# COMPUTER SCIENCE + HISTORY (BS)

The Computer Science + History (BS) is a multidisciplinary degree that enables students to combine training in computer science with the analytical and writing skills of history to become software developers with writing expertise and a liberal arts orientation.

Program Requirements	Quarter Hours
Liberal Studies	72
CS ICRS	48
HST ICRS	44
Open Electives	28
Total hours required	192

- 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 and select an algorithm based on system effects.
- Analyze the efficiency of a computational solution mathematically, and validate the analysis experimentally.
- Criticize a program on the basis of its maintainability and suggest improvements.
- Identify, analyze, evaluate, and synthesize primary and secondary source evidence.
- · Analyze an event, source, idea or person within its historical context.
- Conduct research independently using primary and secondary source
   widence
- · Express knowledge and reason effectively in writing.

## **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 Quarte	r	
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 <sup>1</sup>	4
WRD 104	COMPOSITION AND RHETORIC II <sup>1</sup>	4
Quantitative Reasoning		
Not Required		
Sophomore Yea	r	
Race, Power, an	d Resistance	
LSP 200	SEMINAR ON RACE, POWER, AND RESISTANCE	4
Junior Year		
Experiential Lea	rning	
Required		4

#### **Senior Year**

Capstone	
Required 1	4

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/undergraduatecore/liberal-studies-program/liberal-studies-learning-domains/ historical-inquiry/)

· Not 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

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

· 2 Courses Required

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

1 Course Required
 [1 Lab Course]

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 Course Required

Course Title Quarter

#### The Modern Language Requirement (MLR)

All students will be required to demonstrate competence in a modern language (i.e., a language other than English) equivalent to the proficiency attained from one year of college-level language study. This Modern Language Requirement (MLR) may be demonstrated by:

placing into 104 or above on the DePaul language placement exam

completing the last course or earning AP or BI credit for the last course in the first-year collegel sequence of any language (e.g., 103 for DePaul language classes)

completing a college course or earning AP or IB credit for a college course beyond the first-year level in any language (e.g., 104 or above for DePaul language classes)

completing the final course of a four-year sequence of the same modern language in high school \*

completing a proctored exam by BYU and passing the exam (see the Department of Modern Languages website for registeration details)

completing a proctored Written Proficiency Test (WPT) by Language Testing International (LTI) and achieving a score of Beginner High or above (see the Department of Modern Languages website for registration details)

\*Students are strongly encouraged to take the DePaul language placement exam even if they have met the MLR via study of a language in high school. This will ensure continuation of language at the proper level.

Please note: Modern Languages courses with an Edesignation are taught in English and may not be applied to the Modern Langague Requirement.

Students who complete an Inter-College Transfer (ICT) to the College will abide by the MLR in place on the effective date of the ICT, regarless of when they first matriculated at DePaul.

#### **MAJOR REQUIREMENTS (CS ICRS)**

MAT 140	DISCRETE MATHEMATICS I	4
MAT 141	DISCRETE MATHEMATICS II	4
CSC 241	INTRODUCTION TO COMPUTER SCIENCE I	4
CSC 242	INTRODUCTION TO COMPUTER SCIENCE II	4
CSC 300	DATA STRUCTURES I	4
CSC 301	DATA STRUCTURES II	4
CSC 321	DESIGN AND ANALYSIS OF ALGORITHMS	4
CSC 373	COMPUTER SYSTEMS I	4
CSC 374	COMPUTER SYSTEMS II	4
One course from the following		4
CSC 347	CONCEPTS OF PROGRAMMING LANGUAGES	
CSC 376	DISTRIBUTED SYSTEMS	
SE 350	OBJECT-ORIENTED SOFTWARE DEVELOPMENT	
Eight (8) additional credit hours, can be any 300-level CSC,		

Eight (8) additional credit hours, can be any 300-level CSC,	8
CSEC, DSC or SE	
MA IOR REQUIREMENTS (HST ICRS)	

	MAJOR REQUIREM	IENTS (HST ICNS)	
Three 100/200 level HST courses (HON 102 also satsfies this requirement)			12
Five 300-level HST courses		20	
One HST course or SOC 279 or similar statistics course		4	
	HST 298	NTRODUCTION TO HISTORICAL SOURCES	4
		AND METHODS	

	/ IND INIETTIODO	
HST 299	CRAFT OF HISTORY	4
Senior Capston following:	ne options - choose one course from the	
HST 390	CAPSTONE IN HISTORICAL RESEARCH	4

CAPSTONE IN HISTORICAL RESEARCH AND WRITING <sup>2</sup>

or CSC 394 SOFTWARE PROJECTS

Note: CSC 243 Python for Programmers and a CS elective can take the place of CSC 241 & CSC 242

- CSC 243 Python for Programmers and a CS elective can take the place of CSC 241 & CSC 242
- <sup>2</sup> If HST 390, one of the required 300-level HST courses must be a "Gateway" course [determined annually by the History Department].

### **Open Electives**

Open elective credits are also required to meet the minimum graduation requirement of 192 quarter-credit hours.