COMPUTER SCIENCE (BS)

The BS in Computer Science provides essential training in the foundations of computing, data storage and information processing. With this foundation, graduates of the program can easily adapt to and create new information technologies, new computing paradigms, and new ideas for applying computer systems.

Students can choose to study within one of three concentrations in the BS in Computer Science program:

- Artificial Intelligence
- Game Systems
- Software Development

Program Requirements	Quarter Hours
Liberal Studies Requirements	76
Major and Concentration Requirements	96
Open Electives	20
Total hours required	192

Learning Outcomes

Students will be able to:

- Model a computational problem, select appropriate algorithms and data structures for a solution, justify the correctness of the algorithm, and implement an application solving the problem.
- Analyze the efficiency of a computational solution mathematically and validate the analysis experimentally.
- · Analyze and select an algorithm based on system effects.
- Criticize a program on the basis of its maintainability and suggest improvements.

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
Chicago Quarter		
LSP 110 or LSP 111	DISCOVER CHICAGO or EXPLORE CHICAGO	4
Focal Point		
LSP 112	FOCAL POINT SEMINAR	4
Writing		
WRD 103	COMPOSITION AND RHETORIC I	4
WRD 104	COMPOSITION AND RHETORIC II ¹	4
Quantitative Reasoning		
Not Required		
Sophomore Year		
Race, Power, and Resistance		
LSP 200	SEMINAR ON RACE, POWER, AND RESISTANCE	4
Junior Year		
Experiential Learning		
Required		4

Senior Year

Capstone

Required in major

¹ Students must earn a C- or better in this course.

Learning Domains

Arts and Literature (AL) (https://catalog.depaul.edu/undergraduatecore/liberal-studies-program/liberal-studies-learning-domains/ arts-and-literature/)

3 Courses Required

Historical Inquiry (HI) (https://catalog.depaul.edu/undergraduatecore/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-studieslearning-domains/math-and-computing/)

Not Required

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

- 2 Courses Required:
 - CSC 208
 - 1 Additional Course

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

2 Courses Required

Scientific Inquiry (SI) (https://catalog.depaul.edu/undergraduatecore/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-behavioralinquiry/)

3 Courses Required

Note

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.

Concentration Requirements

Students must complete the requirements from the Artificial Intelligence, Game Systems, or Software Development concentrations.

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 Computer Science are forbidden from pursuing the following secondary/double majors: BS Computer Science + Animation; BS Computer Science +Geography; BS Game Programming; BS Information Technology; BS Math and Computer Science.

Students pursuing the BS in Computer Science are also forbidden from pursuing the Minor in Computer Science and the Minor in Information Technology.

Concentrations, tracks and specializations provide focus to the major. In addition to any college core requirements, liberal studies requirements and major requirements, students are required to choose one of the following:

- Artificial Intelligence Concentration, Computer Science (BS) (https:// catalog.depaul.edu/programs/computer-science-bs/artificialintelligence-concentration-computer-science-bs/)
- Game Systems Concentration, Computer Science (BS) (https:// catalog.depaul.edu/programs/computer-science-bs/game-systemsconcentration-computer-science-bs/)
- Software Development Concentration, Computer Science (BS) (https://catalog.depaul.edu/programs/computer-science-bs/ software-development-concentration-computer-science-bs/)