION
CR: 3**

This course provides an introduction to the theory and practice of information bibliographic control. The main topics covered include standards, schemes, tools and utilities used for information organization with a particular emphasis on resource description, subject analysis, and categorization and classification of information materials. This course is conducted with a practical orientation aimed at teaching frequently used bibliographic tools such as International Standard Bibliographic Description (ISBD), Resource Description and Access (RDA), Machine-readable Cataloguing (MARC), Library of Congress Subject Headings (LCSH) and Dewey Decimal Classification (DDC).

**1331-509: RESEARCH METHODS IN
INFORMATION STUDIES
CR: 3**

This course provides an introduction to quantitative and qualitative foundations of research in information studies. Main topics covered include concept of research process (scientific method, problem identification, methodological design, data collection and analysis); study of selected research methods (survey, experimental and other methods relevant to the discipline of information studies), research design for conducting and implementing research studies and projects, methods of statistical analysis, ethical issues in research, development of research proposals and writing of research reports.

**1331-525: INFORMATION SOURCES IN
SCIENCE & TECHNOLOGY
CR: 3**

This course provides an overview of the information needs and practices of researchers and practitioners in the fields of science and technology. Main topics covered include examination of the process of communication and information requirements of/in the scientific community, study of primary, secondary, and tertiary sources of information in the physical, biological, and applied sciences. The course also covers application of new information technologies and in particular the World Wide Web as used in scientific and technical communication.

**1331-526: INFORMATION SOURCES IN
BUSINESS
CR: 3**

This course provides an overview of information sources in the area of business, management and industry. Companies and the nature of various business functions within a company are also discussed in an attempt to understand what business information is needed and how it may be used by individuals within an organization. Students also develop understanding of nature of business information, information needs and use, types of business information, competitive intelligence, information resources collections to support business, business information systems, sources and services, finding business information from print, electronic and web-based sources.

**1331-527: INFORMATION SOURCES IN
HUMANITIES & SOCIAL
SCIENCES
CR: 3**

This course investigates the structure of knowledge in the humanities and social sciences and their

constituent disciplines in order to understand how information and knowledge in these fields is created, organized, communicated and retrieved.

Main topics covered include disciplinary literatures in print and electronic materials and disciplinary communication structure, information needs & seeking behavior of social scientists and humanists, development of information resources and services to provide support for research, teaching and practice in respective fields.

**1331-528: HEALTH INFORMATION
SOURCES & SERVICES
CR: 3**

This course introduces the provision and use of health information and end user information searching in library and bibliographical services, consumer health information services, and patients' health records. The emphasis is on using high-quality sources of health information in print and electronic formats and evaluation of these sources. Major topics to be covered include types of health information; health information sources; use and evaluation of sources; controlled vocabularies & bibliographic database searching in health; evidence-based medicine & informatics; and consumer health information sources

**1331-529: PUBLIC AND COMMUNITY
INFORMATION SERVICES
CR: 3**

This course introduces the role and functions of public libraries in building and sustaining communities. Main topics covered include environmental scanning, community analysis, collection development policies, and management of resources and services of public libraries with a special focus on strategic planning, marketing, evaluation and measurement, physical setup, and networking. The public library as a center for community information service is discussed and delivery of services regarding health, education, employment, agriculture, and daily life activities are also covered.

**1331-530: ACADEMIC INFORMATION
SERVICES
CR: 3**

This course provides an overview of the role of information services to support teaching and research in higher education institutions. Main topics covered include collection development policies for building collections of information resources; management of resources and services with a special focus on

standards, planning, organizing, financial management, human resources management, evaluation and measurement, and technological capabilities. The course also covers special measures for enhancing faculty liaison with information services staff for determining information needs and delivering services accordingly.

**1331-535: INFORMATION LITERACY
CR: 3**

This course provides an overview of fundamental concepts related to defining and articulating the need for information. Main topics covered include identifying a variety of types and formats of potential sources of information; understanding how information is produced, organized, and disseminated; locating and accessing information from a variety of formal, informal, print, and electronic information sources; developing abilities to analyze, evaluate, interpret, and synthesize information; The course also covers how to communicate information effectively using a variety of methods directed at a range of audiences; and introduces the principles of legal, ethical, and social issues that surrounds the use of information.

**1331-536: CORPORATE INFORMATION
SERVICES
CR: 3**

This course provides the students with knowledge of the scope and function of special libraries and information centers in the corporate environment. It also provides an understanding about the core concepts of information services as they apply to the essential techniques of selection, analysis, synthesis, and evaluation of information resources to meet individual and collective needs. The course addresses the analysis of information environments and information flows. Design, management, and evaluation of information services and products are also introduced.

**1331-537: SCHOOLS INFORMATION
RESOURCES AND SERVICES
CR: 3**

This course provides an overview of role and functions of library media programs and learning resource centers in schools. Main topics covered include development and provision of children and young adult materials and services to meet their educational, cultural and recreational needs. The course also covers planning, organizing, and operating media resources programs, impact of technology on instruction and library service,

instructional functions of the media specialist in terms of integrating information processing skills in the curriculum through the instructional design process by working in partnership with teachers and applying the principles of teaching and learning theories.

**1331-538: INFORMATION LITERACY
STANDARDS FOR DIFFERENT
PROFESSIONS
CR: 3**

The Information Literacy Competency Standards for professions such as nursing, journalism, science and technology etc... The course is based on the information literacy needs of students who are preparing for a profession in which evidence-based practice and translational research are fundamental values. The process includes an extensive review of library and the required profession's literature, study standards that directly address the information skills needed in different academic settings. The purpose of the Information Literacy Standards is to provide a framework for faculty and students in the developing information literacy skills for evidence-based practice in the different professions.

**1331-539: INFORMATION APPLICATION
OF E-GOVERNMENT
CR: 3**

This course introduces the students to information applications in electronic government. It reviews the use of information technology in e-government functions and discusses the challenges in the delivery of services and information in the electronic environment. Main topics covered in the course include models of information applications of e-government; e-government services and benefits to citizens; smart cities; adoption of e-services by public; use of web portals and social media in e-services; change management needed; and issues of privacy and security.

**1331-540: INFORMATION TECHNOLOGIES
FOR EDUCATION & LEARNING
RESOURCES
CR: 3**

This course is an introduction to the history, theory and use of educational technologies for learning and teaching. Main topics covered include issues of how to select, use and effectively integrate technology in support of learning and problem solving in educational environments. The focus is on changing roles of professionals as a result of technological integration and issues of empowerment, leadership and collaboration. The course also covers design and

development of instructional materials for use in educational and information institutions.

**1331-543: SYSTEMS ANALYSIS AND
DESIGN IN INFORMATION
ORGANIZATIONS
CR: 3**

This course provides an overview of needs assessments: analysis, specifications, and designs involved in developing formal information systems. Main topics covered include application of structured systems modeling and analysis tools, and use of software modeling tools. The emphasis is on managing projects related to information systems used in the daily operation of libraries and information centers used by technical staff and the information consumers. The course focuses on information as a product and its role in the operation of an organization as a whole and the impact of change on the integration of resources, work flow and usability.

**1331-545: NETWORKS AND
TELECOMMUNICATIONS IN
INFORMATION
ORGANIZATIONS
CR: 3**

This course explores the structures, processes and implications of information networks with an emphasis on networking applications in information organizations. Main topics covered include network protocol types and models, methods for designing and evaluating networks for library and information organizations, overview of modern data networks with emphasis on local area networks; connectivity, and management and information security and privacy issues. The course also covers foundations for understanding these networks and relationships between network structures, information content, community needs, and styles of network growth, and network impacts.

**1331-546: INTERNET FOR INFORMATION
PROFESSIONALS
CR: 3**

This course explores the potential of Internet and web technologies to support information services. Main topics covered include using Internet as medium for information access, search, and communication, and development of awareness and understanding of the Internet from the perspective of technology, standards, content, organization, and users. The course also covers issues related to Internet applications in Arabic and social contexts and policies related to the Internet.

**1331-549: SOCIAL MEDIA APPLICATIONS
IN INFORMATION
ORGANIZATIONS
CR: 3**

This course provides an overview of social media (i.e. blogs, tagging, wikis, social networking, etc.) in information organizations. The course explores the effective use as well as management of social media technologies in order to address information problems in library and information organizations. The emphasis of the course is on use of social media sites for service development, outreach, access and marketing of information services. Other topics include social media as a set of digital tools to raise awareness and promote services in information organizations and application of social media to the management of emerging challenges in service delivery and strategies for their effective implementation information professionals.

**1331-550: PRINCIPLES & PRACTICES OF
KNOWLEDGE MANAGEMENT
CR: 3**

The course provides an overview of the concepts, development, and practices of knowledge management (KM). It examines key issues related to the various enablers of managing knowledge. The course also introduces the students to a variety of applications that can assist in the management of knowledge in organizations. Strategies that can be employed to implement knowledge management projects in organizations are discussed and practices prevalent in leading knowledge in organizations locally and internationally are reviewed.

**1331-551: DIGITAL LIBRARIES AND
ARCHIVES
CR: 3**

This course examines the critical issues surrounding the development of digital libraries and their contents. Main topics covered include processing materials and working with digital library systems, theoretical principles and practical aspects of digital archiving and preservation within libraries, museums, archives and other institutions administering digital content. Other topics include technical infrastructure, network information resources, utilities, role and application of standards and protocols for building archives and digital repositories and managing digital collections and archives.

**1331-552: COMMUNITIES OF PRACTICE
CR: 3**

Communities of practice are an effective mean of creating and leveraging the collective knowledge of organizational groups. The course introduces the students to the core concepts associated with communities of practice and it illustrates how they can facilitate knowledge sharing and collaboration across the enterprise. In addition, students learn about best practices of building communities of practice that fit within organizational knowledge strategies, including a look at the role of leadership, culture, and technology that facilitate the emergence of communities practice an interest.

**1331-553: ELECTRONIC RECORDS
MANAGEMENT
CR: 3**

This course covers records management concepts and methods that apply to electronic records and their storage as digital documents. This course also surveys the history and practice of records management in corporate, non-profit, government and education environments. It also considers issues related to the records life-cycle, the records continuum, the concept of document authenticity and the role this concept has played in the development of digital preservation standards. The course focuses on systems and standards used for managing electronic records and documents and their long-term preservation in different formats.

**1331-554: METADATA APPLICATIONS
FOR KNOWLEDGE
ORGANIZATIONS
CR: 3**

This course addresses the theoretical and practical principles of metadata. Students examine, develop and apply metadata for specific domains and settings. The course focuses on principles and theories of metadata development in the digital environment. Combining with extensive hands-on practices, the course covers the design and applications of metadata standards for distinct domains and information communities, issues in metadata interoperability, vocabulary control, quality control and evaluation. It examines international standards, activities, and projects, including trends and practices in metadata creation and encoding to support information and knowledge discovery.

**1331-555: INFORMATION ETHICS
CR: 3**

This course is an introduction to ethical issues of importance to information professionals and provides

an overview of applications of moral theories in the information field. The emphasis is on the ethical deliberation process and its ramifications on information practices, and effect of these issues on designing and delivering information services. The course focuses on developing skills in reasoning about issues and topics such as ethical considerations in using information, data and software; intellectual property; data integrity and accuracy; privacy, access to information, and censorship.

**1331-556: TOOLS FOR KNOWLEDGE
ORGANIZATION &
MANAGEMENT
CR: 3**

This course provides an overview of how technology can support knowledge management (KM) applications in organizations. Main topics covered include frameworks for study of KM tools, assessing organizational and technological readiness, developing a KM infrastructure and architecture, selection and evaluation of KM tools for content management, business intelligence, mind mapping and idea generation, knowledge creation and capturing, and taxonomy building, knowledge repositories, collaboration systems.

**1331-557: MANAGEMENT INFORMATION
SYSTEMS
CR: 3**

This course is meant to develop students' understanding of IT components and their availability and how it can be utilized and applied appropriately for success. The course covers the terminology used in the field of IT and how IT principles can apply to businesses. The course stresses the competitive advantage of using IT and its return on investment. It focuses on the basic principles of Information Technology: hardware and software components, database technology, telecommunications and networking, e-commerce and e-business, Artificial Intelligence (AI) and Expert Systems (ES), systems development and implementation, and the ethical and societal issues involved in IT.

**1331-558: INFORMATION POLICY
CR: 3**

This course provides an overview of policy development in areas of information systems, communications, and media. Main topics covered include ownership of information and intellectual property rights in light of the increasing access to information and how information policies improve or

hinder the goals and objectives of information organizations. The course covers information policy concepts with which library, archival, and information science practitioners need to be familiar. In addition, it covers ethical issues including the role of government and the private sector in providing access to information at personal, institutional and national level.

**1331-559: SOCIAL INFORMATICS
CR: 3**

This course examines the impact of Information and Communication Technologies (ICTs) on identity, community, behavior and society. The course is general in nature and stems from the orientation that text is only one modality of information transfer and communication. Students will be provided an overview of the major themes, methods, analysis, and practical implication related to the impact of ICT on social behavior. Topics related to privacy, community building, collaboration and communication, digital divide, Technology democracy and politics, censorship, and digital storytelling will be covered in his course. Ability to critically recognize and appreciate the meaning in a visual content and to communicate a message effectively, strengthen the message or substitute for its content.

**1331-560: AUTOMATION IN
INFORMATION
ORGANIZATIONS
CR: 3**

This course surveys the evolution of automation and integrated information systems relevant to information organizations. Main topics covered include principles associated with the planning, procurement, implementation, and management of automated systems. Selection and evaluation of automated solutions for information management functions are discussed and guidelines for management of operations of automated systems are covered with an emphasis on supporting acquiring and organizing information materials and provision of user services.

**1331-561: DATABASE APPLICATIONS IN
INFORMATION
ORGANIZATIONS
CR: 3**

This courses covers database concepts and practices as these apply to information storage and retrieval systems. Main topics covered include fundamentals of the database development process with emphasis on user needs assessment, data integrity, data models,

and record structure; principles and concepts of database systems. Other topics include data modeling, the entity-relationship model, database design, relational models, normalization techniques, and query languages, database applications in information organizations, the integration of databases on the Web.

**1331-563: USABILITY STUDIES
CR: 3**

Methodologies and concepts that apply for user-centred design. A variety of usability research methods/techniques including developing scenario, profiling users, analysing tasks, and usability tests. This is different from a Web or interface design course, actually it is a research and evaluation course on usability and user experience. It assumes that the results of user and usability research feed directly into the interface design cycle.

**1331-564: DIGITAL COLLECTIONS
MANAGEMENT
CR: 3**

The course covers how individuals and organizations create, communicate, use and manage digital collections for learning, work and entertainment. It also covers the role of ICT in digital content creation and management and how strategies can be developed to use ICT effectively and responsibly to benefit individuals, organizations and society. The roles of social media, web applications and mobile technology are also introduced in order to understand their impact on content creation and management behavior.

**1331-565: E-LIBRARIES AND E-SERVICES
CR: 3**

This course covers how virtual (electronic) libraries and electronic services are developed and built. It also covers how to link users with library catalogues, licensed journal databases, electronic book collections, selected Internet resources, electronic reserves, tutorials, and to forums for communication and interaction with librarians. A library web site is also covered in this course which can function as an information gateway, an entry point to a range of online resources, with key components of library catalogue and journal databases. User service, such as the ability to check due dates, renew materials, e-reserves, and request materials online, are also discussed. Other related topics include: various forms of interaction and communication with users; the changing technologies; and investment in human capital.

**1331-566: MEASUREMENT AND EVALUATION IN INFORMATION ORGANIZATION
CR: 3**

This course introduces students to methods of measurement and evaluation of information sources and services. It covers theory and practice of the design, collection, and analysis of systematic data for managerial decision-making, planning, and quality assurance. The course focuses on a range of information organizations (libraries, information centers, and other information agencies with a focus on their resources and functions). People-oriented tools such as surveys, interviews, focus groups, and observation are discussed with a focus on information resources and collections.

**1331-567: ADVANCED RESEARCH APPLICATION IN INFORMATION STUDIES
CR: 3**

Issues of application of scientific research in the field of information studies are discussed with a practical orientation. Steps in the conduct of research by following standard steps are covered. The course focuses on topics such as formulating a research problem, developing conceptual frame, formulating hypothesis, choosing appropriate or research methods, designing and carrying out research projects, presenting results, writing research report, and publishing findings. This course covers both qualitative and quantitative research approaches.

**1331-593: CAPSTONE PROJECT
CR: 3**

The student undertakes an independent project on a research topic of theoretical and/or experimental focus under the supervision of a faculty member listed in the supervisory list of the College of Graduate Studies. The objective is to provide the student with an opportunity to integrate and apply the knowledge gained throughout the course of study in a practical problem. The student must document the project in a scientific report following standard research writing guidelines and give a public presentation to the project examination committee.

**1331-595: SPECIAL TOPICS IN INFORMATION STUDIES I.
CR: 3**

These courses are offered in emerging areas and specific topics will be chosen keeping in view the availability of resource persons and student interests. Some examples include E-Government and Information Services; Online and Virtual Communities; Marketing of Information Services; and Information Architecture. New topics/courses can be added with the approval of the Program Committee as and when needed and based on availability of faculty.

**1331-596: SPECIAL TOPICS IN INFORMATION STUDIES II.
CR: 3**

These courses are offered in emerging areas and specific topics will be chosen keeping in view the availability of resource persons and student interests. Some examples include E-Government and Information Services; Online and Virtual Communities; Marketing of Information Services; and Information Architecture. New topics/courses can be added with the approval of the Program Committee as and when needed and based on availability of faculty.

**1331-597: THESIS
CR: 0**

**1331-598: THESIS
CR: 0**

**2000-599: THESIS
CR: 9**