

# INFORMATION SYSTEMS (BS)

The BS in Information Systems focuses on the organizational and business application of computers and related technologies. It prepares students for careers in IT project management, systems analysis & design, database administration, help desk, enterprise systems administration, and user training.

Program Requirements	Quarter Hours
Liberal Studies Requirements	76
Major Requirements	88
Open Electives	28
<b>Total hours required</b>	<b>192</b>

## Learning Outcomes

Students will be able to:

- Identify four different types of information systems.
- Identify five phases of systems development life cycle.
- Identify two best practices in IS project management.
- Describe the characteristics and implementation requirements for enterprise-level information systems.
- Identify the key elements of two commonly used diagrams for IS requirements and conceptual design specifications (e.g., data flow diagram, use case diagram, entity relationship diagram).

## Liberal Studies Requirements

Honors program requirements can be found in the individual Colleges & Schools section of the University Catalog. Select the appropriate college or school, followed by Undergraduate Academics and scroll down.

First Year Program	Hours
<b>Chicago Quarter</b>	
LSP 110 DISCOVER CHICAGO or LSP 111 or EXPLORE CHICAGO	4
<b>Focal Point</b>	
LSP 112 FOCAL POINT SEMINAR	4
<b>Writing</b>	
WRD 103 COMPOSITION AND RHETORIC I <sup>1</sup>	4
WRD 104 COMPOSITION AND RHETORIC II <sup>1</sup>	4
<b>Quantitative Reasoning</b>	
Not Required	
<b>Sophomore Year</b>	
<b>Race, Power, and Resistance</b>	
LSP 200 SEMINAR ON RACE, POWER, AND RESISTANCE	4
<b>Junior Year</b>	
<b>Experiential Learning</b>	
Required	4
<b>Senior Year</b>	
<b>Capstone</b>	
Required in major <sup>1</sup>	

<sup>1</sup> Students must earn a C- or better in this course.

## Learning Domains

**Arts and Literature (AL)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/arts-and-literature/>)

- 3 Courses Required

**Historical Inquiry (HI)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/historical-inquiry/>)

- 2 Courses Required

**Math and Computing (MC)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/math-and-computing/>)

- Not Required

**Philosophical Inquiry (PI)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/philosophical-inquiry/>)

- 2 Courses Required (See note below)

**Religious Dimensions (RD)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/religious-dimensions/>)

- 2 Courses Required (See note below)

**Scientific Inquiry (SI)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/scientific-inquiry/>)

- 1 Lab Course Required

**Social, Cultural, and Behavioral Inquiry (SCBI)** (<https://catalog.depaul.edu/undergraduate-core/liberal-studies-program/liberal-studies-learning-domains/social-cultural-and-behavioral-inquiry/>)

- 3 Courses Required

## Notes

Students must take one of the following ethics courses: CSC 208 (PI), PHL 248/MGT 248 (PI) or REL 228/MGT 228 (RD).

Specified required courses within Liberal Studies may have grade minimums (e.g. C- or better). Please consult your advisor or your college and major requirements.

Courses offered in the student's primary major cannot be taken to fulfill LSP Domain requirements. If students double major, LSP Domain courses may double count for both LSP credit and the second major. Students who choose to take an experiential learning course offered by the major may count it either as a general elective or the Experiential Learning requirement.

In meeting learning domain requirements, no more than one course that is outside the student's major and is cross-listed with a course within the student's major, can be applied to count for LSP domain credit.

This policy does not apply to those who are pursuing a double major or earning BFA or BM degrees.

## Major Requirements

### First Year

Course	Title	Quarter Hours
IS 201	INTRODUCTION TO INFORMATION SYSTEMS	4
IT 130	INTRODUCTORY COMPUTING FOR THE WEB	4
IT 240	INTRODUCTION TO DATABASES	4
IT 263	APPLIED NETWORKS AND SECURITY	4
UXD 210	INTRODUCTION TO USER EXPERIENCE DESIGN	4

### Second Year

Course	Title	Quarter Hours
CMNS 201	BUSINESS AND PROFESSIONAL COMMUNICATION	4
IS 215	ANALYSIS AND DESIGN TECHNIQUES	4
IS 324	ENTERPRISE ARCHITECTURE	4
IT 223	DATA ANALYSIS	4
IT 238	INTERACTIVE WEB SCRIPTING	4

### Third Year

Course	Title	Quarter Hours
IS 335	INTRODUCTION TO ORGANIZATIONAL MODELING FOR DIGITAL TRANSFORMATION	4
IS 372	SOFTWARE PROJECT MANAGEMENT	4
IS 373	INTRODUCTION TO ENTERPRISE SYSTEMS	4
IT 231	WEB DEVELOPMENT I	4
Four (4) credit hours of Major Elective		4

### Fourth Year

Course	Title	Quarter Hours
CSEC 340	FUNDAMENTALS OF INFORMATION ASSURANCE (FORMERLY CNS 340)	4
IS 344	IT AUDITING	4
IS 352	INTRODUCTION TO BUSINESS INTELLIGENCE AND ANALYTICS SYSTEMS	4
IS 360	SYSTEMS FOR CLOUD COMPUTING AND BIG DATA	4
IS 376	INFORMATION SYSTEMS PROJECT	4
Eight (8) credit hours of Major Electives		8

### Major Electives

Major Electives may be selected from any 200- or 300-level CSEC, CSC, ECT, IS, IT, SE, NET, or UXD courses. Students are encouraged, but not required, to select all Major Elective courses from one of the following competency lists:

### Competency in Management Applications

Course	Title	Quarter Hours
DSC 341	FOUNDATIONS OF DATA SCIENCE	
IS 331	FUNDAMENTALS OF DIGITAL PRODUCT MANAGEMENT	
IS 379	VIRTUAL SOFTWARE TEAMS	
IT 320	CONTENT MANAGEMENT SYSTEMS	

### Competency in Government, Regulation, and Compliance

Course	Title	Quarter Hours
CSEC 228	LEGAL, ETHICAL AND SOCIAL ISSUES IN INFORMATION SECURITY (FORMERLY CNS 228)	
CSEC 342	CYBERSECURITY OPERATIONS (FORMERLY CNS 342)	
CSEC 345	HUMAN-CENTERED CYBERSECURITY (FORMERLY CNS 345)	
CSEC 366	CRITICAL INFRASTRUCTURE AND CONTROL SYSTEMS CYBERSECURITY (FORMERLY CNS 366)	
IS 352	INTRODUCTION TO BUSINESS INTELLIGENCE AND ANALYTICS SYSTEMS	
IS 382	INTRODUCTION TO LEGAL ISSUES IN INFORMATION TECHNOLOGY	
IS 386	INTRODUCTION TO CYBERSECURITY LAW	

### Competency in User Interaction

Course	Title	Quarter Hours
UXD 220	PROTOTYPING METHODS I	
UXD 222	INTRODUCTION TO DATA VISUALIZATION DESIGN	
UXD 225	CODING DESIGN FRAMEWORKS	
UXD 260	USER EXPERIENCE RESEARCH AND EVALUATION	
UXD 270	USER-CENTERED WEB DESIGN	

### Competency in Software Development

Course	Title	Quarter Hours
IT 211	INTRODUCTION TO APPLIED PROGRAMMING	
IT 212	APPLIED OO PROGRAMMING	
IT 313	ADVANCED APPLICATION DEVELOPMENT	
IT 330	USER INTERFACE DEVELOPMENT FOR INTERACTIVE SYSTEMS	

### Open Electives

Open Elective credit hours are required to meet the minimum graduation requirements of 192 hours. Open Electives may be taken from any unit at DePaul.

### Degree Requirements

Students in this degree must meet the following requirements:

- Complete a minimum of 192 credit hours (generally 48 courses).
- Earn a grade of C- or higher in WRD 103, WRD 104, and all Major and Minor courses.
- Earn a grade of D or higher in all other Liberal Studies and Open Elective courses.
- Maintain a cumulative GPA of 2.0 or higher.

### **Program Combination Restrictions**

Students pursuing the BS in Information Systems are forbidden from pursuing the Minor in Information Systems, the Minor in Information Technology, and the Minor in Management Information Systems.