UNOFFICIAL DEGREE PLAN WORKSHEET

University of North Texas
College of Information
Bachelor of Science

Information Science (BSIS)

University Core: 42 Hours (* = best selection)			
UNT Course	Transfer Course	College	S.H.
COMMUNICATION (6 HRS.) C or better			
ENGL 1310			3
ENGL 1320			3
MATHEMATICS (3 HRS.)			
MATH 1580*			3
LIFE & PHYSICAL SCIENCES (6 HRS.)			
LAB SCIENCE			3
LAB SCIENCE			3
CREATIVE ARTS (3 HRS.)			
			3
LANGUAGE, PHILOSOPHY, & CULTURE (3 HRS.)			
			3
AMERICAN HISTORY (6 HRS.)			
HIST 2610			3
HIST 2620			3
GOVERNMENT/ POLITICAL SCIENCE (6 HRS.)			
PSCI 2305			3
PSCI 2306			3
SOCIAL & BEHAVIORAL SCIENCE (3 HRS.)			
			3
CORE OPTION COURSES (6 HRS.)			
Core Option A			3
Core Option B			3
Total University Core Hours:			

*If you plan to take courses at a community college while attending UNT, the major advisor approval is required.

*You may request an official degree plan at

CI-Advising@unt.edu

CROSS-FUNCTIONAL ELECTIVES: 45 Hours At least 9 hours of the 45 hours must be upper level		
1.		3
2.		3
3.		3
4.		3
5.		3
6.		3
7.		3
8.		3
9.		3
10.		3
11.		3
12.		3
13. Advanced Elective		3
14. Advanced Elective		3
15. Advanced Elective		3
Total Cross Functional Elective Hours:		

BSIS MAJOR COURSES: 33 Hours Major GPA 2.5 or higher is required		
1 INFO Concentration course		3
2 INFO Concentration course		3
3 INFO Concentration course		3
4 INFO Concentration course		3
5 INFO major elective or INFO 4910		3
6 INFO major elective or INFO 4970		3
7 INFO major elective		3
8 INFO major elective		3
9 INFO major elective		3
10 INFO major elective		3
11 INFO major elective		3
Total BSIS Hours:		

BSIS Program Concentrations (18 Hours)

Information Science & Knowledge Organization	Project & Knowledge Management	Information Management & Health Informatics	Digital Content & Information Systems	Data Science
INFO 4203 Information Indexing and Organization	**INFO 4230** Records Management Operations	**INFO 4365** Health Sciences Information Management	**INFO 4206** Information Retrieval Systems	**DTSC 4050** Statistical Methods for Data Science and Analysis
INFO 4206 Information Retrieval Systems	**INFO 4306** Project Management for Information Systems	**INFO 4637** Medical Informatics	**INFO 4710** Information Technology Management	**INFO 4707** Data Modeling and Data Warehousing
INFO 4223 Metadata and Networked Information	**INFO 4307** Knowledge Management Tools and Technologies	**INFO 4670** Data Analysis and Knowledge Discovery	**INFO 4730** Digital Preservation	**DTSC 4501** Principles of Data Science and Analytics
INFO 4710 Information Technology Management	**INFO 4710** Information Technology Management	**INFO 4710** Information Technology Management	**INFO 4745** Information Architecture	**INFO 4709** Data Visualization
INFO 4910 Special Problems or **INFO elective**	**INFO 4910** Special Problems or **INFO elective**	**INFO 4910** Special Problems or **INFO elective**	**INFO 4910** Special Problems or **INFO elective**	**INFO 4910** Special Problems or **INFO elective**
INFO 4970 Information Science Seminar or **INFO elective**	**INFO 4970** Information Science Seminar or **INFO elective**	**INFO 4970** Information Science Seminar or **INFO elective**	**INFO 4970** Information Science Seminar or **INFO elective**	**INFO 4970** Information Science Seminar or **INFO elective**

INFO 4910 is Special Problems. If you already talked to one of the BSIS professors and plan to do research based on your interests and the professor's, contact the CI advising office for course permission.
Otherwise, **INFO 4910 is substituted with any other INFO course.**

INFO 4970 is a seminar course, which varies by topic. **INFO 4970 is substituted with any other INFO course.**

INFO 4080 - Research Methods and Evaluation - Research principles and techniques; role of theories and hypotheses; experimental and non-experimental research; measurement and data collection; analysis and interpretation; quantitative methods and applications; problems in formulating research proposals and evaluating representative studies. 3 hours; Prerequisite(s): None

INFO 4100 – Introduction to Information Sciences -Serves as a core course of the BS-IS program and prepares undergraduate students in the field of information science to understand the origins and history of information science, essential characteristics and scope of this discipline, as well as its fundamental principles and international standards. Guides students through each of the essential conceptual blocks of information science such as information behavior, bibliometric analysis, information organization and retrieval, e-publishing, information security and privacy, the future of the discipline.
3 hours; Prerequisite(s): None.

INFO 4203 - Information Indexing and Organization - Applications in different types of information systems of text documents, images or audio files. Use of database retrieval software to store and represent information. Indexing formulation, automatic programming, and design for user support. Planning and implementing multimedia documents. 3 hours**;** Prerequisite(s): None.

INFO 4206 - Information Retrieval Systems – Computer-based storage and retrieval of textual, pictorial, graphic and voice data. Addresses questions about how users interact with information retrieval (IR) systems, their components, evaluation and their impact in society. The issues of representation, the nature of the query, and other aspects of the system are examined. 3 hours; Prerequisite(s): None.

INFO 4210 - Information Organization and Records Control - Descriptive cataloging, subject analysis, classification and control of information resources of all kinds; Anglo-American Cataloguing Rules; Dewey Decimal and Library of Congress classification systems; subject headings; organization, functions and use of catalogs and classification systems; principles of information indexing and retrieval; use of bibliographic databases; representative problems and practice. 3 hours; Prerequisite(s): Consent of Department.

INFO 4223 - Metadata and Networked Information Organization - Representation, organization and retrieval of networked information resources (NIR) using various forms of metadata. Examination and evaluation of key metadata schemes for representing and organizing NIR. Identification and use of metadata creation tools to build and manage metadata repositories. Explore implications for retrieval of NIR through search engines that exploit metadata. 3 hours; Prerequisite(s): INFO 4203 or Consent of Department.

INFO 4230 - Records Management Operations - Management operations for records control and use; preparation, organization, storage, retrieval and dissemination. Preservation, security and disposal problems. Planning and supervising records management programs. Departmental functions and organization. Data-processing applications and online systems. 3 hours; Prerequisite(s): None.

DTSC 4050 - Statistical Methods for Data Science and Analysis - Introduces students to both theories and applications of statistical methods. Students learn the core concepts of statistical computing and advanced techniques for data analysis, while working hands-on with real data using statistical tools.3 hours; Prerequisite(s): None.

INFO 4300 - Administration of Information Agencies - Role, functions and development of principal kinds of information centers and agencies. Management principles and practices; standards and evaluation; resources and services; facilities and equipment; planning, staffing and reporting; public relations; budgeting and financial procedures; policy making; social contexts and backgrounds; professional perspectives. 3 hours; Prerequisite(s): None.

INFO 4306 - Project Management for Information Systems - Managing the process of planning, developing, implementing and evaluating systems, including defining requirements, developing requests for proposals, evaluating alternative systems, and locating and hiring consultants. 3 hours; Prerequisite(s): None.

INFO 4307 - Knowledge Management Tools and Technologies - Introduction to knowledge management technologies; Internet and web technologies; knowledge management processes and corresponding technologies; collaboration tools and technologies; information and knowledge portals; KM readiness and IT infrastructure; evaluation and selection criteria for knowledge management tools. 3 hours; Prerequisite(s): None.

INFO 4365 - Health Sciences Information Management - Introduction to computer-based health sciences information centers. Topics include: health sciences environment, management, collections, users, project planning, information technology, evaluation and assessment, professional activities of health information
management specialists, including the growing emphasis on evidence-based practice, informatics, and trends that affect future practice. 3 hours; Prerequisite(s): None.

INFO 4400 - Evaluation and Development of Information Resources - Principles and techniques of selecting and acquiring information resources of all kinds; development and maintenance of collections; criteria and selection aids; national and trade bibliographies; online searching; publishers and publishing; censorship problems and intellectual freedom; representative problems and practice. 3 hours; Prerequisite(s): None.

INFO 4420 - Information Resources for Children - Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; children's services and programs; wide reading and use of literature and other materials for children from preschool through middle-school years. 3 hours; Prerequisite(s): None.

INFO 4430 - Information Resources for Young Adults - Survey of print and nonprint materials, including multicultural/multiethnic materials; utilization practices and selection; curricular correlations and enrichment; recreational and developmental needs; young adult services and programs; wide reading and use

of literature and other materials for young adults from upper middle school through high school years. 3 hours; Prerequisite(s): None.

DTSC 4501 - Principles of Data Science and Analytics - Introduction to the fundamentals of data science and data analytics. It provides the required foundational knowledge and practice to students to successfully integrate automatic methods and tools for qualitative and quantitative analysis. Other topics include CRTSP-DM, SEMMA, data assurance, policy, ethics, privacy and security, principles and practice of technical, statistical, and human behavior, as well as social and professional issues related to the handling of data. 3 hours; Prerequisite(s): None.

INFO 4615 - Electronic Information Services - Basic concepts of electronic information services and databases in different fields; conducting online searches and evaluating services. Supervised practical experience. 3 hours; Prerequisite(s): None.

INFO 4620 - Information Resources in the Humanities - Information resources, methods and services to meet access needs in the humanities. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice. 3 hours; Prerequisite(s): None.

INFO 4630 - Information Resources in Sciences and Technology - Information resources, methods and services to meet access needs in science and technology. Literature searching and communication patterns in individual fields. Role of professional organizations and government. Representative problems and practice. 3 hours; Prerequisite(s): None.

INFO 4637 - Medical Informatics - History of medical information. Biomedical communication. Types of information resources and services related to the transfer of information in the health sciences. Computer applications to health sciences libraries. Analyses of current issues in the health care field and their relationship to health sciences libraries and information centers, ethics, confidentiality and security. 3 hours; Prerequisite(s): None.

INFO 4646 - Information Resources in Business - Information resources, methods and services to meet access needs of business as a discipline and in practice. Characteristics of information services to a specific, diverse user community. Introduction to and development of print and electronic forms of information relevant to the business community's information needs. 3 hours; Prerequisite(s): None.

INFO 4670 - Data Analysis and Knowledge Discovery - Introduces the student to data analysis, data mining, text mining and knowledge discovery principles, concepts and practices to approach data and data mining tasks and techniques using suitable software and other data analysis tools. Covers principles and theories of data mining and text mining techniques as well as analytical applications of data mining and knowledge discovery tools. 3 hours; Prerequisite(s): None.

INFO 4685 - Information Resources in Culturally Diverse Communities - Information resources, methods and services to meet access needs of ethnic cultural minorities. Issues in the provision of

information services to ethnic cultural minority communities. Study of the needs and cultural milieu of these communities. Materials and methods for serving these groups. 3 hours; Prerequisite(s): None.

INFO 4710 - Information Technology Management - Basic concepts of information and its role in an information society. Includes mechanisms of information processing, information transfer, and applications of computers and other information tools in various disciplines and fields. 3 hours; Prerequisite(s): None.

INFO 4730 - Digital Curation and Preservation - The abundance of electronic and computer-based information requires a new type of professional to examine the life-cycle of the new type of information content: digital content. Decisions about the preservation of this new type of material are not trivial, and include its descriptive components and particular formats and standards for long term archival storage and access. This course is about the tools and techniques to accomplish these goals. 3 hours; Prerequisite(s): None.

INFO 4745 - Information Architecture - Introduces the basic concepts and components of information architecture within the context of end-user and organizational needs. Provides an understanding of the intellectual technologies necessary to design and implement effective and cost-efficient information systems such as digital libraries, database systems, and a range of other web-accessible resources, as well as collaborative computer systems in organizational environments. Students conduct a collaborative term project to design and implement a real-world system integrating the knowledge and skills learned on organization of information, visual design, human interface and usability issues. 3 hours; Prerequisite(s): None.

INFO 4707 - Data Modeling and Data Warehousing - Introduction to traditional linear and relational database theory and practice. The main focus is on modern approaches that include SQL and NoSQL, graph-based databases for structured and unstructured datasets, and standards for data representation, exchange and modern computer-based processing related to the data lifecycle. 3 hours; Prerequisite(s): None.

INFO 4709 - Data Visualization - Introduction to data visualization covering the design and evaluation of visual data, including acquisition, parsing, and analysis. It will enable students to combine statistical approaches, computer treatment, and graphic methods to examine structured and unstructured data. Students will learn different techniques and computer tools to visualize large datasets, discover hidden information and be able to answer research questions. 3 hours; Prerequisite(s): None.

INFO 4910 - Special Problems - Supervised individual or small-group study of special problems or topics not otherwise covered by regular course offerings. 1-3 hours; Prerequisite(s): Consent of instructor and chair of the department. May be repeated for credit as topics vary.

INFO 4970 - Information Science Seminar - Supervised individual or group work on current issues

of modern technology and information science. 3 hours; Prerequisite(s): Consent of instructor and chair of the department. May be repeated for credit as topics vary.

Program Concentrations for Bachelor's Degree

http://informationscience.unt.edu/program-concentrations-bachelors-degree