

# INFORMATION SYSTEMS, PH.D.

**Department Chair:** Jonathan K. Trower

**Program Director:** John Carlson

**Associate Dean for Graduate Programs:** Patsy Norman

## Program Description

The Ph.D. in Information Systems seeks to train future researchers, scholars, and teachers to analyze and understand the multi-faceted impact of information systems and technologies on individuals. Students examine the positive and negative consequences of information systems as well as the moral and ethical dilemmas introduced in societies coordinated by and highly dependent upon information. Understanding the consequences of information systems and technologies requires a solid theoretical background that spans various disciplines. The program requires students to take courses outside the Information Systems & Business Analytics department, to expand their theoretical and methodological knowledge. Students also take courses in pedagogy and engage in a mentoring program to help them develop their teaching skills. Ultimately, the program aims to graduate and place highly-trained students in colleges and universities around the world.

## Admission Requirements

Applicants must have a bachelor's degree from an accredited university or college, and a master's degree from an accredited university in a related discipline is preferred. An acceptable score on the GMAT or GRE is required. Applicants must adhere to the general admissions requirements of Baylor's Graduate School for admission to Ph.D. level graduate studies. In general, applicants should meet the common body of knowledge (CBK) requirements for business degrees. CBK is sometimes referred to as business core courses. Students not meeting the CBK requirements may need to complete additional general business courses.

## Curriculum

The Ph.D. in Information Systems is a full-time, four-year residential program. The first two years require 36 hours of formal coursework, with the remaining time comprised of independent research, teaching, and student development. Of the eight required courses, five are doctoral seminars offered in the Information Systems & Business Analytics department. Two required courses (ENT 6340 Seminar in Research Methods and ECO 5349 Causal Inference and Research Design) are research methods courses that are part of a foundational research methods course sequence required by all Hankamer School of Business PhD students. Prior to entering the program, students will have access to an online introductory statistics course for no credit. Students should complete this prior to the start of their Ph.D. program to ensure they have the basic statistical knowledge needed to complete the coursework required for the program. The final required course, EDL 6302 Teaching and Learning in Higher Education, teaches students about course development, teaching techniques, and learning theories. Students supplement these required courses with doctoral level electives offered by the Information Systems & Business Analytics department, the Hankamer School of Business, or other departments across the university. Ph.D. students interested in completing 5000-level (master's) courses in their support area must obtain prior approval from the program director.

After successfully completing 36 hours of coursework, students must complete a written comprehensive exam, which takes the form of a qualifying paper. Students will complete this requirement during the summer after their second year of coursework. After the completion of the comprehensive exam, students will write and orally defend a dissertation proposal and dissertation on an important issue related to information systems theory, policy, or practice under the supervision of a faculty advisor and committee.

Students receiving a graduate assistantship, which includes an annual stipend and tuition remission, will be assigned to work as a research assistant or a teaching assistant. Students assigned as research assistants will gain experience in developing and producing academic research. Later in the program, typically after coursework is completed, students will be the instructor of record for courses offered in the Information Systems & Business Analytics department.

| Code  | Title   | Hours     |
|---|---|-----------|
| <b>Information Systems Required Courses</b>   |   |           |
| QBA 5330                                      | Business Analytics for Decision Making  | 0         |
| MIS 6340                                      | Qualitative Methods in Information Systems Research                                       | 3         |
| ENT 6340                                      | Seminar in Research Methods   | 3         |
| MIS 6V98                                      | Special Studies in Information Systems  | 3         |
| MIS 6320                                      | Quantitative Methods in Information Systems Research                                      | 3         |
| MIS 6330                                      | Theoretical Perspectives in Information Systems Research                                  | 3         |
| ECO 5349                                      | Causal Inference and Research Design  | 3         |
| MIS 6310                                      | Foundations in Information Systems Research   | 3         |
| MIS 6350                                      | Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students | 3         |
| MIS 6380                                      | Ethics in Contemporary Topics in Information Systems                                      | 3         |
| EDL 6302                                      | Teaching and Learning in Higher Education   | 3         |
| MIS 6325                                      | Quantitative Methods: Survey Research Using PLS Analysis                                  | 3         |
| MIS 6399                                      | Research Apprenticeship II (Qualifying Paper)   | 3         |
| MIS 6V00                                      | Dissertation Proposal   | 3         |
| <b>Electives</b>                              |   |           |
| Information Systems or other supporting areas |   | 9         |
| <b>Dissertation</b>                           |   |           |
| MIS 6V99                                      | Dissertation  | 12        |
| <b>Total Hours</b>                            |   | <b>60</b> |

## Program Completion Requirement

Students will be recognized as candidates for the doctoral degree only after having

1. Passed the written comprehensive exam (qualifying paper)
2. Completed all residence and departmental requirements except the dissertation
3. Received approval by the Dean of the Graduate School of their formal application for admission to candidacy for the degree.

The written comprehensive exam (qualifying paper) will be completed following the student's second year of study. The candidate must also successfully complete and defend the dissertation at an oral examination.

## Degree Plan

A formal degree plan will be developed in consultation with the program director or dissertation advisor. A maximum of six hours of graduate-level course work may be transferred from another accredited university.

The recommended course sequence is as follows:

| Course        | Title   | Hours    |
|---------------|---|----------|
| <b>Year 1</b> |   |          |
| <b>Fall</b>   |   |          |
| ENT 6340      | Seminar in Research Methods   | 3        |
| MIS 6340      | Qualitative Methods in Information Systems Research                                       | 3        |
| MIS 6V98      | Special Studies in Information Systems  | 3        |
| <b>Hours</b>  |   | <b>9</b> |
| <b>Spring</b> |   |          |
| MIS 6320      | Quantitative Methods in Information Systems Research                                      | 3        |
| ECO 5349      | Causal Inference and Research Design  | 3        |
| MIS 6330      | Theoretical Perspectives in Information Systems Research                                  | 3        |
| <b>Hours</b>  |   | <b>9</b> |
| <b>Summer</b> |   |          |
| MIS 6325      | Quantitative Methods: Survey Research Using PLS Analysis                                  | 3        |
| MIS 6380      | Ethics in Contemporary Topics in Information Systems                                      | 3        |
| <b>Hours</b>  |   | <b>6</b> |
| <b>Year 2</b> |   |          |
| <b>Fall</b>   |   |          |
| MIS 6310      | Foundations in Information Systems Research   | 3        |
| MIS 6350      | Conducting Effective Literature reviews: A Doctoral Seminar for pre-Dissertation Students | 3        |
| Elective      |   | 3        |
| <b>Hours</b>  |   | <b>9</b> |
| <b>Spring</b> |   |          |
| EDL 6302      | Teaching and Learning in Higher Education   | 3        |
| Electives     |   | 6        |
| <b>Hours</b>  |   | <b>9</b> |
| <b>Summer</b> |   |          |
| MIS 6399      | Research Apprenticeship II (Qualifying Paper)   | 3        |
| <b>Hours</b>  |   | <b>3</b> |
| <b>Year 3</b> |   |          |
| MIS 6V00      | Dissertation Proposal   | 3        |
| MIS 6V99      | Dissertation  | 3        |
| <b>Hours</b>  |   | <b>6</b> |

### Year 4

|                    |              |           |
|--------------------|--------------|-----------|
| MIS 6V99           | Dissertation | 9         |
| <b>Hours</b>       |              | <b>9</b>  |
| <b>Total Hours</b> |              | <b>60</b> |