

Interdisciplinary Information Science PhD Program

Data Science Concentration

About the Program

The University of North Texas Interdisciplinary Information Science PhD Program (or IIS PhD Program) responds to the varied and changing needs of the information age, therefore offering the Data Science Concentration. The concentration is being offered jointly with UNT Department of Information Technology and Decision Sciences and UNT Department of Computer Science and Engineering with the ultimate goal of providing the opportunity for interdisciplinary training, research and professional services in consumer behavior and experience management. With this concentration, students will take courses that will prepare them for conducting research on critical issues in consumer behavior and related areas as they pertain to the information science perspective.

About Faculty

Please visit our website (<http://lis.unt.edu/faculty>; <http://www.cob.unt.edu/itds/faculty.php>; <http://www.cse.unt.edu/site/node/18>) to see the wide range of research interests of our faculty members along with their contact information.

Application Process

There are two steps to the application process for the Interdisciplinary Information Science PhD Program.

1. Apply to the University of North Texas Toulouse Graduate School: <http://tsgs.unt.edu/future-students/graduate-admissions>.
2. Apply to the Interdisciplinary Information Science PhD Program: https://lis.unt.edu/sites/default/files/IIS_PhD_Admission&Application_EFORM.pdf and indicate that you are applying for the Data Science concentration. In addition to your application, the following materials must be submitted for evaluation:
 - a. Personal Statement (500 word minimum)
 - b. Curriculum Vita/ Resume
 - c. Formal Writing Sample (you must be the sole author of the document)
 - d. Three Letters of Recommendation
 - e. GRE Scores
 - f. Funding Source/ Sponsor Letter (if applicable)
3. Submit all application materials via
 - a. Email to CI-IISPhD@unt.edu (electronic submissions are encouraged)
 - b. Mail to:
IIS PhD Program Office: Admissions
University of North Texas
College of Information- Department of Library and information Sciences
1155 Union Circle #311068
Denton, Texas 76203-5017
 - c. Or Fax to (940) 369-7898

For More information regarding the admissions process, please visit: <https://lis.unt.edu/phd-admission-criteria>.

Please Note: We only allow students to start in the fall semester. You cannot apply to start in the spring or summer. Applications are due November 1st for admission in the fall of the following year. Admissions decisions are announced in January.

Admissions Criteria

As mandated by the State of Texas, all applications are evaluated under the rubric of "holistic review". This means that deficiency in one element of an application does not necessarily disqualify an applicant from being admitted to a program.

Funding

There is funding available through the Department of Library and Information Science in the forms of the Tuition Benefit Program, stipends and other opportunities (found here: <http://lis.unt.edu/financial-assistance>). Please contact us for details on how to apply for funding during the application process.

Course Requirements

Students enrolled in the Data Science Concentration will take courses from four blocks of courses:

1. Information Science Core Area (12 graduate credit hours)

INFO 6945 Doctoral Seminar in Information Issues

INFO 6000 Seminar in Information Science
INFO 6700 Seminar in Communication and Use of Information
INFO 6660 Readings in Information Science

2. Research Courses (minimum of 24 graduate credit hours, including doctoral dissertation hours)

INFO 6940 Inquiry and Research Design
Quantitative Research Methods/ Statistics (6 graduate credit hours in consultation with advisor)
Qualitative Research Methods (3 graduate credit hours in consultation with advisor)
Doctoral Dissertation Hours (minimum of 12 credit hours of INFO 6950 to be completed after passing the qualifying examination)

3. Data Science Concentration Core (15 graduate credit hours)

CSCE 5300 Introduction to Big Data and Data Science (or DSCI 5350 Big Data Analytics, or CMHT 6500 Big Data and Social Network Analysis)
DSCI 5240 Data Mining (or CSCE 5380 Data Mining)
DSCI 5360 Data Visualization for Analytics (or INFO 5709 Data Visualization and Communication)
INFO 5810 Data Analysis and Knowledge Discovery
INFO 5731 Computational Methods for Information Systems

4. Data Science Concentration Electives (a minimum of 9 graduate credit hours; the following is a partial list. Other relevant courses may be used upon approval).

INFO 5707 Data Modeling for Information Professionals (or CSCE 5350 Database Systems)
INFO 5717 Dynamic WWW Control Structures
INFO 5735 Usability and User Experience Assessment
INFO 5737 Information and Cybersecurity (or equivalent, e.g., CSCE 5550 Introduction to Computer Security)
INFO 5841 Digital Curation Fundamentals
INFO 6880 Information Science and Technology Seminar: Social Network Analysis for Information Professionals
INFO 6880 Information Science and Technology Seminar: Health Research Methodology
LING 5410 Computational Linguistics
LING 6060 Data Analysis in Human Language Technology
LING 6130 Natural Language Processing (or equivalent, e.g., CSCE 5290 Natural Language Processing)
DSCI 5220 Survey Analytics
DSCI 5250 Statistical Techniques in Simulations
DSCI 5260 Business Process Analytics
DSCI 5310 Risk and Life-Data Analysis
DSCI 5330 Enterprise Applications of Business Intelligence
DSCI 5340 Predictive Modeling and Business Forecasting
LTEC 6514 Seminar on Advanced Research Topics: Computer-Mediated Discourse Analysis (or LING 5560 Discourse Analysis)
LTEC 6514 Seminar on Advanced Research Topics: Scaling Methods
CSCE 5215 Machine Learning

Contact Us

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