UNIVERSITY OF NORTH TEXAS
College of Information
Department of Information Science

Master of Science in Data Science Program

Graduate opportunities

The Master of Science in Data Science degree at the University of North Texas is designed to meet the rising needs for highly skilled data science and data analytics professionals. It prepares students for careers in data science and analytics with a broad knowledge of the tools, techniques, and methods. Some of the areas this program is concerned with include statistical analysis, natural language processing, computational linguistics, information retrieval, information visualization, social network analysis, text analytics and data mining. The program helps graduates to acquire the type of skills and competencies needed in designing, implementing and transforming data sets and large volumes of information into actionable knowledge. It provides students with the knowledge they need to mange data science and data analytics projects and work with analytics tools and technologies. The program aimed at educating a new generation of information professionals capable of taking the leadership role through connecting the dots and using data to support strategic initiatives within the organization.

Innovative course delivery

Courses are offered in a variety of formats, including face-to-face, online and blended. This allows you to effectively balance courses with full-time or part-time employment. The core courses are offered online with a face-to-face component known as onsite institutes.

Distance students participating in the onsite institute format meet at an onsite institute host site for either one nine-day institute or two four-day institutes and complete the remaining courses online. Cohorts are available in different parts of the country and the State of Texas. Some of the currently active cohorts include: El Paso, Houston, Los Angeles and northern California, Nevada and Utah region, New Mexico, Arkansas and Virginia.

Outstanding student support and accolades

The educational experience is enhanced by student organization activities, interaction with local chapters of national professional associations and pre-professional work with community libraries and corporations.

In addition to the American Library Association accreditation, our programs have been nationally recognized and received numerous other recognitions. They include:

- Ranked one of the nation's best Medical Informatics graduate programs by *U.S. News and World Report*
- Ranked one of the nation's best master's programs in Library and Information Sciences, according to *U.S. News and World Report*
- Have the third largest endowment among library and information science programs in the U.S.

- Received funds for research and student support from the Institute of Museum and Library Services, the Library of Congress, the Online Computer Library Center and the Texas State Library and Archives Commission

Research resources

Research labs include the **Information Research and Analysis Lab**, the **Intelligent Information Access Lab** and the **Visual Thinking Lab**.

We're also members of several key organizations and consortiums that provide unique research opportunities for our students. Among them the **iSchools** organization, which allows our students to be trained in research by world renowned scholars.

Attending UNT

Admission requirements

You'll need to meet the admission requirements of the Toulouse Graduate School®, which are outlined at *graduateschool.unt.edu*. In addition, the department requires:

- Program application
- Statement of purpose, indicating qualifications and your goals in applying to our program
- Three letters of recommendation

For forms and more information about program admission requirements, visit *lis.unt.edu/admissions-process*. We also offer personal advising by phone and in person.

Degree requirements

- 9 credit hours of core courses
- 24 credit hours of electives (determined in consultation with a faculty advisor and depend on your career objectives, interests and previous experience)
- 3 credit hours of field experience or research seminar in the area of data science or closely related topic.
- In lieu of a thesis, an end of program exam is required during your last semester before graduation

Financial assistance

The university and department offer multiple options to help you pursue your graduate degree, including loans, teaching assistantships, scholarships, internships or co-ops, and part-time employment. More information about these opportunities is available at *lis.unt.edu/financial-assistance*.

Information about federal financial assistance programs is available at *financialaid.unt.edu*. Libraries, agencies and corporations offer part-time employment, internships or co-op experiences.

Graduate faculty and research areas

Jeff M. Allen, Regent Professor; Ph.D. Pennsylvania State University. Knowledge management, Learning technology; workforce development and human resources management.

Bubbie, Bushman, Lecturer, Ph.D., University of Missouri. Children and young adult services, library services for the deaf, public libraries, special needs library programming.

Yvonne J. Chandler, Associate Professor; Ph.D., University of Michigan. Legal information services and research; Internet resources and services; education for library and information services.

Hsia-Ching (Carrie) Chang, Assistant Professor; Ph.D., University at Albany. Adoption/diffusion of social media; business analytics; knowledge/science mapping; cloud computing security; human information interaction; information architecture.

Jiangping Chen, Associate Professor; Ph.D., Syracuse University. Digital libraries; multilingual information access; service information systems design and analysis.

Ana D. Cleveland, Regents Professor; Ph.D., Case Western Reserve University. Medical informatics; information storage and retrieval; indexing and abstracting.

Yunfei Du, Associate Professor; Ph.D., University of North Texas. Academic libraries; international librarianship; learning styles; e-learning.

Larry Enoch, Senior Lecturer; Ph.D., University of North Texas. Information organization; design theory; information access; special libraries.

Suliman Hawamdeh, Professor and Department Chair; Ph.D., University of Sheffield (United Kingdom). Digital information management; knowledge management; information organization and information retrieval; organizational learning and learning organization.

Jeonghyun Kim, Assistant Professor; Ph.D., Rutgers University. Digital content management in libraries, museums and archives; human information behavior; information architecture.

John Marino, Assistant Professor; Ph.D., University of Washington. School library, Information Literacy, information solving problems.

Shawne D. Miksa, Associate Professor; Ph.D., Florida State University. Organization, control and access to information entities; classification research and theory; information retrieval; bibliometrics; scholarly communication.

Brian O'Connor, Professor; Ph.D., University of California- Berkeley. Image document access; information seeking behavior; browsing studies; representation of questions and documents.

Guillermo Oyarce, Associate Professor; Ph.D., University of North Texas. Information retrieval systems; feature selection; human computer interaction: direct, manipulation in IR and visualization; cognitive issues in distributed networks and the digital library.

Jodi Philbrick, Lecturer; Ph.D., University of North Texas. Health informatics; health sciences libraries; competencies for information professionals; social media, mobile technology and information access.

Barbara Schultz-Jones, Associate Professor; Ph.D., University of North Texas. Collaboration networks; cataloging; social networks; school library automation systems; information behavior in context.

Daniella Smith, Assistant Professor; Ph.D., Florida State University. Leadership role of school libraries; mentorship in organizations; information seeking behaviors of children; cultures and transformational leadership.

Xin Wang, Lecturer; Ph.D., University of Missouri. Usability and user experience research; health informatics; human computer interaction; image system design.

Michele Villagran, Lecturer, Ed.D., Pepperdine University. Legal information services and research, diversity issues/cultural intelligence, conflict management/dispute resolution,competitive Intelligence.

Maurice Wheeler, Associate Professor; Ph.D., University of Pittsburgh. Management; leadership; organizational culture; diversity; public libraries.

Oksana Zavalina, Assistant Professor; Ph.D., University of Illinois. Information organization, access and retrieval; digital libraries and aggregations; subject access; metadata, cataloging and classification; information use and users; information systems.

For more information on this program, contact or visit:
Department of Information Sciences
lis.unt.edu
940-565-2445
LIS-Chair@unt.edu
Discovery Park, Room E292